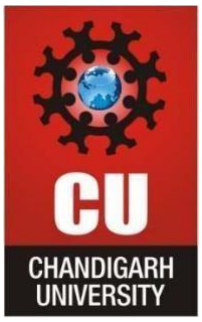

UNIVERSITY INSTITUTE OF ENGINEERING

Department of Computer Science & Engineering

Subject Name: Project Based Learning in Java Lab

Subject Code: 20CSP321

Submitted to: Er.Parveen Tanwar Sir
Faculty name: Er. Parveen Tanwar Sir

Submitted by: Pranjal Kumar
Name: Pranjal Kumar
UID: 20BCS3504
Section: 607
Group: B

Department of Computer Science & Engineering

INDEX

Ex. No	List of Experiments	Conduct (MM: 12)	Viva (MM: 10)	Record (MM: 8)	Total (MM: 30)	Date	Remarks/Signature
1.1	Create an application to save the employee information using arrays.					03/09/22	
1.2	Design and implement a simple inventory control system for a small video rental store.					05/09/22	
1.3	Create a application to calculate interest for FDs, RDs based on certain conditions using inheritance.					10/09/22	
2.1	Create a program to set view of Keys from Java Hashtable.					29/09/22	
2.2	Create a program to show the usage of Sets of Collection interface.					07/10/22	
2.3	Write a Program to perform them basic operations like insert, delete, display, and search in list. List contains String object items where these operations are to be performed.					12/10/22	
2.4	Create a menu-based Java application with the following options. 1.Add an Employee 2.Display All 3.Exit If option 1 is selected, the application should gather details of the employee like employee name, employee id, designation and salary and store it in a file. If option 2 is selected, the application should display all the employee details. If option 3 is selected the application should exit.					13/10/22	
3.1	Create a palindrome creator application for making a longest possible palindrome out of given input string.					03/11/22	
3.2	Create a Servlet/ application with a facility to print any message on web browser.					04/11/22	
3.3	Create JSP application for addition, multiplication and division.					07/11/22	

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Experiment 3.3

Student Name: Pranjal Kumar **UID: 20BS3504**

Branch: CSE **Section/Group: 607-B**

Semester: 5th **Date of Performance: 07/11/22**

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

AIM:

Create JSP application for addition, multiplication and division.

Software/Hardware Requirements:

VS Code or Eclipse

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

JAVA CODE/INPUT:

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>
```

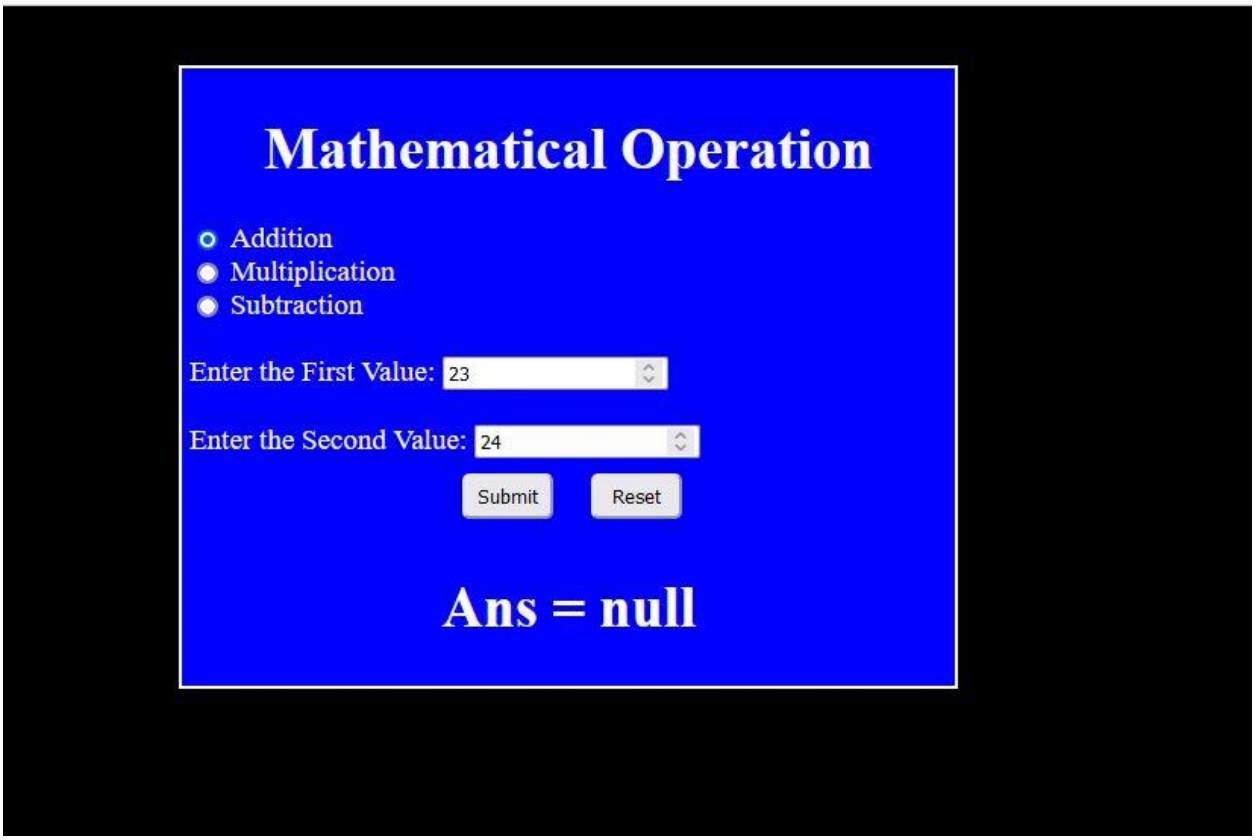
Functions.java

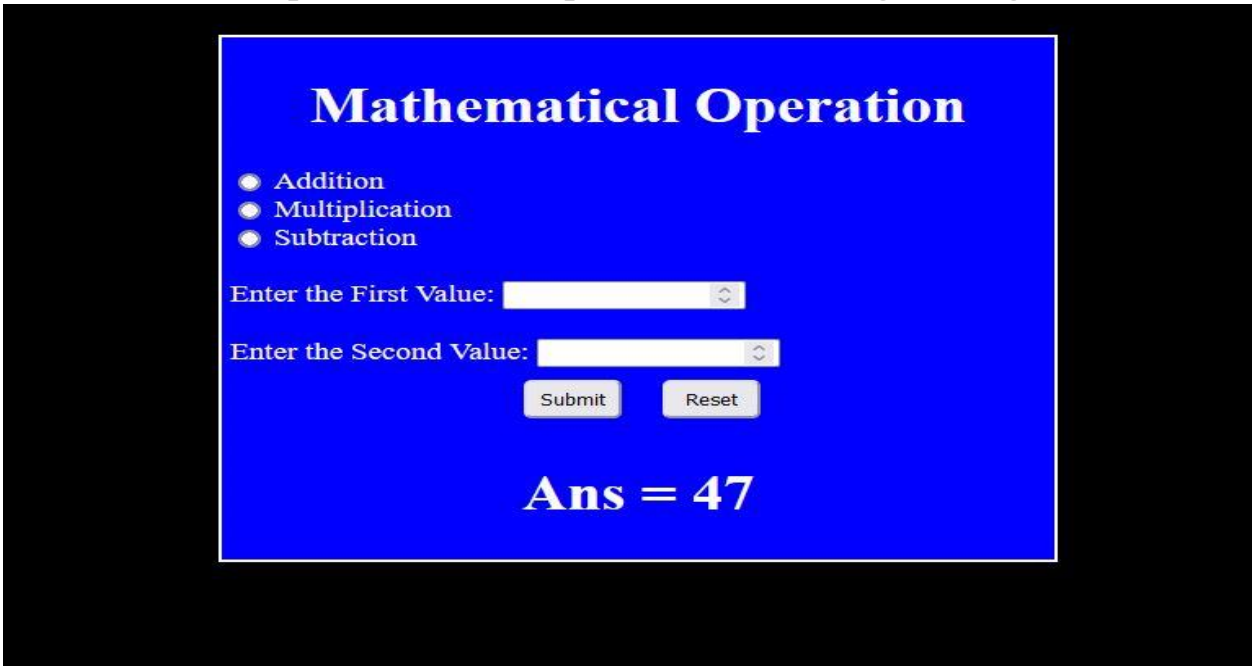
```
package fun;



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



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.