Experiment Title – 3.3

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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
<br/>
                <input type="radio" id="sub" name="fun" value="-"> Subtraction
<br/><br/>
                Enter the First Value:  <input type="number" name="fst"><br/><br/>
                Enter the Second Value: <input type="number" name="snd"><br/>
                <button type="submit">Submit</button>
```

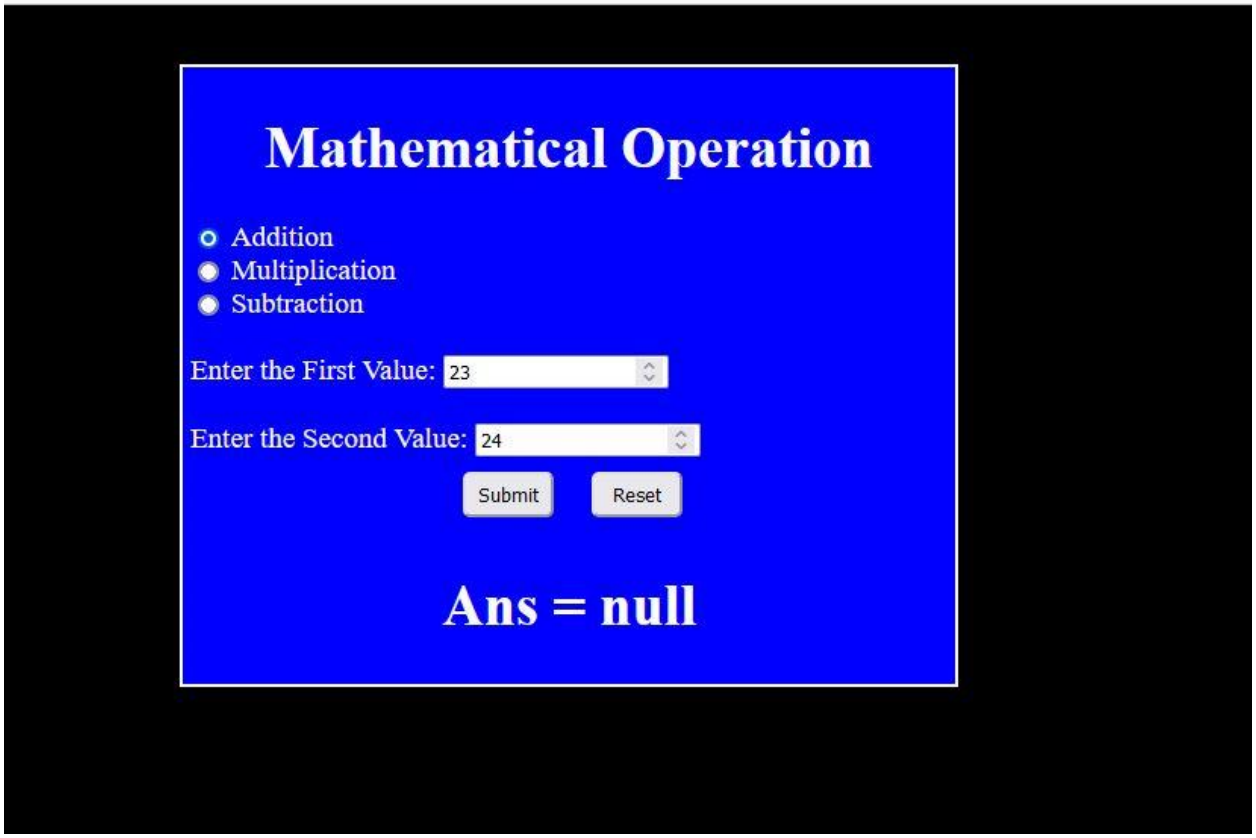
```
                <button value="Reset">Reset</button>
            </form>
            <h1>Ans = <%=request.getAttribute("ans") %></h1>
        </div>

</body>
</html>
```

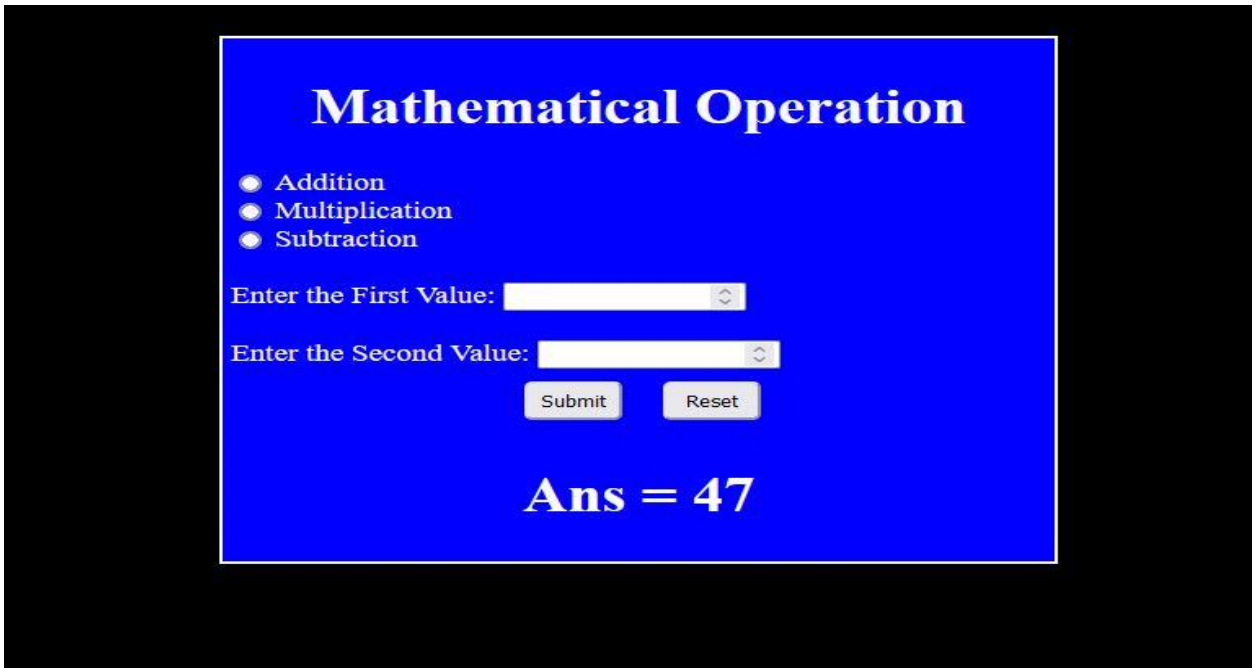
Functions.java

```
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);
```

```
                        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: 23
Enter the Second Value: 24
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.