

Experiment 3.3

Student Name: Lipakshi

Branch: BE-CSE

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UID: 20BCS5082

Section/Group: 607 B

Subject Name : PBLJ Lab

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

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="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/>
    <div class="Paramter">
        <form name="funcitons" action="<%=request.getContextPath()%>/functions"
method="post" >

        <h1>Mathematical Operation</h1>
        <input type="radio" id="add" name="fun"
value="+"> Addition <br/>
        <input type="radio" id="mul" name="fun"
value="*"> Multiplication

        <input type="radio" id="sub" name="fun"
value="-"> Subtraction

        Enter the First Value: <input
type="number" name="fst"><br/>
        Enter the Second Value: <input
type="number" name="snd"><br/>
```



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type="submit">Submit</button>

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```
        <button value="Reset">Reset</button>
    </form>
    <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);
```



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```
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:

Mathematical Operation

- ☒ Addition
- ☐ Multiplication
- ☐ Subtraction

Enter the First Value:

Enter the Second Value:

Submit

Reset

Ans = null

Mathematical Operation

- ☐ Addition
- ☐ Multiplication
- ☐ 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.