Assignment 7

1.create a new project and choose option "java web" and select "web application"

2. Some name to project and click next.

3.select glassfish server and if not present there simply click add option there and select glassfish and there also it is not present then click on tools on top and in the server option select glassfish server.

4.and then select glassfish server and click next.

5.no need to select any framework so simply click next.

6.so the project is created name "calculatorwebservice"

7.right click on project name and click on new and select web service and give it name "calculator".

8.and select package name "com.unique" and then click on finish.

9.now the folder named web service is created int he project folder.

10.IN that web service named folder calculator web service is created in this "hello" named function is there.

11.and delete the that function name hello.

12 now right click on calculator web service and click on "add operation".

13.And give a name "getNumbers" to that method and provide 2 integer type parameters(num1,num2) to that getNumber method and click on ok.

14.then the method name getNumbers is created in the code.

15.Now in that function getNumbers write (int sum = num1 + num2)

16 and then return sum;

17.now right click on the project name and click on clean and build for errors.

18.build successful is there.

19 then again right click on the project name and click on the deploy.

20.then it is deployed successfully.

21.now we have to test the web service so right click on the web service name "calculator" and click on the "test web service".

22.then there is a localhost window is opened in the browser tab.

23.now we have to create the client to use this calculator web service.

24.now create a new project name "calculatorclient". With the use of "java web".

25.select glassfish server.no need to select framework.

26.right click on the calculatorclient and click on the new and select "web service client".

27.and provide the path of the calculator web service which is created in the calculatorwebservice project(previous project). With use of browse option.

28.then click on finish.

29.so now web service reference folder is created in the calculator client.
 In that reference of the calculator web service which is taken from the calculatorwebservice project.

30.now in the opened index.html we have edit the things which are look like a "the inputs for 2 numbers in the html and the submit button". Simply we have to create the web page in html.gui.

31.Now in the body create the form which is

```
    <body>
    <form action="Calculator">
        Enter Number 1 : <input type="text" name="txt1" value="" /><br>
```

Enter Number 2 : <input type="text" name="txt2" value="" />
            <input type="submit" value="Submit" />
        </form>
    </body>

32.right click on the source package in the calculatorclient and right click on it and click on the servlet.

33.name the servlet "Calculator" which is written in the action in the form.

34.and click next and tick add information to descriptor…

35.and click on finish.

36.then the Calculator.java file is created.

37.now drag and drop the getNumber from the web service references into the that Calculator.java file which lokk like this

```
private int getNumber(int num1, int num2) {
    // Note that the injected javax.xml.ws.Service reference as well as port objects are not thread safe.
    // If the calling of port operations may lead to race condition some synchronization is required.
    com.unique.Calculator port = service.getCalculatorPort();
    return port.getNumber(num1, num2);
}
```

38.now simply change that try block code with this code below

```
try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample code. */
        int num1,num2;
        num1 = Integer.parseInt(request.getParameter("txt1"));
        num2 = Integer.parseInt(request.getParameter("txt2"));


        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet Calculator</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1>"+getNumber(num1, num2) + "</h1>");
        out.println("</body>");
        out.println("</html>");
    }
```

39.make to that calculatorclient "clear and build" and then "deploy".

40.now run the index.html which is present in the web service folder in the client project and the new tab is opened in the browser and thats it.