

Velagapudi Ramakrishna Siddhartha Engineering College

Kanuru, 520001



Code : 20IT6303

**Web Programming and
Development Laboratory**

WEEK – 1

Aim : Create a JDBC application which connects with an MS Access database and perform CRUD Operations.

Program :

```
package javadb;

import java.io.*;
import java.sql.*;

public class JavaDBC {

    public static void main(String[] args)
    {
        try
        {
            Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
            // E:\venkat sai\WebDev_Program\JDBC.accdb

            Connection con = DriverManager.getConnection("jdbc:ucanaccess://E:\\venkat
sai\\WebDev_Program\\JDBC.accdb");

            Statement st = con.createStatement();

            // Insert Query;
            String sqlinsert = "insert into Employee values(68, 'A. Charan', 208456732, 95000)";
            st.executeUpdate(sqlinsert);

            // update Query
            String sqlupdate = "update Employee set salary = 70000 where ID = 68";
            //st.executeUpdate(sqlupdate);

            // Delete record Query
            String sqldelete = "delete from Employee where id = 4";
```

```
//st.executeUpdate(sqldelete);  
// Create Query  
String sqlcreate = "CREATE TABLE REGISTRATION " +  
    "(id INTEGER not NULL, " +  
    " first VARCHAR(255), " +  
    " last VARCHAR(255), " +  
    " age INTEGER, " +  
    " PRIMARY KEY ( id ))";  
//st.executeUpdate(sqlcreate);  
// Select Query  
ResultSet rs = st.executeQuery("select * from Employee");  
while(rs.next())  
{  
    System.out.println("Employee ID Number is: " + rs.getInt(1));  
    System.out.println("Employee name is: " + rs.getString(2));  
    System.out.println("Employee Mobile Number : " + rs.getInt(3));  
    System.out.println("Employee Salary : " + rs.getInt(4));  
    System.out.println();  
}  
}  
catch(Exception e)  
{  
    System.out.println("An unknown Exception occurred : \n\n" + e);  
}  
}  
}
```

Output :

Select Query

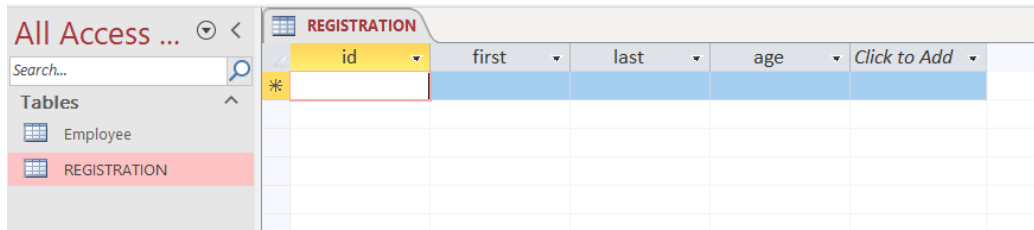
Employee				
ID	EmployeeNa	Mobile	Salary	Click to Add
1	Rizwanullah	34724675	45000	
2	MJNVsai	2416671	35000	
3	Ajay Kumar	4534589	87000	
4	Mounav	23000	10	
5	sai vamsi	2345667	90000	
9	sai vamsi	2345667	95000	
10	Raju Deepak	2354667	95	
11	A. Charan	208456732	95000	
*	(New)	0	0	

Update Query

Employee				
ID	EmployeeNa	Mobile	Salary	Click to Add
1	Rizwanullah	34724675	45000	
2	MJNVsai	2416671	35000	
3	Ajay Kumar	4534589	87000	
4	Mounav	23000	10	
5	sai vamsi	2345667	90000	
9	sai vamsi	2345667	95000	
10	Raju Deepak	2354667	95	
11	A. Charan	208456732	70000	
*	(New)	0	0	

Delete Query :

Employee				
ID	EmployeeNa	Mobile	Salary	Click to Add
1	Rizwanullah	34724675	45000	
2	MJNVsai	2416671	35000	
3	Ajay Kumar	4534589	87000	
5	sai vamsi	2345667	90000	
9	sai vamsi	2345667	95000	
10	Raju Deepak	2354667	95	
11	A. Charan	208456732	70000	
*	(New)	0	0	

Create Query :

id	first	last	age	Click to Add
*				

Result : Sucessfully Executed the Program.

Week – 2

Aim : Create a JDBC application which connects with an Mysql database and perform CRUD Operations.

Program :

```
package javadb;

import java.io.*;
import java.sql.*;
import java.util.*;

public class MySql
{
    public static void main(String[] args)
    {
        try
        {
            Scanner s = new Scanner(System.in);
            System.out.print("Enter Eno : ");
            int a = s.nextInt();
            System.out.print("Enter Ename : ");
            String ss = s.next();

            Class.forName("com.mysql.jdbc.Driver");
            Connection con =
            DriverManager.getConnection("jdbc:mysql://localhost/it","root","");
            Statement st = con.createStatement();

            // Statement is an Interface and Connection is an Child Class
```

```
//Create Database
```

```
String sqldb = "create database 208W1A1299";
```

```
//st.executeUpdate(sqldb);
```

```
//Create table
```

```
String sqltable = "create table employee (eno int, name varchar(20))";
```

```
//st.executeUpdate(sqltable);
```

```
// Insert Records
```

```
String sqlinsert = "insert into employee values(4,'kumar')";
```

```
//st.executeUpdate(sqlinsert);
```

```
String insertdynamic = "insert into employee values("+a+", '"+ss+"')";
```

```
//st.executeUpdate(insertdynamic);
```

```
// Update Query
```

```
String sqlupdate = "update employee set name='charan' where eno=268";
```

```
//st.executeUpdate(sqlupdate);
```

```
// Delete Query
```

```
String sqldelete = "delete from employee where eno=299";
```

```
//st.executeUpdate(sqldelete);
```

```
// Select Query
```

```
ResultSet rs = st.executeQuery("select * from employee");
```

```
while(rs.next())
```

```

        System.out.println(rs.getInt(1) + " " + rs.getString(2));
    con.close();
}
catch(Exception e)
{
    System.out.println("An unknown Error occured : \n" + e);
}
}
}

```

Output :

Create Query :

```

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| 208w1a12a0 |
| college |
| companymail |
| ddl |
| it |
| mysql |
| project1 |
| student |
+-----+
9 rows in set (0.00 sec)

```

```

mysql> use 208w1a12a0;
Database changed
mysql> desc employee;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| eno   | int(11)       | YES  |     | NULL    |       |
| name  | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.08 sec)

```


Insert Query :

```
mysql> select * from employee;
+-----+-----+
| eno  | name  |
+-----+-----+
| 268  | A     |
| 299  | rizwan |
+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

Update Query :

```
mysql> select * from employee;
+-----+-----+
| eno  | name  |
+-----+-----+
| 268  | charan |
| 299  | rizwan |
+-----+-----+
2 rows in set (0.00 sec)
```

Delete Query :

```
mysql> select * from employee;
+-----+-----+
| eno  | name  |
+-----+-----+
| 268  | charan |
+-----+-----+
1 row in set (0.00 sec)
```

Result : Sucessfully Executed the Program.

Week – 3

Aim : Create a JDBC application and insert the records into Mysql database By using the PreparedStatement interface.

Program :

```
package javadb;
import java.io.*;
import java.util.*;
import java.sql.*;
public class PrepState
{
    public static void main(String[] args)
    {
        try
        {
            Class.forName("com.mysql.jdbc.Driver");
            Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/student","root","");
            String sqltable = "create table students(roll int, name varchar(50), marks float)";
            PreparedStatement ps = con.prepareStatement(sqltable);
            int t = ps.executeUpdate();
            System.out.println(t);

            String sqlinsert = "insert into students values(?, ?, ?)";
            PreparedStatement ps = con.prepareStatement(sqlinsert);
            ps.setInt(1, 82);
            ps.setString(2, "Sai vamsi");
            ps.setFloat(3, 95.8f);
            int i = ps.executeUpdate();
            System.out.println(i);

            String sqlres = "select * from students";
            PreparedStatement ps = con.prepareStatement(sqlres);
            ResultSet rs = ps.executeQuery();
            while(rs.next())
            {
```

```

        System.out.println("Student Roll Number : " + rs.getInt(1));
        System.out.println("Student Name : " + rs.getString(2));
        System.out.println("Student Marks : " + rs.getFloat(3));
        System.out.println();
    }
}
catch(Exception e)
{
    System.out.println(e);
}
}
}

```

Output :

Create Query :

```

mysql> desc students;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| roll  | int(11)       | YES  |     | NULL    |       |
| name  | varchar(50)   | YES  |     | NULL    |       |
| marks | float         | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

```

Insert Query :

```

mysql> select * from students;
+-----+-----+-----+
| roll | name      | marks |
+-----+-----+-----+
| 82   | Sai vamsi | 95.8   |
+-----+-----+-----+
1 row in set (0.00 sec)

```

Result : Sucessfully Executed The Program

WEEK – 4

Aim : Create a Login Web Application which interacts with an mysql database and validates Login credentials of the user.

Program : index.html

```
<html>
  <head>
    <title> Just A login </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <h1> <b> Login </b> </h1>
      <form action = "Servlet1" method = "GET">
        <label for = "dfu"> User Name : </label>
        <input type = "text" name = "u1" /> <br> <br>

        <label for = "dfp"> Password : </label>
        <input type = "text" name = "u2" /> <br> <br>

        <input type = "submit" value = "SUBMIT" />
      </form>
    </center>
  </body>
</html>
```

Program : Servlet1.java

```
import javax.servlet.http.*;
import javax.servlet.*;
import java.io.*;
import java.sql.*;

public class Servlet1 extends HttpServlet
{
    @Override
```

```

public void doGet(HttpServletRequest req, HttpServletResponse res) throws
ServletException, IOException
{
    res.setContentType("text/html");//setting the content type or mine type
    PrintWriter pw = res.getWriter();//get the stream to write the data

    //writing html in the stream
    //pw.println("<html><body>");
    String s1 = req.getParameter("u1");
    String s2 = req.getParameter("u2");

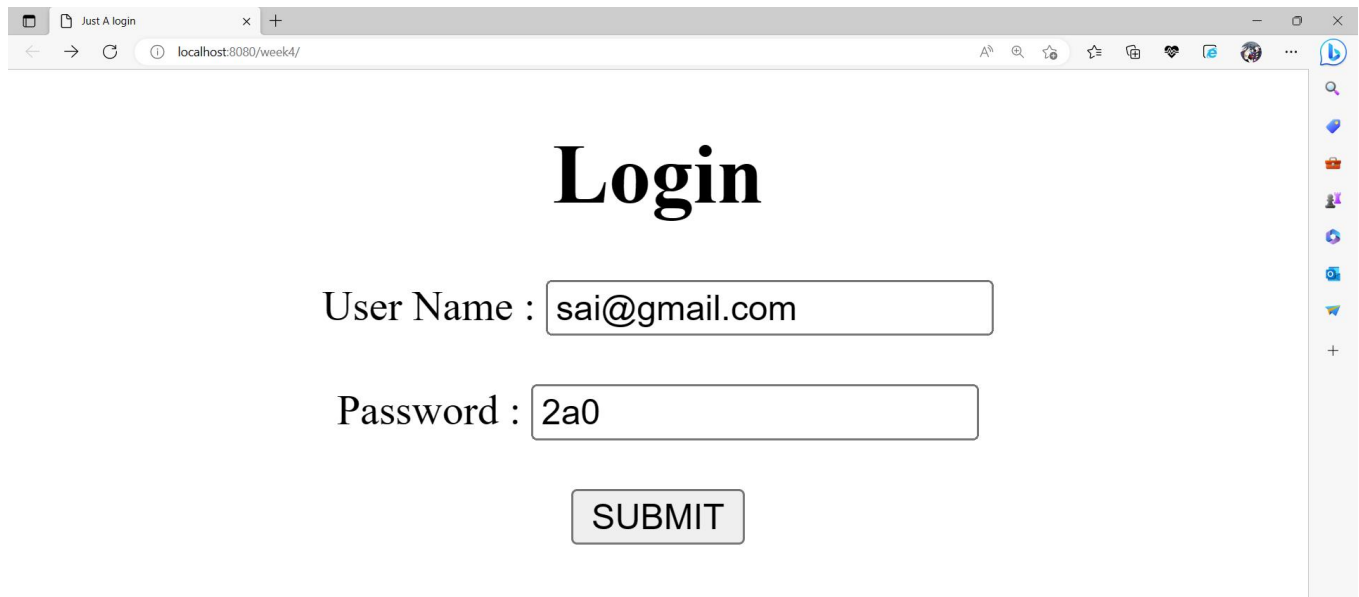
    boolean status = false;

    try
    {
        Class.forName("com.mysql.jdbc.Driver");
        Connection con = DriverManager.getConnection("jdbc:mysql://localhost/it", "root",
        "");

        String checksql = "select * from login where user = ? and pass = ?";
        PreparedStatement ps = con.prepareStatement(checksql);
        ps.setString(1, s1);
        ps.setString(2, s2);

        ResultSet rs = ps.executeQuery();
        while(rs.next())
        {
            status = true;
        }
        pw.print("<center> <h1> User Login Sucessfull </h1> </center>");
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }
}
}

```

Output :

A screenshot of a web browser window. The address bar shows 'localhost:8080/week4/'. The page content features the word 'Login' in a large, bold, black serif font. Below it, there are two input fields. The first is labeled 'User Name :' and contains the text 'sai@gmail.com'. The second is labeled 'Password :' and contains the text '2a0'. Below the password field is a button labeled 'SUBMIT' in a light gray box with a thin black border.



Result : Sucessfully Executed The Program.

Week – 5

Aim : Create a Registration Web Application which interacts with Mysql database and Save them into the Database.

Program : index.html

```
<html>
  <head>
    <title> Registration </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <h1> <b> Registration Form </b> </h1>
      <form action = "Servlet1" method = "GET">
        <h3> Full Name : &nbsp; <input type = "text" name = "r1" /> </h3>
        <h3> Email ID : &nbsp; <input type = "text" name = "r2" /> </h3>
        <h3> Password : &nbsp; <input type = "password" name = "r3" /> </h3>

        <h3> Gender : &nbsp; <input type = "radio" name = "r4" value = "male"/> Male
        &nbsp; <input type = "radio" name = "r4" value = "male"/> Female &nbsp; <input type =
        "radio" name = "r4" value = "male"/> Others </h3>

        <h3> Date Of Birth : &nbsp; <input type = "date" name = "r5" /> </h3>
        <h3> City : &nbsp; <input type = "text" name = "r6" /> </h3>
        <h3> State : &nbsp; <input type = "text" name = "r7" /> </h3>

        <h3> Country : &nbsp;
          <select name = "r8">
            <option> India </option>
            <option> USA </option>
            <option> Russia </option>
            <option> Japan </option>
            <option> Pakisthan </option>
            <option> France </option>
            <option> Germany </option>
```



```
boolean status = false;

try
{
    Class.forName("com.mysql.jdbc.Driver");
    Connection con = DriverManager.getConnection("jdbc:mysql://localhost/it", "root",
    "");

    String checksql = "insert into register values(?, ?, ?, ?, ?, ?, ?, ?, ?)";
    PreparedStatement ps = con.prepareStatement(checksql);
    ps.setString(1, s1);
    ps.setString(2, s2);
    ps.setString(3, s3);
    ps.setString(4, s4);
    ps.setString(5, s5);
    ps.setString(6, s6);
    ps.setString(7, s7);
    ps.setString(8, s8);
    ps.setString(9, s9);

    int result = ps.executeUpdate();
    while(result > 0)
    {
        status = true;
    }

    pw.print("<center> <h1> Your Registration is Sucessfull !!! </h1> </center>");
}
catch(Exception e)
{
    e.printStackTrace();
}
}
```

Output :

Registration Form

Full Name :

Email ID :

Password :

Gender : ☒ Male ☐ Female ☐ Others

Date Of Birth :

City :

State :

Country :

Mobile Number :

```
mysql> select * from register;
+-----+-----+-----+-----+-----+-----+-----+-----+
| name   | email                | password | gender | dob       | city       | state       | country | mobile   |
+-----+-----+-----+-----+-----+-----+-----+-----+
| sai    | dhfb@gmail.com       | 1234    | male   | 2023-03-16 | vijayawada | AP          | Japan   | 76476586745 |
| MJNVSai | 208w1a12a0@vrsec.ac.in | sai208  | male   | 2002-01-15 | Vijayawada | Andhra Pradesh | India   | 8331062449 |
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql>
```

Result : Sucessfully Executed The Program.

WEEK - 6

Aim : Create a Web application in which user enters an Employee Number and fetch the Employee Information and print it on servlet Page.

Program : Index.html

```
<html>
  <head>
    <title> Assignment 1 </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <form action = "Servlet1" method = "GET">
        <h1> <b> Employee Details </b> </h1>
        <label for = "em"> Enter a Employee Number : </label>
        <input type = "text" name = "id" /> <br> <br>
        <input type = "submit" value = "SUBMIT" />
      </form>
    </center>
  </body>
</html>
```

Program : Servlet1.java

```
import javax.servlet.http.*;
import javax.servlet.*;
import java.io.*;
import java.sql.*;

public class Servlet1 extends HttpServlet
{
    @Override
    public void doGet(HttpServletRequest req,HttpServletResponse res) throws
ServletException,IOException
    {
        res.setContentType("text/html"); //setting the content type or mine type
```

```

PrintWriter pw=res.getWriter(); //get the stream to write the data

int id = Integer.parseInt(req.getParameter("id"));

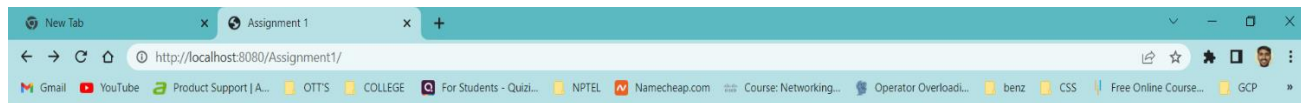
try
{
    Class.forName("com.mysql.jdbc.Driver");
    Connection con = DriverManager.getConnection("jdbc:mysql://localhost/it", "root",
""");

    PreparedStatement ps = con.prepareStatement("select * from javaemployee where
id = ?");
    ps.setInt(1, id);

    ResultSet rs = ps.executeQuery();
    while(rs.next())
    {
        pw.println("<center>");
        pw.println("<h1> Employeee Id : " + rs.getInt(1) + "</h1> <br> <br>");
        pw.println("<h1> Employeee Name : " + rs.getString(2) + "</h1> <br> <br>");
        pw.println("<h1> Employeee City : " + rs.getString(3) + "</h1> <br> <br>");
        pw.println("<h1> Employeee Company : " + rs.getString(4) + "</h1> <br> <br>");
        pw.println("<h1> Employeee Salary : " + rs.getFloat(5) + " Lakhs </h1> <br> <br>");
        pw.println("</center>");
    }
}
catch(Exception e)
{
    pw.println("An unexcepted Error Occured");
}
}
}

```

Output :



Employee Details

Enter a Employee Number : 3

SUBMIT

Employee Id : 3

Employee Name : charan

Employee City : krishna

Employee Company : avantal

Employee Salary : 98.99 Lakhs

Aim : Create a Web Application that provides a web program to an end User and he should be able to get the details in the form when it is Entered provide the update control on the form to update the Employee information in the database.

Program : Index.html

```
<html>
  <head>
    <title> Assignment 2 </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <h1> <b> Book Details </b> </h1>
      <form action = "Servlet1" method = "GET">
        <label for = "is"> Enter Book ISBN Number : </label>
        <input type = "text" name = "isbn" /> <br> <br>
        <input type = "submit" value = "SUBMIT" />
      </form>
    </center>
  </body>
</html>
```

Program : Book.html

```
<html>
  <head>
    <title> Book Details </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <form action = "Servlet2" method = "GET">
        <h1> <b> Update Book Details In Database </b> </h1>
        <label for = "is1"> Enter ISBN Number : </label>
```

```

<input type="text" name="is1" /> <br> <br>

<label for = "au1"> Enter Book Name : </label>
<input type="text" name="au1" /> <br> <br>

<label for = "bo1"> Enter Book Price : </label>
<input type="text" name="bo1" /> <br> <br>

<input type = "submit" value = "UPDATE" />
</form>
</center>
</body>
</html>

```

Program : Servlet1.java

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.*;
import java.sql.*;

public class Servlet1 extends HttpServlet
{
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");    //setting the content type
        PrintWriter pw = response.getWriter();    //get the stream to write the data

        int isbn = Integer.parseInt(request.getParameter("isbn"));

        try
        {
            Class.forName("com.mysql.jdbc.Driver");

```

```

Connection con = DriverManager.getConnection("jdbc:mysql://localhost/it", "root",
""");

PreparedStatement ps = con.prepareStatement("select * from newbook where isbn =
?");

ps.setInt(1, isbn);
ResultSet rs = ps.executeQuery();

while(rs.next())
{
    pw.println("<center>");
    pw.println("<h1> Book ISBN Number : " + rs.getInt(1) + "</h1> <br> <br>");
    pw.println("<h1> Book Name : " + rs.getString(2) + "</h1> <br> <br>");
    pw.println("<h1> Book Price : " + rs.getFloat(3) + "</h1> <br> <br>");
    pw.println("</center>");
}

pw.println("<center>");
//pw.println("<h1> Execution Completed </h1>");


pw.println("<br> <br>");
pw.println("<form action = 'book.html'>");
pw.println("<input type = 'submit' value = 'EDIT' />");
pw.println("</form>");
pw.println("</center>");
}
catch(Exception e)
{
    pw.println(e);
}
}
}

```


Program : Servlet2.java

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.*;
import java.sql.*;

public class Servlet2 extends HttpServlet
{
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");    //setting the content type
        PrintWriter pw = response.getWriter();    //get the stream to write the data

        int isbn = Integer.parseInt(request.getParameter("is1"));
        String author = request.getParameter("au1");
        float price = Float.parseFloat(request.getParameter("bo1"));

        try
        {
            Class.forName("com.mysql.jdbc.Driver");
            Connection con = DriverManager.getConnection("jdbc:mysql://localhost/it", "root",
""");

            PreparedStatement ps = con.prepareStatement("update newbook set name = ?, price
= ? where isbn = ?");
            ps.setInt(3, isbn);
            ps.setString(1, author);
            ps.setFloat(2, price);

            int check = ps.executeUpdate();

            Statement st = con.createStatement();

```

```
ResultSet rs = st.executeQuery("select * from newbook");
```

```
while(rs.next())
```

```
{
```

```
    pw.println("<center>");
```

```
    pw.println("<h1> Book ISBN Number : " + rs.getInt(1) + "</h1> <br> <br>");
```

```
    pw.println("<h1> Book Name : " + rs.getString(2) + "</h1> <br> <br>");
```

```
    pw.println("<h1> Book Price : " + rs.getFloat(3) + "</h1> <br> <br>");
```

```
    pw.println("<hr>");
```

```
    pw.println("</center>");
```

```
}
```

```
pw.println("<center>");
```

```
pw.println("<h1> Execution Completed </h1>");
```

```
pw.println("<br> <br>");
```

```
pw.println("<form action = 'index.html'>");
```

```
pw.println("<input type = 'submit' value = 'Search' />");
```

```
pw.println("</form>");
```

```
pw.println("</center>");
```

```
}
```

```
catch(Exception e)
```

```
{
```

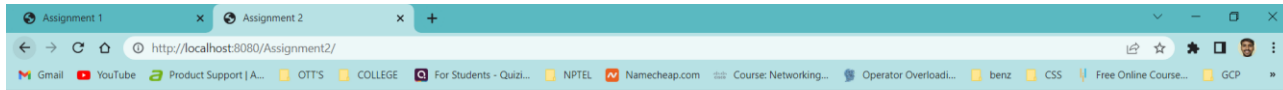
```
    pw.println(e);
```

```
}
```

```
}
```

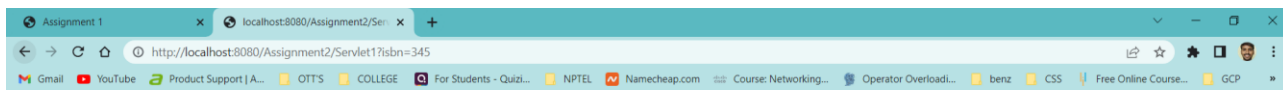
```
}
```

Output :



Book Details

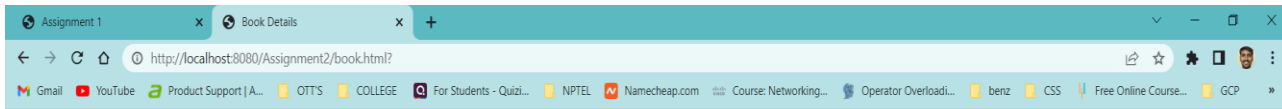
Enter Book ISBN Number :



Book ISBN Number : 345

Book Name : titanic

Book Price : 500.0

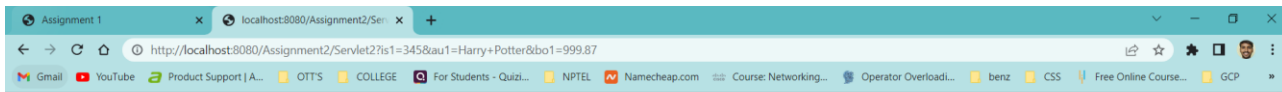


Update Book Details In Database

Enter ISBN Number :

Enter Book Name :

Enter Book Price :



Book Price : 698.99

Book ISBN Number : 345

Book Name : Harry Potter

Book Price : 999.87

Book ISBN Number : 420

Book Name : UHV

Aim : Create a Web application in which user enter the details of the Book are isbn, book name, book cost in the web form insert those Details as a new record in the database using servlets.

Program : Index.html

```
<html>
  <head>
    <title> Book Details </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <form action = "Servlet1" method = "GET">
        <h1> <b> Insert New Record Into Database </b> </h1>
        <label for = "is1"> Enter Book ISBN Number : </label>
        <input type="text" name="is1" /> <br> <br>

        <label for = "au1"> Enter Book Name : </label>
        <input type="text" name="au1" /> <br> <br>

        <label for = "bo1"> Enter Book Price : </label>
        <input type="text" name="bo1" /> <br> <br>

        <input type = "submit" value = "SUBMIT" />
      </form>
    </center>
  </body>
</html>
```

Program : Servlet1.java

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.*;
import java.sql.*;

public class Servlet1 extends HttpServlet
{
    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");    //setting the content type
        PrintWriter pw = response.getWriter();    //get the stream to write the data

        int isbn = Integer.parseInt(request.getParameter("is1"));
        String name = request.getParameter("au1");
        float price = Float.parseFloat(request.getParameter("bo1"));

        try
        {
            Class.forName("com.mysql.jdbc.Driver");
            Connection con = DriverManager.getConnection("jdbc:mysql://localhost/it", "root",
""");

            PreparedStatement ps = con.prepareStatement("insert into newbook values(?, ?, ?)");
            ps.setInt(1, isbn);
            ps.setString(2, name);
            ps.setFloat(3, price);

            int check = ps.executeUpdate();

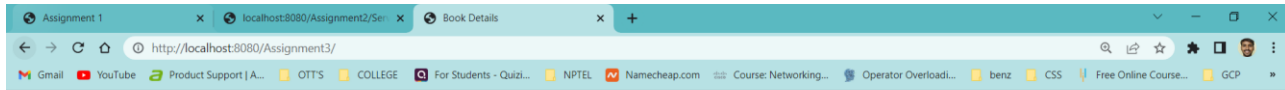
            Statement st = con.createStatement();
            ResultSet rs = st.executeQuery("select * from newbook");

```

```
while(rs.next())
{
    pw.println("<center>");
    pw.println("<h1> Book ISBN Number : " + rs.getInt(1) + "</h1> <br> <br>");
    pw.println("<h1> Book Name : " + rs.getString(2) + "</h1> <br> <br>");
    pw.println("<h1> Book Price : " + rs.getFloat(3) + "</h1> <br> <br>");
    pw.println("<hr>");
    pw.println("</center>");
}

pw.println("<center>");
pw.println("<h1> Execution Completed </h1>");
pw.println("<br> <br>");
pw.println("<form action = 'index.html'>");
pw.println("<input type = 'submit' value = 'New Record' />");
pw.println("</form>");
pw.println("</center>");
}
catch(Exception e)
{
    pw.println(e);
}
}
```

Output :

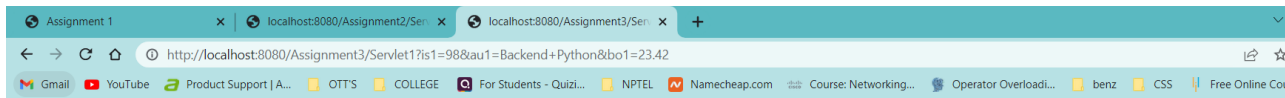


Insert New Record Into Database

Enter Book ISBN Number :

Enter Book Name :

Enter Book Price :



BOOK NAME : Software Testing

Book Price : 50.99

Book ISBN Number : 98

Book Name : Backend Python

Book Price : 23.42

Aim : Create a Web application that gives a web form for the end user in Which end user enters the salary range . server should sent to the Employee details whose salary are beyond the range.

Program : Index.html

```
<html>
  <head>
    <title> Assignment - 4 </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <form action = "Servlet1" method = "GET">
        <h1> <b> Range Of Salary </b> </h1>
        <label for = "mny"> Enter The Range Of Salary : </label>
        <input type = "text" name = "sal" /> <br> <br>
        <input type = "submit" value = "SUBMIT" />
      </form>
    </center>
  </body>
</html>
```

Program : Servlet1.java

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.*;
import java.sql.*;
public class Servlet1 extends HttpServlet
{
    @Override
```

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException

```
{
    response.setContentType("text/html");    //setting the content type
    PrintWriter pw = response.getWriter();    //get the stream to write the data

    int range = Integer.parseInt(request.getParameter("sal"));

    try
    {
        Class.forName("com.mysql.jdbc.Driver");
        Connection con = DriverManager.getConnection("jdbc:mysql://localhost/it", "root",
        "");

        PreparedStatement ps = con.prepareStatement("select * from javaemployee where
        salary >= ?");
        ps.setInt(1, range);

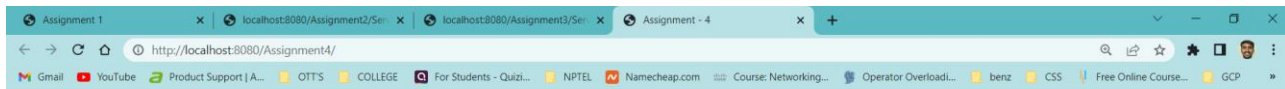
        ResultSet rs = ps.executeQuery();

        while(rs.next())
        {
            pw.println("<center>");
            pw.println("<h1> Employeee Id : " + rs.getInt(1) + "</h1> <br> <br>");
            pw.println("<h1> Employeee Name : " + rs.getString(2) + "</h1> <br> <br>");
            pw.println("<h1> Employeee City : " + rs.getString(3) + "</h1> <br> <br>");
            pw.println("<h1> Employeee Company : " + rs.getString(4) + "</h1> <br> <br>");
            pw.println("<h1> Employeee Salary : " + rs.getFloat(5) + " Lakhs </h1> <br> <br>");
            pw.println("<hr>");
            pw.println("</center>");
        }

        pw.println("<center>");
        //pw.println("<h1> Execution Completed </h1>");
        pw.println("<br> <br>");
        pw.println("<form action = 'index.html'>");
```

```
pw.println("<input type = 'submit' value = 'HOME' />");  
pw.println("</form>");  
pw.println("</center>");  
}  
catch(Exception e)  
{  
    pw.println(e);  
}  
}  
}
```

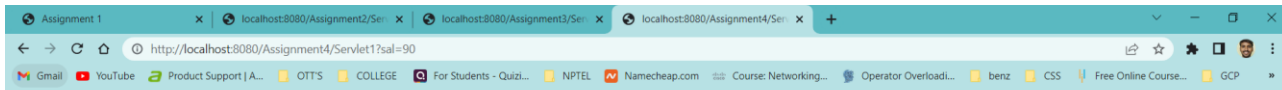
Output :



Range Of Salary

Enter The Range Of Salary :

SUBMIT



Employee Id : 2

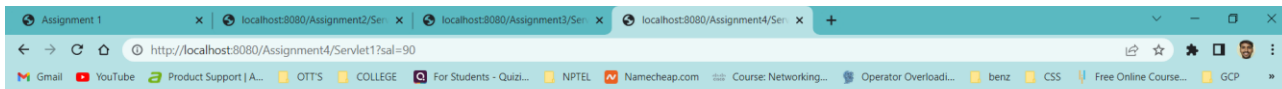
Employee Name : rizwan

Employee City : kanuru

Employee Company : avantal

Employee Salary : 95.67 Lakhs

Employee Id : 3



Employee Name : charan

Employee City : krishna

Employee Company : avantal

Employee Salary : 98.99 Lakhs

Employee Id : 4

Employee Name : prabhu ram

WEEK – 7

Aim : Create a web application for the Login and Logout Form using Servlets and cookies where cookies stores the user information In the web browser.

Program : index.html

```
<html>
  <head>
    <title> Login & Logout Using Cookies </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <a href="login.html"> Login </a> |
      <a href="LogoutServlet"> Logout </a> |
      <a href="ProfileServlet"> Profile </a>
    <hr>
    </center>
  </body>
</html>
```

Program : link.html

```
<html>
  <head>
    <title> Link Web Page </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <a href="login.html"> Login </a> |
      <a href="LogoutServlet"> Logout </a> |
      <a href="ProfileServlet"> Profile </a>
    <hr>
    </center>
  </body> </html>
```

Program : login.html

```

<html>
  <head>
    <title>Login Web Page</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body bgcolor = "#ff8080">
    <center>
      <form action = "LoginServlet" method = "POST">
        <h1> <strong> Login & Logout Using Cookies </strong> </h1>
        <label for="un"> Enter Your Name : </label>
        <input type = "text" name = "un" size = "25"/> <br> <br>
        <label for="up"> Enter Your Password : </label>
        <input type = "password" name = "up" /> <br> <br>
        <input type = "submit" value = "Login" />
      </form>
    </center>
  </body>
</html>

```

Program : LoginServlet.java

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class LoginServlet extends HttpServlet
{
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
    }
}

```

```

request.getRequestDispatcher("link.html").include(request, response);

String s1 = request.getParameter("un");
String s2 = request.getParameter("up");

if(s2.equals("admin"))
{
    out.println("You Are Sucessfully Login");
    out.println("<br> Welcome " + s1);

    Cookie ck = new Cookie("name", s1);
    response.addCookie(ck);
}
else
{
    out.println("Error !!! UserName Or password Must be Wrong Please Check It Again ");
    request.getRequestDispatcher("login.html").include(request, response);
}
out.close();
}
}

```

Program : LogoutServlet.java

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class LogoutServlet extends HttpServlet
{
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {

```

```

response.setContentType("text/html");
PrintWriter out = response.getWriter();

request.getRequestDispatcher("link.html").include(request, response);
Cookie ck = new Cookie("name", "");
ck.setMaxAge(0);
response.addCookie(ck);

out.println("You are Sucessfully Logout") } }

```

Program : ProfileServlet.java

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class ProfileServlet extends HttpServlet
{
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        request.getRequestDispatcher("link.html").include(request, response);
        Cookie ck[] = request.getCookies();

        if(ck != null)
        {
            String name = ck[0].getValue();
            if(!name.equals("") || name != null)
            {
                out.println("<b> Welcome to Profile </b> ");
                out.println("Welcome" + name);
            }
        }
    }
}

```

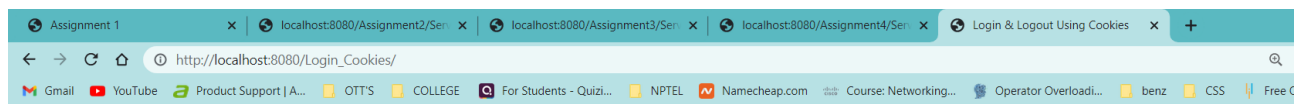


```

    }
    else
    {
        out.println("Please Login First");
        request.getRequestDispatcher("login.html").include(request, response);
    }
    out.close();
}
}

```

Output :

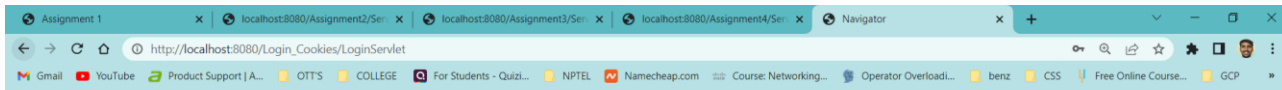


[Login](#) | [Logout](#) | [Profile](#)

Login & Logout Using Cookies

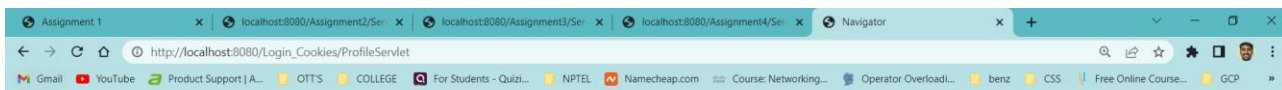
Enter Your Name :

Enter Your Password :



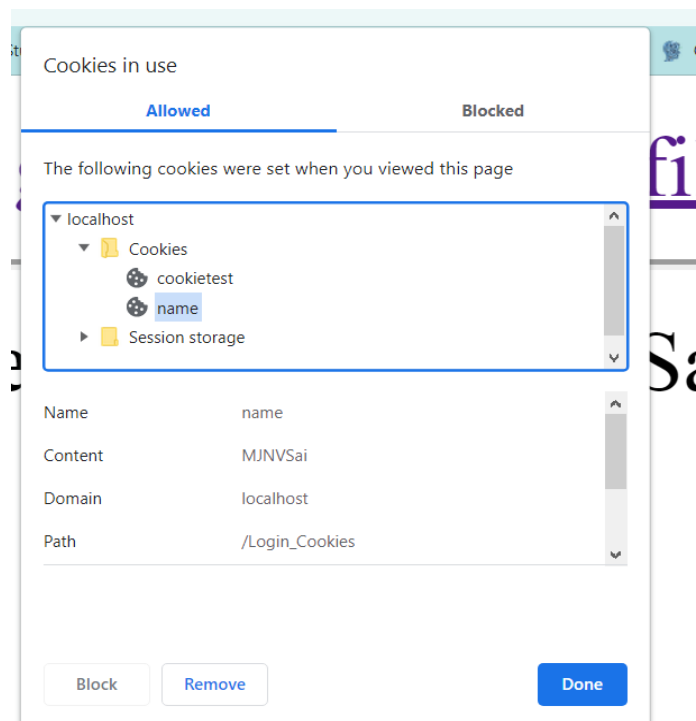
[Login](#) | [Logout](#) | [Profile](#)

You Are Successfully Login
Welcome MJNVSai



[Login](#) | [Logout](#) | [Profile](#)

Welcome to Profile WelcomeMJNVSai



Aim : Create a web application in which, a web form allows the end user To perform online transfer of funds from savings account to the Current account and it will update in the database also.

Program : index.html

```
<html>
  <head>
    <title> Banking Application </title>
  </head>
  <body>
    <center>
      <h1> <b> <i> Online Fund Transfer Interface </i> </b> </h1>
      <form action = "Transfer" method = "POST">
        <label for = "sbno"> Enter Savings A/C Number : </label>
        <input type="text" name="sbno" required /> <br> <br>
        <label for = "cbno"> Enter Current A/C Number : </label>
        <input type="text" name="cbno" required /> <br> <br>
        <label for = "amount"> Enter Transfer : </label>
        <input type="text" name="amount" required /> <br> <br>
        <input type="submit" value="TRANSFER"/>
      </form>
    </center>
  </body>
</html>
```

Program : web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="3.1" xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd">

  <servlet>
    <servlet-name>Transfer</servlet-name>
    <servlet-class>Transfer</servlet-class>
```

```
<init-param>  
  <param-name>Driver</param-name>  
  <param-value>com.mysql.jdbc.Driver</param-value>  
</init-param>
```

```
<init-param>  
  <param-name>DriverUrl</param-name>  
  <param-value>jdbc:mysql://localhost/it</param-value>  
</init-param>
```

```
<init-param>  
  <param-name>Username</param-name>  
  <param-value>root</param-value>  
</init-param>
```

```
<init-param>  
  <param-name>Password</param-name>  
  <param-value></param-value>  
</init-param>  
</servlet>
```

```
<servlet-mapping>  
  <servlet-name>Transfer</servlet-name>  
  <url-pattern>/Transfer</url-pattern>  
</servlet-mapping>
```

```
<session-config>  
  <session-timeout>  
    30  
  </session-timeout>  
</session-config>  
</web-app>
```

Program : Transfer.java

```

import java.io.*;
import java.sql.*;
import java.lang.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
//main code starts from here
public class Transfer extends HttpServlet
{

    Connection con;
    public void init(ServletConfig config) throws ServletException
    {
        try
        {
            String driver = config.getInitParameter("Driver");
            String url = config.getInitParameter("DriverUrl");
            String user = config.getInitParameter("Username");
            String pwd = config.getInitParameter("Password");

            Class.forName(driver);
            con = DriverManager.getConnection(url, user, pwd);
        }
        catch(Exception e)
        {
            System.out.println(e);
        }
    }
    public void doPost(HttpServletRequest req,HttpServletResponse res) throws
ServletException,IOException
    {
        Statement st = null;
        int sbacno = Integer.parseInt(req.getParameter("sbno"));
        int caccno = Integer.parseInt(req.getParameter("cbno"));
        float amount = Float.parseFloat(req.getParameter("amount"));
    }
}

```

```

res.setContentType("text/html");
PrintWriter out = res.getWriter();

out.println("<html>");
out.println("<body bgcolor='azure'>");
try
{
    st = con.createStatement();
    String sql1 = "update savings set balance = balance-" +amount+ "where accno="
+sbaccno;
    String sql2 = "update current set balance = balance+" +amount+ "where accno="
+caccno;

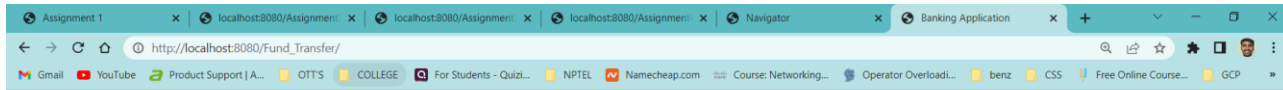
    if(sbaccno != caccno)
    {
        st.executeUpdate(sql1);
        st.executeUpdate(sql2);
        out.println("<h2> <b> <i> Funds Transferred Successfully ! </i> </b> </h2>");
    }
    else
    {
        out.println("Saving or Current Bank Account Number was incorrect. Please check and
try again ! <a href='index.html'> Click here </a>");
    }

}
catch(Exception e)
{
    System.out.println(e);
}
finally
{
    try
    {
        if(st!=null)
        {

```

```
        st.close();
    }
}
catch(Exception e)
{
    e.printStackTrace();
}
}
out.println("</body>");
out.println("</html>");
}
public void destroy()
{
    try
    {
        if(con!=null)
        {
            con.close();
        }
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }
}
}
```

Output :



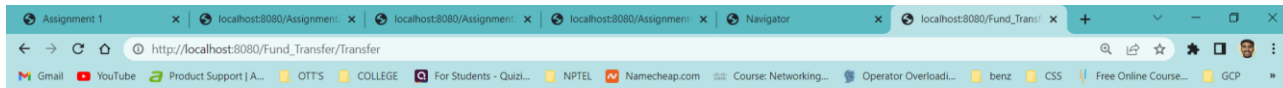
Online Fund Transfer Interface

Enter Savings A/C Number :

Enter Current A/C Number :

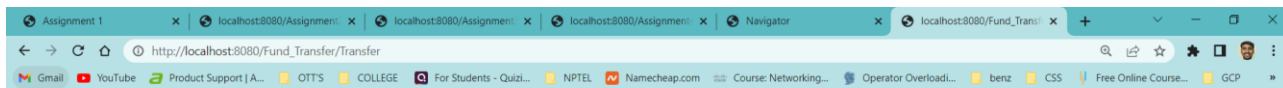
Enter Transfer :

TRANSFER



Funds Transferred Successfully !

Invalid Input :



Saving or Current Bank Account Number was incorrect. Please check and try again ! [Click here](#)

WEEK – 8

Aim : Create a Web Application Which Shows the product code and product quantity on User side of an web page and create a session in which session holds the product Code and quatity of that product

Program : index.html

```
<html>
  <head>
    <title> Session Tracking </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
  </head>
  <body>
    <center>
      <h1> Welcome to The Shopping Mall </h1>

      <form action = "Servlet1" method = "GET">
        <label for = "a1"> Select Product Code : </label>
        <select name = "pCode">
          <option value = 101> 101
          <option value = 102> 102
          <option value = 103> 103
          <option value = 104> 104
          <option value = 105> 105
        </select> <br> <br>

        <label for = "a2"> Product Quantity : </label>
        <input type = "text" name = "qty" /> <br> <br>
        <input type = "submit" name = "submit" value = "ADD ITEM" />
        <input type = "submit" name = "submit" value = "REMOVE ITEM" />
        <input type = "submit" name = "submit" value = "SHOW ITEMS" />
        <input type = "submit" name = "submit" value = "PAY AMOUNT" />
        <input type = "submit" name = "submit" value = "LOGOUT" />
      </form>
    </center>
  </body> </html>
```

Program : Servlet1.java

```
import java.io.*;
import javax.servlet.*;
import java.util.*;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class Servlet1 extends HttpServlet
{
    HttpSession session;
    String pCode, qty, clickButton;

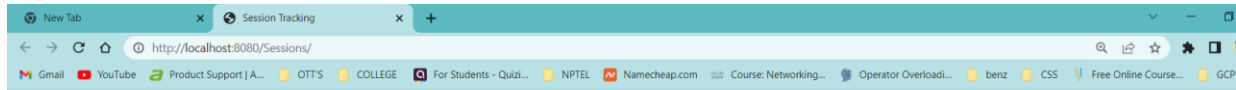
    public void doGet(HttpServletRequest req, HttpServletResponse res) throws
ServletException, IOException
    {
        res.setContentType("text/html");
        PrintWriter pw = res.getWriter();
        session = req.getSession(true);
        clickButton = req.getParameter("submit");

        if(clickButton.equals("ADD ITEM"))
        {
            pCode = req.getParameter("pCode");
            qty = req.getParameter("qty");

            if(!pCode.equals("") || qty.equals(""))
            {
                session.setAttribute(pCode, qty);
                res.sendRedirect("./index.html");
            }
        }
        else if(clickButton.equals("REMOVE ITEM"))
        {
            pCode = req.getParameter("pCode");
```

```
    session.removeAttribute(pCode);
    res.sendRedirect("./index.html");
}
else if(clickButton.equals("SHOW ITEMS"))
{
    Enumeration e = session.getAttributeNames();
    if(e.hasMoreElements())
    {
        pw.println("<h1> Your Shopping Cart Items </h1>");
        while(e.hasMoreElements())
        {
            String code = (String)e.nextElement();
            pw.println("<h1> Product Code : " + code + "</h1>");
            pw.println("<h1> Quantity : " + session.getAttribute(code) + "</h1>");
        }
    }
    else
    {
        pw.println("<h1> No Items Please </h1>");
    }
}
else if(clickButton.equals("LOGOUT"))
{
    session.invalidate();
    res.sendRedirect("./index.html");
}
else if(clickButton.equals("PAY AMOUNT"))
{
    pw.println("<h1> Payment Logic Goes Here </h1>");
}
pw.close();
}
```

Output :

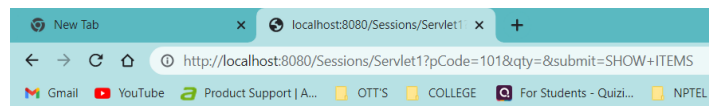


Welcome to The Shopping Mall

Select Product Code : 101

Product Quantity : 435

ADD ITEM REMOVE ITEM SHOW ITEMS PAY AMOUNT LOGOUT



Your Shopping Cart Items

Product Code : 101

Quantity : 435

Product Code : 102

Quantity : 500

Product Code : 103

Quantity : 999

Result : Sucessfully Executed The Program.

Company Mailer Project

Aim : Create A mailer Web application for a company that can be used by the employees of the company only. It can be run on interanet. Each user can send mails, receive mails and delete mails after getting logged in!

DataBase Tables :

Table – 1 :

create database companymail;

```
create table company_mailer_user(
    ID bigint, NAME varchar(4000), EMAIL varchar(4000),
    PASSWORD varchar(4000), GENDER varchar(4000), DOB date,
    ADDRESSLINE varchar(4000), CITY varchar(4000), STATE varchar(4000),
    COUNTRY varchar(4000), CONTACT varchar(4000), REGISTEREDDATE date, AUTHORIZED
    varchar(4000),
    primary key(ID)
);
```

Table – 2:

```
create table company_mailer_message(
    ID bigint, SENDER varchar(4000), RECEIVER varchar(4000), SUBJECT
    varchar(4000),
    MESSAGE varchar(4000), TRASH varchar(4000), MESSAGEDATE date,
    primary key(ID)
);
```

- Create Both These tables in Mysql Database

Program : index.html

```
<html>
  <head>
    <title> Index Web Page</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <style>
    .inputform
    {
      float:left;
      width:400px;
      border:1px solid pink;
      border-radius:10px;
      padding:10px;
    }
    .inputform table tr td input,textarea,select
    {
      width:200px;
    }
    #gender1,#gender2
    {
      width:10px;
    }
    #submit
    {
      margin-left:100px;
      width:100px;
    }
    #reset
    {
      width:100px;
    }
    .design
    {
      background-color:red;
      color:white;
```



```

        <option>Other</option>
    </select></td></tr>
    <tr><td>Contact:</td><td><input type="text" name="contact"/></td></tr>
    <tr><td colspan="2"><input id="submit" type="submit" value="register"/>
    <input id="reset" type="reset" value="clear"/>
    </td></tr>
</table>
</form>
</div>

```

```

<div class="inputform" style="float:right;">
    <h1 class="design"> <b> Login Form </b> </h1>
    <form action="LoginServlet" method="post">
        <table>
            <tr><td>Email:</td><td><input type="email" name="email"/></td></tr>
            <tr><td>Password:</td><td><input type="password"
name="password"/></td></tr>
            <tr><td colspan="2"><input id="submit" type="submit" value="login"/>
            </td></tr>
        </table>
    </form>
</div>
</body>
</html>

```

Program : composeform.html

```

<html>
    <head>
        <title> Compose Form Web Page </title>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
    </head>
    <body>
        <center>
            <div class="inputform" style="float:left;">
                <h1 class="design"> <b> Compose Mail Form </b> </h1>
                <form action="ComposeServletProcess">

```



```

<table>
  <tr><td>ID : </td><td><input type="text" name="id1"/></td></tr>
  <tr><td>To:</td><td><input type="text" name="to"/></td></tr>
  <tr><td>Subject:</td><td><input type="text" name="subject"/></td></tr>
  <tr><td colspan="2">Message:</td><td></td></tr>
  <tr><td colspan="2"><textarea name="message" rows="5"
cols="30"></textarea></td></tr>
  <tr><td colspan="2"><input id="submit" type="submit" value="Send Mail"/>
</td></tr>
</table>
</form>
</div>
</center>
</body>
</html>

```

Program : footer.html

```
<!DOCTYPE html>
```

```
<!--
```

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

```
-->
```

```
<html>
```

```
<head>
```

```
<title> Footer Web Page </title>
```

```
<meta charset="UTF-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
</head>
```

```
<body>
```

```
<h3 style="margin-top:500px;background-color:red;color:white;text-align:center"> <b>
&copy; &nbsp; Copyright 2011-2050. All rights reserved! </b> </h3>
```

```
</body>
```

```
</html>
```

Program : header.html

```
<html>
  <head>
    <title> Header Web Page</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <style>
    .inputform
    {
      float:left;
      width:400px;
      border:1px solid pink;
      border-radius:10px;
      padding:10px;
    }
    .inputform table tr td input,textarea,select
    {
      width:200px;
    }
    #gender1,#gender2
    {
      width:10px;
    }
    #submit
    {
      margin-left:100px;
      width:100px;
    }
    #reset
    {
      width:100px;
    }
    .design
    {
      background-color:red;
      color:white;
```

```

        padding-left:100px;
    }
</style>
</head>
<body>
    <center> <h1> <b> Company Mailer </b> </h1> </center>
    <h3 style="background-color:red;color:red;"> c </h3>
</body>
</html>

```

Program : link.html

```

<html>
<head>
    <title> Link Web Page </title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">

<style>
    .anchor
    {
        /* Box Model */
        padding: 5px;
        margin: 10px; /* 20px */
        border-radius: 9px; /* 520px */
        border-color: blue;
        border-style: double;
        border-width: 2px; /* 5px */

        color: crimson;
        text-decoration: none;
        letter-spacing: 2px;
    }

    .anchor:hover
    {
        color: white;
        background-color: indianred;
    }

```

```

        /*transition-delay: 0.7s;*/
    }
</style>
</head>
<body>
<center>
    <br> <br>
    <a href="index.html" class="anchor"> Home </a> |
    <a href="InboxServlet" class="anchor"> Inbox </a> |
    <a href="ComposeServlet" class="anchor"> Compose Mail </a> |
    <a href="SentServlet" class="anchor"> Sent Mail </a> |
    <a href="TrashServlet" class="anchor"> Trash </a> |
    <a href="LogoutServlet" class="anchor"> Logout </a>
    <br> <br>
    <hr/>
</center>
</body>
</html>

```

Program : login.html

```

<html>
<head>
    <title> Login Web Page</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body>
    <div class="inputform" style="float:left;">
        <h2 class="design">Login Form</h2>
        <form action="LoginServlet" method="post">
            <table>
                <tr><td>Email:</td><td><input type="email" name="email"/></td></tr>
                <tr><td>Password:</td><td><input type="password"
name="password"/></td></tr>
                <tr><td colspan="2"><input id="submit" type="submit" value="login"/>
                </td></tr>
            </table>

```

```

        </form>
    </div>
</body>
</html>

```

Program : RegisterServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;

public class RegisterServlet extends HttpServlet
{
    public void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);

        String rid = request.getParameter("regid");
        String name = request.getParameter("name");
        String password = request.getParameter("password");
        String email = request.getParameter("email") + "@cmail.com";
        String gender = request.getParameter("gender");
        //String dob = request.getParameter("dob");
        LocalDate dob = LocalDate.parse(request.getParameter("dob"));

        String addressLine = request.getParameter("addressLine");
        String city = request.getParameter("city");
        String state = request.getParameter("state");
        String country = request.getParameter("country");
    }
}

```

```

String contact = request.getParameter("contact");

try
{
    int status = 0;
    Date sqlDob = Date.valueOf(dob);

    // Getting Current Date
    java.sql.Date sqlCurrentDate = null;
    java.util.Date utilDate = java.util.Calendar.getInstance().getTime();
    sqlCurrentDate = new java.sql.Date(utilDate.getTime());

    String insertsql = "insert into
company_mailer_user(id,name,email,password,gender,dob,addressLine,city,state,country,c
ontact,registerddate,authorized) values(?,?,?,?,?,?,?,?,?,?,?,?,?)";

    Class.forName("com.mysql.jdbc.Driver");
    Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/companymail", "root", "");
    PreparedStatement ps = con.prepareStatement(insertsql);

    ps.setString(1, rid);
    ps.setString(2, name);
    ps.setString(3, email);
    ps.setString(4, password);
    ps.setString(5, gender);
    ps.setDate(6, sqlDob);
    ps.setString(7, addressLine);
    ps.setString(8, city);
    ps.setString(9, state);
    ps.setString(10, country);
    ps.setString(11, contact);
    ps.setDate(12, sqlCurrentDate);
    ps.setString(13, "yes");

    status = ps.executeUpdate();

```

```

        if(status > 0)
        {
            out.println("<h1> You are Sucessfully Registred </h1>");
            request.getRequestDispatcher("login.html").include(request, response);
        }
    }
    catch(Exception e)
    {
        out.println("<h1> An Error Occured " + e + "</h1>");
    }
    finally
    {
        request.getRequestDispatcher("footer.html").include(request, response);
        out.close();
    }
}
}

```

Program : LoginServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
public class LoginServlet extends HttpServlet
{
    public void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
    }
}

```

```

request.getRequestDispatcher("header.html").include(request, response);

String email = request.getParameter("email");
String password = request.getParameter("password");

try
{
    boolean status = false;

    Class.forName("com.mysql.jdbc.Driver");
    Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/companymail", "root", "");

    String selectsql = "select * from company_mailer_user where email = ? and password
= ? and authorized = ?";
    PreparedStatement ps = con.prepareStatement(selectsql);

    ps.setString(1, email);
    ps.setString(2, password);
    ps.setString(3, "yes");
    ResultSet rs = ps.executeQuery();
    if(rs.next())
    {
        status = true;
    }

    if(status)
    {
        request.getSession().setAttribute("login", "true");
        request.getSession().setAttribute("email", email);
        response.sendRedirect("InboxServlet"); // Created The Servlet
        //response.sendRedirect("./index.html");
    }
    else
    {
        out.print("<h1> Sorry, username or password Invalid </h1>");
        request.getRequestDispatcher("login.html").include(request, response);
    }
}

```



```

    }
}
catch(Exception e)
{
    out.println("<h1> An Error Occured " + e + "</h1>");
}
finally
{
    request.getRequestDispatcher("footer.html").include(request, response);
    out.close();
}
}
}

```

Program : InboxServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
import javax.servlet.http.HttpSession;
public class InboxServlet extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);
        request.getRequestDispatcher("link.html").include(request, response);

        HttpSession session = request.getSession(false);

```

```

if(session == null)
{
    response.sendRedirect("./index.html");
}
else
{
    String email = (String)session.getAttribute("email");
    String mainrec = (String)session.getAttribute("Torec");
    out.print("<span style='float:right'> <h2> <b> Hi, " + email + "</b> </h2> </span>");
    out.print("<h1> <strong> Inbox <strong> </h1>");

    String msg = (String)request.getAttribute("msg");
    if(msg != null)
    {
        out.print("<h3> <b> " + msg + "</b> </h3>");
    }

    try
    {
        Class.forName("com.mysql.jdbc.Driver");
        Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/companymail", "root", "");

        String selectsql = "select * from company_mailer_message where sender = ? and
trash = 'no' order by id desc";
        PreparedStatement ps = con.prepareStatement(selectsql);
        //ps.setString(1, "manju@gmail.com");
        ps.setString(1, email);
        ResultSet rs = ps.executeQuery();

        out.println("<center>");
        out.print("<table border='1' style='width:700px;'>");
        out.print("<tr style='background-color:grey;color:white'><td> <center> Sender
</center> </td><td> <center> Subject </center> </td></tr>");
        while(rs.next())
        {

```

```

        out.print("<tr><td>" + rs.getString(2)+ "</td><td> <a href='ViewMailServlet?id="
+rs.getString(1)+ "'>" +rs.getString(4)+ "</a></td></tr>");
    }
    out.print("</table>");
    out.println("</center>");

    con.close();
}
catch(Exception e)
{
    out.println("<h1> An Error Occured " + e + "</h1>");
}
}
request.getRequestDispatcher("footer.html").include(request, response);
out.close();
}

```

```

public void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
{
    doGet(request,response);
}
}

```

Program : ComposeServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
import javax.servlet.http.HttpSession;

```

```

public class ComposeServlet extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);
        request.getRequestDispatcher("link.html").include(request, response);

        HttpSession session=request.getSession(false);
        if(session == null)
        {
            response.sendRedirect("index.html");
        }
        else
        {
            String email = (String)session.getAttribute("email");
            out.print("<span style='float:right'> <h2> <b> Hi, " +email+ " </b> </h2> </span>");

            String msg = (String)request.getAttribute("msg");
            if(msg != null)
            {
                // request.setAttribute("Torec", email);
                out.print("<p>" +msg+ "</p>");
            }
            request.getRequestDispatcher("composeform.html").include(request, response);
        }

        request.getRequestDispatcher("footer.html").include(request, response);
        out.close();
    }
}

```

Program : ComposeServletProcess.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
import javax.servlet.http.HttpSession;
public class ComposeServletProcess extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);

        String receiver = request.getParameter("to");
        String id1 = request.getParameter("id1");
        String subject = request.getParameter("subject");
        String message = request.getParameter("message");
        message = message.replaceAll("\n", "<br>");
        String email = (String)request.getSession(false).getAttribute("email");

        try
        {
            int status = 0;
            Class.forName("com.mysql.jdbc.Driver");
            Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/companymail", "root", "");

```

```

String insertmsg = "insert into
company_mailer_message(id,sender,receiver,subject,message,trash,messagedate)
values(?,?,?,?,?,?,?)";
PreparedStatement ps = con.prepareStatement(insertmsg);

java.sql.Date sqlCurrentDate = null;
java.util.Date utilDate = java.util.Calendar.getInstance().getTime();
sqlCurrentDate = new java.sql.Date(utilDate.getTime());

ps.setString(1, id1);
ps.setString(2, email);
ps.setString(3, receiver);
ps.setString(4, subject);
ps.setString(5, message);
ps.setString(6, "no");
ps.setDate(7, sqlCurrentDate);

status = ps.executeUpdate();

if(status > 0)
{
    request.setAttribute("msg", "message successfully sent");
    request.setAttribute("Torec", receiver);
    request.getRequestDispatcher("ComposeServlet").forward(request, response);
}
}
catch(Exception e)
{
    out.println("<h1> An Error Occured " + e + "</h1>");
}
finally
{
    request.getRequestDispatcher("footer.html").include(request, response);
    out.close();
}
} }

```

Program : ViewMailServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
import javax.servlet.http.HttpSession;
public class ViewMailServlet extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);
        request.getRequestDispatcher("link.html").include(request, response);

        HttpSession session=request.getSession(false);
        if(session == null)
        {
            response.sendRedirect("index.html");
        }
        else
        {
            String email = (String)session.getAttribute("email");
            out.print("<span style='float:right'> <h2> <b> Hi, " +email+ " </b> </h2> </span>");

            int id = Integer.parseInt(request.getParameter("id"));
            try
            {
                Class.forName("com.mysql.jdbc.Driver");

```

```

Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/companymail", "root", "");

String selectview = "select * from company_mailer_message where id = ?";
PreparedStatement ps = con.prepareStatement(selectview);
ps.setInt(1, id);

ResultSet rs = ps.executeQuery();
if(rs.next())
{
    out.print("<style>");
    out.println(".anchor{padding: 5px; margin: 10px; border-radius: 9px; border-
color: blue; border-style: double; border-width: 2px; color: crimson; text-decoration: none;
letter-spacing: 2px;}");
    out.println("</style>");

    out.print("<h1> <b> " +rs.getString("subject")+ "</b> </h1> <hr/>");

    out.print("<center>");
    out.print("<p><b> <h3> Message: </h3> </b> " +rs.getString("message")+
"</p>");
    out.println("<p> <b> Sender : </b> " +rs.getString("sender")+ "</p> ");
    out.println("<p> <b> Receiver : </b> " +rs.getString("receiver")+ "</p> ");

    out.print("<p><a href='DeleteMailServlet?id=" +rs.getString(1)+ "' class='anchor'>
Delete Mail </a></p>");
    out.print("</center>");

    }

    con.close();
}
catch(Exception e)
{
    out.println("<h1> An Error Occured " + e + "</h1>");
}
}

```



```

        request.getRequestDispatcher("footer.html").include(request, response);
        out.close();
    }
}

```

Program : DeleteMailServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
import javax.servlet.http.HttpSession;

public class DeleteMailServlet extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);
        request.getRequestDispatcher("link.html").include(request, response);

        HttpSession session=request.getSession(false);
        if(session == null)
        {
            response.sendRedirect("index.html");
        }
        else
        {
            String email = (String)session.getAttribute("email");

```

```

        out.print("<span style='float:right'> <h2> <b> Hi, " + email+ " </b> </h2> </span>");

        int id = Integer.parseInt(request.getParameter("id"));
    try
    {
        Class.forName("com.mysql.jdbc.Driver");
        Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/companymail", "root", "");

        String delquery = "update company_mailer_message set trash = ? where id = ?";
        PreparedStatement ps = con.prepareStatement(delquery);
        ps.setString(1, "yes");
        ps.setInt(2, id);
        int i = ps.executeUpdate();

        if(i > 0)
        {
            request.setAttribute("msg", "Mail successfully deleted!");
            request.getRequestDispatcher("InboxServlet").forward(request, response);
        }
        con.close();
    }
    catch(Exception e)
    {
        out.println("<h1> An Error Occured " + e + "</h1>");
    }
}
request.getRequestDispatcher("footer.html").include(request, response);
out.close();
}
}

```

Program : SentServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
import javax.servlet.http.HttpSession;

public class SentServlet extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);
        request.getRequestDispatcher("link.html").include(request, response);

        HttpSession session=request.getSession(false);
        if(session == null)
        {
            response.sendRedirect("index.html");
        }
        else
        {
            String email = (String)session.getAttribute("email");
            out.print("<span style='float:right'> <h2> <b> Hi, " +email+ " </b> </h2> </span>");
            out.print("<h1> <b> Sent Mail </b> </h1>");

            try
            {
                Class.forName("com.mysql.jdbc.Driver");
            }
        }
    }
}

```

```

        Connection con =
DriverManager.getConnection("jdbc:mysql://localhost/companymail", "root", "");

        String sendsql = "select * from company_mailer_message where sender = ? and
trash = 'no' order by id desc";
        PreparedStatement ps = con.prepareStatement(sendsql);
        ps.setString(1, email);
        ResultSet rs = ps.executeQuery();

        out.print("<center>");
        out.print("<table border='2' style='width:700px;'>");
        out.print("<tr style='background-color:grey;color:white'><td> <center> To
</center> </td><td> <center> Subject </center></td></tr>");

        while(rs.next())
        {
            out.print("<tr><td>" + rs.getString("receiver") + "</td><td><a
href='ViewMailServlet?id=" + rs.getString(1) + "'>" + rs.getString("subject") +
"</a></td></tr>");
        }
        out.print("</table>");
        out.print("</center>");

        con.close();
    }
    catch(Exception e)
    {
        out.println("<h1> An Error Occured " + e + "</h1>");
    }
}
request.getRequestDispatcher("footer.html").include(request, response);
out.close();
}
}

```

Program : TrashServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
import javax.servlet.http.HttpSession;
public class TrashServlet extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);
        request.getRequestDispatcher("link.html").include(request, response);

        HttpSession session=request.getSession(false);
        if(session == null)
        {
            response.sendRedirect("index.html");
        }
        else
        {
            String email = (String)session.getAttribute("email");
            out.print("<span style='float:right'> <h2> <b> Hi, " +email+ " </b> </h2> </span>");
            out.print("<h1> <b> Trash </b> </h1>");

            String msg = (String)request.getAttribute("msg");
            if(msg != null)
            {
                out.print("<p>" +msg+ "</p>");
            }
        }
    }
}

```

```

    }

    try
    {
        Class.forName("com.mysql.jdbc.Driver");
        Connection con =
        DriverManager.getConnection("jdbc:mysql://localhost/companymail", "root", "");

        String trashsql = "select * from company_mailer_message where receiver = ? OR
sender = ? and trash = ? order by id desc";
        PreparedStatement ps = con.prepareStatement(trashsql);
        ps.setString(1, email);
        ps.setString(2, email);
        ps.setString(3, "yes");

        ResultSet rs = ps.executeQuery();

        out.print("<center>");
        out.print("<table border='2' style='width:700px;'>");
        out.print("<tr style='background-color:grey;color:white'><td> <center> Sender
</center> </td><td> <center> Subject </center></td></tr>");

        while(rs.next())
        {
            out.print("<tr><td>" + rs.getString("sender") + "</td><td>"
+rs.getString("subject") + "</td></tr>");
        }
        out.print("</table>");
        out.print("</center>");

        con.close();
    }
    catch(Exception e)
    {
        out.println("<h1> An Error Occured " + e + "</h1>");
    }
}

```

```

        request.getRequestDispatcher("footer.html").include(request, response);
        out.close();
    }
}

```

Program : LogoutServlet.java

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.time.*;
import javax.servlet.http.HttpSession;

public class LogoutServlet extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException
    {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        request.getRequestDispatcher("header.html").include(request, response);

        request.getSession().invalidate();
        out.print("<center> <h1> <b> You are successfully logged out! </b> </h1>
</center>");

        request.getRequestDispatcher("login.html").include(request, response);

        request.getRequestDispatcher("footer.html").include(request, response);
        out.close();
    }
}

```

Outputs :

Register :

The screenshot shows a web browser window with the URL `http://localhost:8080/Company_Mail/`. The page title is "Company Mailer". Below a red header bar, there are two forms: a "Registration Form" and a "Login Form". The "Registration Form" contains the following fields and values:

- ID: 100
- Name: MJNVSai
- Email: mjnvsai@cmailer.com
- Password: *****
- Gender: ☒ Male ☐ Female
- Date Of Birth: 15-01-2002
- AddressLine: Bhavanipuram, Swathi Theatre, Vijayawada, NTR, 520012
- City: Vijayawada
- State: Andhra Pradesh
- Country: India
- Contact: 8331062448

At the bottom of the registration form are "register" and "clear" buttons. The "Login Form" has fields for "Email:" and "Password:" with a "login" button below them.

Login :

The screenshot shows a web browser window with the URL `http://localhost:8080/Company_Mail/RegisterServlet`. The page title is "Company Mailer". Below a red header bar, the text "You are Successfully Registered" is displayed. Below this text is a "Login Form" with the following fields and values:

- Email: mjnvsai@cmailer.com
- Password: *****

A "login" button is located below the password field.

Compose Mail :

Company Mailer

Home | Inbox | Compose Mail | Sent Mail | Trash | Logout

Hi, mjnvsai@cmail.com.com

Compose Mail Form

ID :

To:

Subject:

Message:

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Company Mailer

Home | Inbox | Compose Mail | Sent Mail | Trash | Logout

Hi, mjnvsai@cmail.com.com

message successfully sent

Compose Mail Form

ID :

To:

Subject:

Message:

INBOX :

New Tab x Header Web Page x +

← → ↻ ⌂ http://localhost:8080/Company_Mail/InboxServlet

Gmail YouTube Product Support | A... OTT'S COLLEGE For Students - Quizi... NPTEL Namecheap.com Course: Networking... Operator Overloadi... benz CSS Free Online Course... GCP »

Company Mailer

Home | Inbox | Compose Mail | Sent Mail | Trash | Logout

Inbox

Hi, mjnvsai@cmail.com

Sender	Subject
mjnvsai@cmail.com	Web Developer
mjnvsai@cmail.com	Sir Movie

New Tab x Header Web Page x +

← → ↻ ⌂ http://localhost:8080/Company_Mail/ViewMailServlet?id=4

Gmail YouTube Product Support | A... OTT'S COLLEGE For Students - Quizi... NPTEL Namecheap.com Course: Networking... Operator Overloadi... benz CSS Free Online Course... GCP »

Company Mailer

Home | Inbox | Compose Mail | Sent Mail | Trash | Logout

Web Developer

Hi, mjnvsai@cmail.com

Message:

Congratulations !!! Bro You have Selected as MEAN Stack Junior Developer in VRSEC College

Sender : mjnvsai@cmail.com

Receiver : rizwan@gmail.com

Delete Mail

Delete Mail :

Company Mailer

Home | Inbox | Compose Mail | Sent Mail | Trash | Logout

Inbox

Mail successfully deleted!

Sender	Subject
mjnvsai@cmail.com	Web Developer

Sent Mail :

Company Mailer

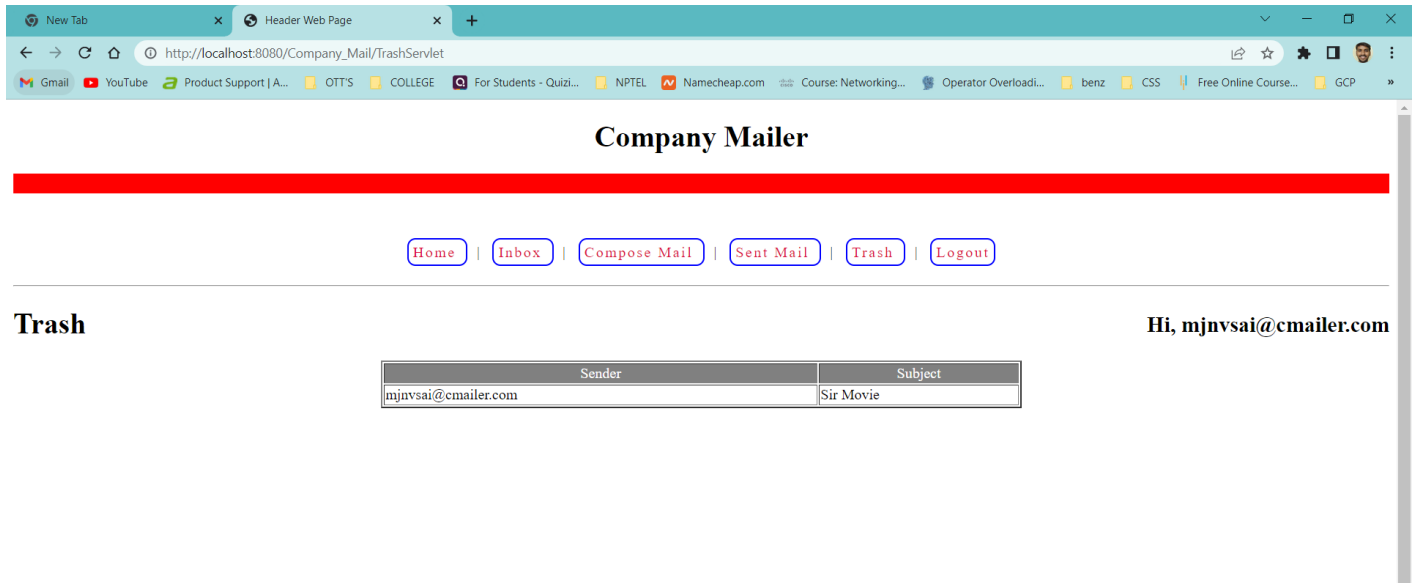
Home | Inbox | Compose Mail | Sent Mail | Trash | Logout

Sent Mail

Hi, mjnvsai@cmail.com

To	Subject
rizwan@gmail.com	Web Developer

Trash Mail :



Company Mailer

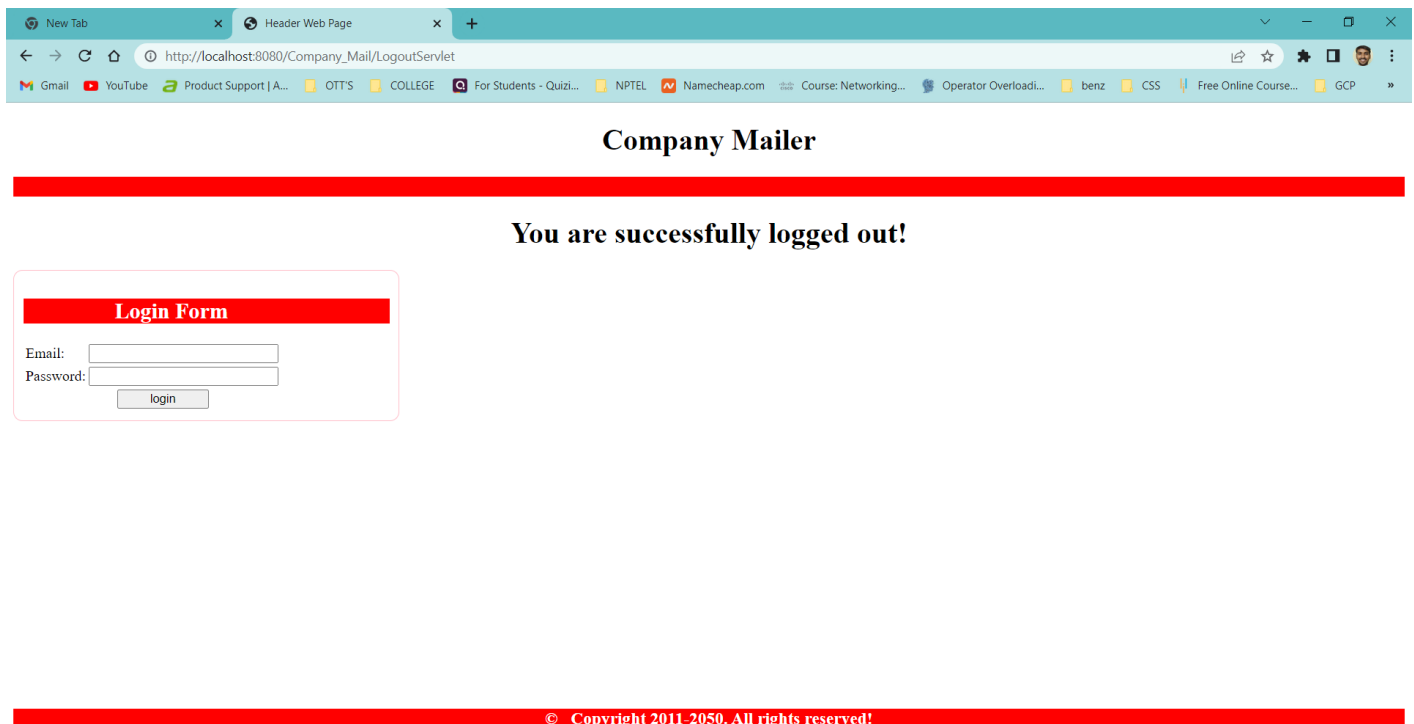
[Home](#) |
 [Inbox](#) |
 [Compose Mail](#) |
 [Sent Mail](#) |
 [Trash](#) |
 [Logout](#)

Trash

Hi, mjnvsai@cmail.com

Sender	Subject
mjnvsai@cmail.com	Sir Movie

Logout :



Company Mailer

You are successfully logged out!

Login Form

Email:

Password:

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Result : Sucessfully Executed The Program.