## **Experiment 3.3**

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Subject Name: PBLJ Lab Subject Code: 20CSP-321

1.Aim: Create JSP application for addition, multiplication and division..

2.Software/Hardware Requirements: VS Code or Eclipse

3. Algorithm/ PsuedoCode:

STEP 1- Create a index.jsp file in a webapp directory.

STEP 2 - Create a package named as fun and create a java file named as functions.java.

STEP 3 - functions.java file contains the logic for Performing the Operation such as addition, Division and Subtraction.

STEP 4- At Last start the server and display the output on the web browser.

STEP 5- EXIT

CODE:

## Index.jsp

```
<%@pagelanguage="java"contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<!DOCTYPEhtml>
<html> <head>
<metacharset="ISO-8859-1">
<title>Calculator</title>
<style> body{
background: black;
color: white;
} h1{
text-align: center;
} .Paramter{
border: 2px solid white;background: blue;
padding: 5px; max-width: 500px; margin:
auto; font-size: 19px;
```

```
} button{ position:
relative; left:
170px;
margin: 10px; width: 60px; height: 30px;
cursor:pointer;border-radius:5px;
} button:hover{
background: orange;
}
</style>
</head>
<body>
<br/>
<divclass="Paramter">
<formname="funcitons"action="<%=request.getContextPath()%>/functions"method="post">
<h1>Mathematical Operation</h1>
<inputtype="radio"id="add"name="fun"value="+"> Addition <br/>
<inputtype="radio"id="mul"name="fun"value="*"> Multiplication <br/><br/>
<inputtype="radio"id="sub"name="fun"value="-"> Subtraction <br/><br/>
                Enter the First Value: <inputtype="number"name="fst"><br/><br/><br/>
                Enter the Second Value: <inputtype="number"name="snd"><br/>
<buttontype="submit">Submit</button>
<buttonvalue="Reset">Reset
<h1>Ans = <%=request.getAttribute("ans") %></h1>
</div>
</body>
</html>
Functions.java
package fun;
import java.io.IOException; import
javax.servlet.ServletException; import
javax.servlet.annotation.WebServlet; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse;
/**
 * Servlet implementation class functions
 */
```

```
@WebServlet(name="functions",urlPatterns={"/functions"})
public class functions extends HttpServlet {
      protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
             String a=request.getParameter("fst");
             String b=request.getParameter("snd");
String fun=request.getParameter("fun");
             try {
                    System.out.println(a+fun+b);
             int i1=Integer.parseInt(a);
      int i2=Integer.parseInt(b);
int ans=0;
                   if(fun.equals("+")) {
                          ans=i1+i2;
                    }else if(fun.equals("-")) {
                          ans=i1-i2;
                    }else if(fun.equals("*")) {
                          ans=i1*i2;
                    }
                   System.out.println(ans);
//
request.setAttribute("ans", ans);
      request.getRequestDispatcher("index.jsp").forward(request, response);
             }catch(Exception e) {
                    System.out.println(e);
             }
      }
```

}

OUTPUT:

<b>Mathematical Operation</b>	
<ul> <li>Addition</li> <li>Multiplication</li> <li>Subtraction</li> </ul>	
Enter the First Value: 23	
Enter the Second Value: 24	
Submit Reset Reset	
Ans = null	
Mathematical Operation	
<ul><li>Addition</li><li>Multiplication</li></ul>	
Subtraction  Enter the First Value:	
Enter the Second Value:	
Submit Reset	
Ans = 47	

Learning outcomes (What I have learnt):

- 1. Learn About the servlet
- 2. Learn about jsp and dynamic web project
- 3. Learn about the tomcat server and its integrations with the java.