18. Prepare Electricity bill from user input based on given tariff. Write a PHP to input previous reading and present reading and prepare an electricity bill using following conditions. (To Understand FORM handling in PHP).

**HTML FORM**

<!DOCTYPE html>

<html lang="en">

<head>

    <title>Document</title>

    <style>

        .container {

            display: flex;

            justify-content: center;

            align-items: center;

            flex-direction: column;

            width: 100%;

            height: 100vh;

        }

        form {

            display: flex;

            justify-content: center;

            align-items: center;

            flex-direction: column;

        }

        table {

            width: 100%;

            margin-bottom: 20px;

        }

        td {

            width: 250px;

        }

        p {

            margin-left: 10px;

        }

        tr:nth-child(even) {

            background-color: rgb(255, 194, 114);

        }

        tr:nth-child(odd) {

            background-color: rgb(236, 207, 153);

        }

        button {

            margin: 10px 0px;

            padding: 5px 10px;

            border-radius: 5px;

            border: 1px solid rgba(0, 0, 0, 0.19);

        }

        button:hover {

            margin: 10px 0px;

            padding: 5px 10px;

            border-radius: 5px;

            background-color: rgb(133, 140, 146);

            color: rgba(0, 0, 0, 0.6);

            border: 1px solid rgba(0, 0, 0, 0.19);

            cursor: pointer;

        }

        input {

            padding: 5px 0px;

            width: 90%;

        }

    </style>

</head>

<body>

    <div class="container">

        <form method="post" action="bill.php">

            <table cellspacing="0">

                <tr>

                    <td colspan="2" align="center">

                        <h1>ELECTRICITY BILL</h1>

                    </td>

                </tr>

                <tr>

                    <td><p>enter the consumer number</p></td>

                    <td><input name="cno" type="text"></td>

                </tr>

                <tr>

                    <td><p>enter the customer name</p></td>

                    <td><input name="cname" type="text"></td>

                </tr>

                <tr>

                    <td><p>enter the previous reading</p></td>

                    <td><input name="prev" type="text"></td>

                </tr>

                <tr>

                    <td><p>enter the present reading</p></td>

                    <td><input name="pres" type="text"></td>

                </tr>

                <tr>

                <td colspan="2" align="center">

             <button type="submit" value="calc-bill">submit</button>

</td></tr>

            </table>

        </form>

    </div>

</body>

</html>

**Form handling using PHP**

<?php

function **calc**($val){

    if($val<100) return 3\*$val;

    else if($val>=100 && $val<200) return 4\*$val;

    else if($val>=200 && $val<300) return 5\*$val;

    else return 6\*$val;

}

$cid=$\_POST['cno'];

$cname=$\_POST['cname'];

$prev=$\_POST['prev'];

$pres=$\_POST['pres'];

$diff=$pres-$prev;

$bill=**calc**($diff);

echo "<table align=center bgcolor=orange cellspacing=0 cellpadding=5>";

echo "<tr><td colspan=2><h1 align=center>ELECTRICITY BILL</h1></td></tr>";

echo "<tr bgcolor=burlywood><td>CUSTOMER ID</td><td>$cid</td></tr>";

echo "<tr><td>CUSTOMER NAME</td><td>$cname</td></tr>";

echo "<tr bgcolor=burlywood><td>PREVIOUS READING</td><td>$prev</td></tr>";

echo "<tr><td>PRESENT READING</td><td>$pres</td></tr>";

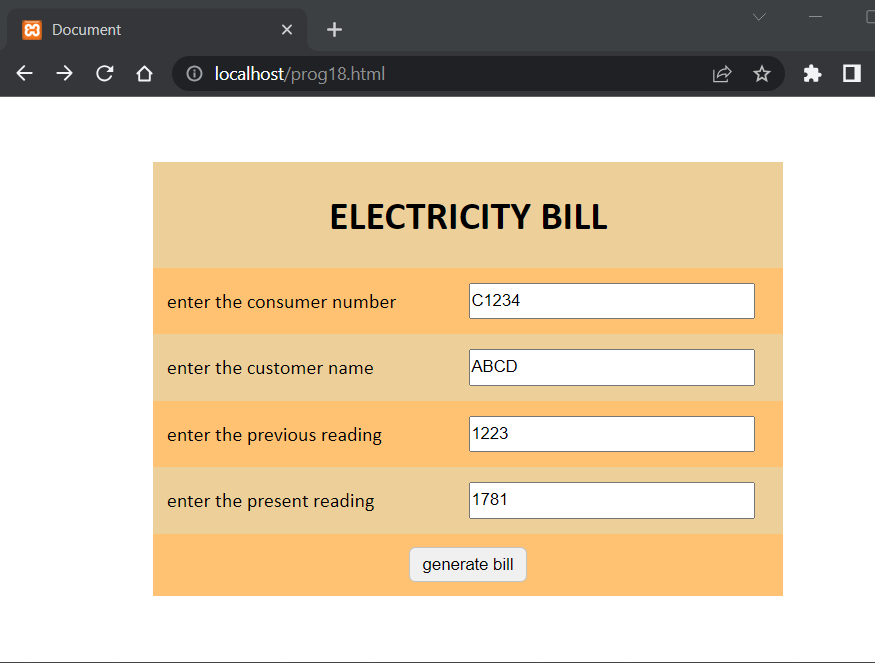
echo "<tr bgcolor=burlywood><td>READING</td><td>$diff</td></tr>";

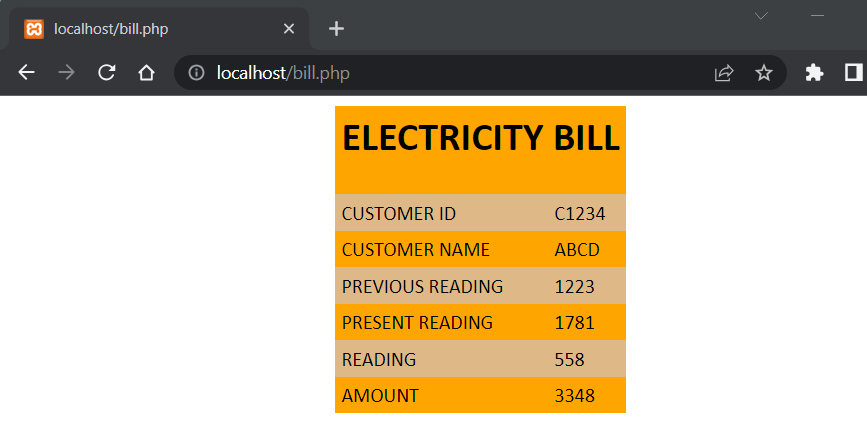
echo "<tr><td>AMOUNT</td><td>$bill</td></tr>";

echo "</table>"

?>

18.Output

****

****

19. Write PHP program to implement a cookie and session-based counter. (Session handling using PHP).

<?php

session\_start();

// Check if the session counter variable exists

if (!isset($\_SESSION['counter'])) {

    $\_SESSION['counter'] = 1;

} else {

    $\_SESSION['counter']++;

}

// Check if the cookie counter variable exists

$cookieCounter = $\_COOKIE['counter'] ?? 0;

// Use 0 as the default value if 'counter' key is not set

setcookie('counter', $cookieCounter + 1, time() + 86400);

// Update the cookie counter value

// Display the session counter variable

echo "Session Counter: " . $\_SESSION['counter'] . "<br>";

// Display the cookie counter variable

echo "Cookie Counter: " . ($cookieCounter + 1) . "<br>";

?>

19.Output

A screenshot of a computer

Description automatically generated

20. To upload the user input file and using constraints file type, file size. (To Understand File Uploading in PHP).

**UI using HTML**

<!DOCTYPE html>

<html>

<head>

    <title>File Upload Example</title>

    <style>

        .invalid-file {

            width: 200px;

            height: 30px;

            background-color: red;

            color: white;

            text-align: center;

            line-height: 30px;

            display: none;

            margin: 10px;

            border-radius: 5px;

            padding: 2px;

        }

        form {

            display: flex;

            flex-direction: column;

            margin: 10px;

            border: 1px solid rgb(142, 142, 255);

            width: 300px;

            background-color: beige;

        }

        input {

            margin: 10px;

            width: 200px;

        }

        h1 {

            margin-left: 10px;

        }

    </style>

    <script>

        function **checkFileExtension**() {

            var fileInput = document.**getElementById**('fileToUpload');

            var file = fileInput.files[0];

            var fileExtension = file.name.**split**('.').**pop**().**toLowerCase**();

            var allowedExtensions = ['jpg', 'jpeg', 'png', 'gif'];

            if (!allowedExtensions.**includes**(fileExtension)) {

                var invalidFileDiv = document.**getElementById**('invalidFile');

                invalidFileDiv.style.display = 'block';

                return false;

            }

        }

    </script>

</head>

<body>

    <form action="prog20.php" method="POST" enctype="multipart/form-data">

        <h1>File Upload</h1>

        <input type="file" id="fileToUpload" name="fileToUpload">

        <input type="submit" value="Upload" onclick="return **checkFileExtension**()">

        <div id="invalidFile" class="invalid-file">

            Invalid file extension.

        </div>

    </form>

</body>

</html>

**PHP CODE**

<?php

if ($\_SERVER['REQUEST\_METHOD'] === 'POST') {

    $targetDirectory = 'uploads/'; // Directory where the uploaded file will be stored

    $targetFile = $targetDirectory . basename($\_FILES['fileToUpload']['name']); // Path of the uploaded file

    $fileExtension = strtolower(pathinfo($targetFile, PATHINFO\_EXTENSION));

    $allowedExtensions = ['jpg', 'jpeg', 'png', 'gif'];

    if (in\_array($fileExtension, $allowedExtensions)) {

        if (move\_uploaded\_file($\_FILES['fileToUpload']['tmp\_name'], $targetFile)) {

            echo "File uploaded successfully.";

        } else {

            echo "Error uploading the file.";

        }

    } else {

        echo "Invalid file extension. Only JPG, JPEG, PNG, and GIF files are allowed.";

    }

}

?>

20.Output

A screenshot of a computer

Description automatically generated with medium confidence26--

A screenshot of a computer

Description automatically generated with medium confidence

A screenshot of a computer

Description automatically generated with medium confidence

21. PHP with MySQL Develop a simple application to:

a. Enter data into database.

b. Retrieve and present data from database

c. Develop a simple application to Update, Delete table data from database.

<!DOCTYPE html>

<html lang="en">

<head>

    <title>Contact me form</title>

    <style>

        #container {

            display: flex;

            flex-direction: column;

            justify-content: center;

            align-items: center;

            height: 80vh;

        }

        #new {

            color: #9925be;

            font-weight: bold;

            font-size: 40px;

        }

        table {

            width: 500px;

        }

        td:nth-child(even) {

            width: 200px;

        }

        input,

        textarea {

            border: 1px solid rgba(0, 0, 0, 0.419);

            margin: 5px;

            padding: 5px 0px;

            margin-left: 10px;

            border-radius: 3px;

        }

        button {

            width: 150px;

            margin: 0px 10px;

            padding: 5px 0px;

            border-radius: 5px;

            border: 1px solid rgba(0, 0, 0, 0.419);

            color: rgba(0, 0, 0, 0.758);

        }

        button:hover {

            width: 150px;

            margin: 0px 10px;

            padding: 5px 0px;

            border-radius: 5px;

            border: 1px solid rgba(0, 0, 0, 0.419);

            background-color: rgba(96, 97, 98, 0.622);

            font-weight: 500;

            color: black;

        }

    </style>

</head>

<body style=" background-color : #ffff99 ; color: #9925be;">

    <div id="container">

        <center id="new">Sign Up</center>

        <form name="myform" action="prog21.php" method="post">

            <table>

                <tr>

                    <td><label for="fname">First Name:</label></td>

                    <td><input type="text" name="fname" id="fname" required placeholder="Enter your Name"></td>

                </tr>

                <tr>

                    <td><label for="mname">Middle Name:</label></td>

                    <td><input type="text" name="mname" id="mname" required placeholder="Enter your Name"></td>

                </tr>

                <tr>

                    <td><label for="lname">Last Name:</label></td>

                    <td><input type="text" name="lname" id="lname" required placeholder="Enter your Name"></td>

                </tr>

                <tr>

                    <td><label for="pass">Password:</label></td>

                    <td><input type="password" name="pass" id="pass" required placeholder="Enter your Password"></td>

                </tr>

                <tr>

                    <td><label for="cpass">Confirm Password:</label></td>

                    <td><input type="password" name="cpass" id="cpass" required placeholder="ReEnter your Password"></td>

                </tr>

                <tr>

                    <td><label for="email">Email:</label></td>

                    <td><input type="email" name="email" id="email" required placeholder="Enter your Email"></td>

                </tr>

                <tr>

                    <td><label for="gender">Gender: </label></td>

                    <td><input type="radio" name="gender" id="gender" value="male">Male

                        <input type="radio" name="gender" id="gender" value="female">Female</td>

                </tr>

                <tr>

                    <td><label for="num">Contact-NO:</label></td>

                    <td><input type="tel" name="num" id="num" required placeholder="Enter your Number"></td>

                </tr>

                <tr>

                    <td><label for="addr">Address:</label></td>

                    <td><textarea type="text" name="addr" id="addr" rows="4" cols="25"></textarea></td>

                </tr>

                <tr>

                    <td><label for="pin">Pin-Code:</label></td>

                    <td><input type="text" name="pin" id="pin"></td>

                </tr>

                <tr>

                    <td><label for="city">City:</label></td>

                    <td><input type="text" name="city" id="city"></td>

                </tr>

                <tr>

                    <td><label for="con">Country:</label></td>

                    <td><input type="text" name="con" id="con"></td>

                </tr><tr>

                    <td><label for="skill">skills:</label> </td>

                    <td><input type="radio" name="skill" id="skill" value="java">JAVA<input type="radio" name="skill" id="skill" value="cpp">C++</td>

                </tr>

                <tr>

                    <td colspan="2" align="center"><input type="radio" name="term" id="term" required>I have read terms and conditions.</td>

                </tr><tr>

                    <td colspan="2" align="center"><button id="btn" type="submit">Submit</button><button id="btn" type="reset">reset</button></td>

                </tr>

            </table>

    </div>

</body>

</html>

<?php

$username="root";

$servername="localhost";

$password="";

$database = "demo";

$conn = mysqli\_connect($servername,$username,$password,$database);

if($conn === false){

die("ERROR: Could not connect. ". **mysqli\_connect\_error**());}

$first\_name = $\_REQUEST['fname'];

$middle\_name = $\_REQUEST['mname'];

$last\_name = $\_REQUEST['lname'];

$password = $\_REQUEST['pass'];

$email = $\_REQUEST['email'];

$gender = $\_REQUEST['gender'];

$phone = $\_REQUEST['num'];

$address = $\_REQUEST['addr'];

$pin = $\_REQUEST['pin'];

$city = $\_REQUEST['city'];

$country = $\_REQUEST['con'];

$skill = $\_REQUEST['skill'];

$sql = "INSERT INTO formtable VALUES ('$first\_name','$middle\_name',

'$last\_name','$password','$email','$gender','$phone','$address','$pin','$city','$country','$skill')";

if(mysqli\_query($conn, $sql)){

echo "<h3>data stored successfully.</h3>";

echo nl2br("<strong>NAME</strong> :$first\_name $middle\_name $last\_name\n"

."<strong>GENDER</strong> : $gender\n"

."<strong>PHONE NO.</strong> : $phone\n"

."<strong>EMAIL</strong> : $email\n"

."<strong>ADDRESS</strong> : $address\n"

."<strong>PIN CODE</strong> : $pin\n"

."<strong>CITY</strong> : $city\n"

."<strong>COUNTRY</strong> : $country\n"

."<strong>SKILLS</strong> : $skill\n");

} else{

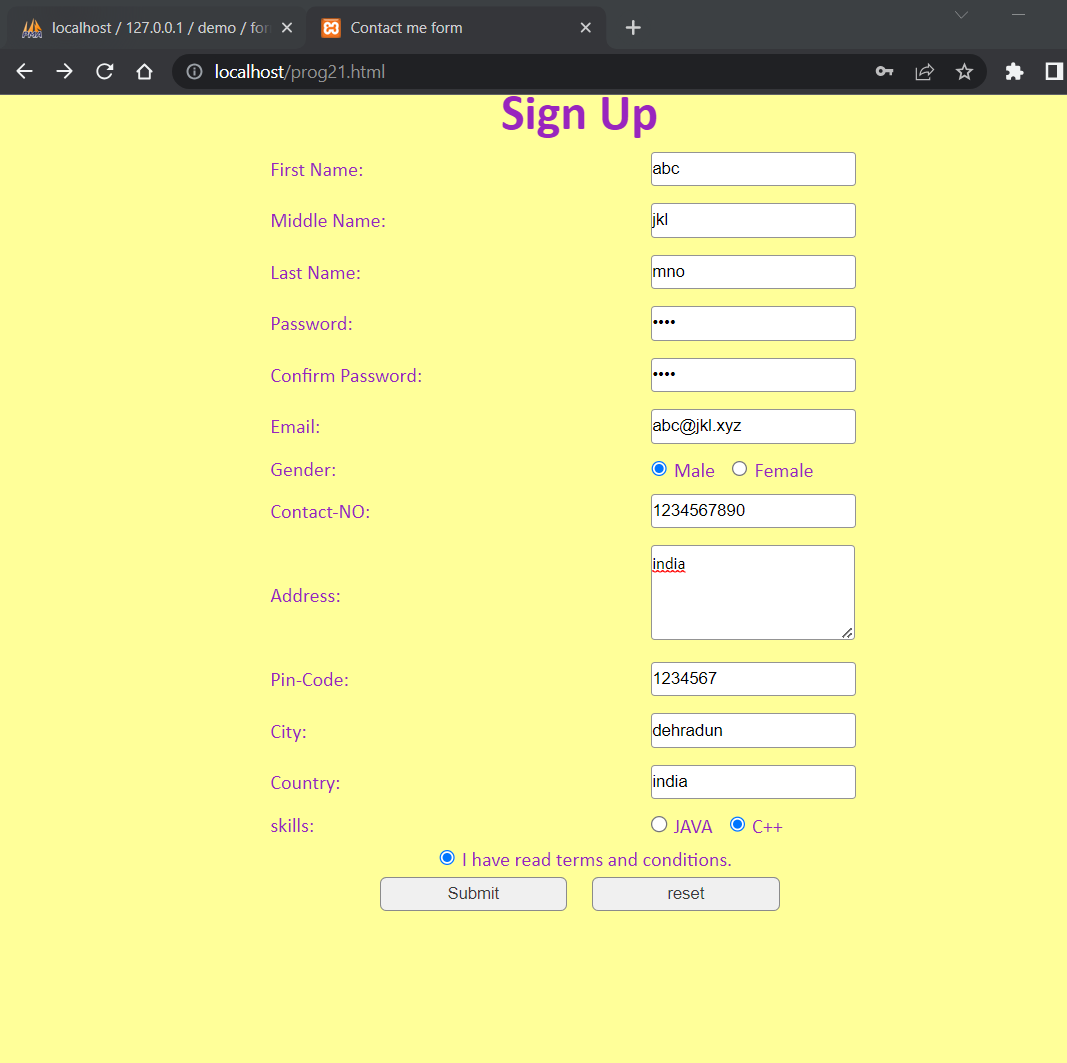
echo "ERROR: $sql. "

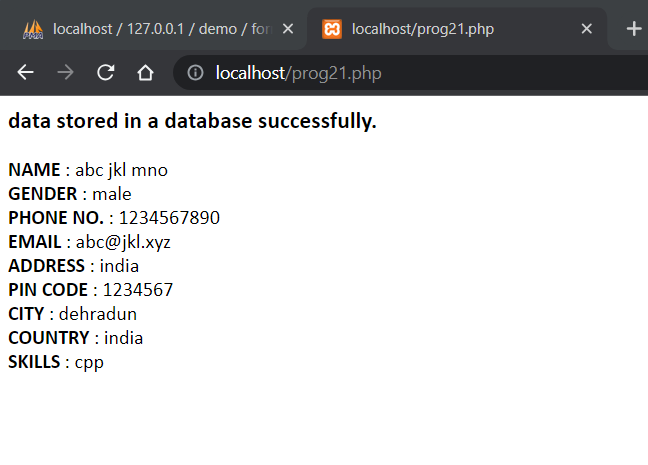
. **mysqli\_error**($conn);}

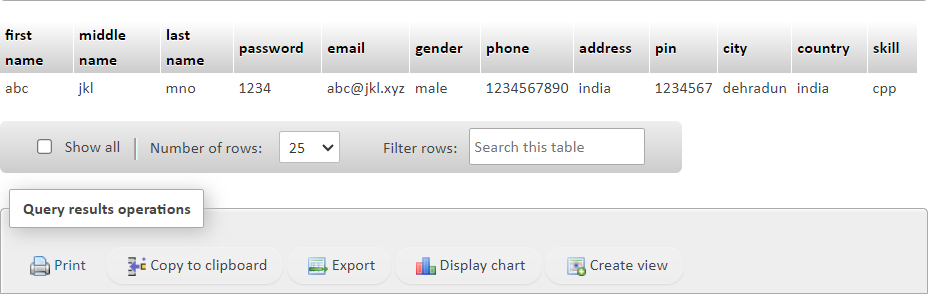
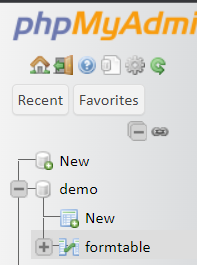
mysqli\_close($conn);

?>

21.Output







22. Create a PHP page for login page with SQL connection

FORM using HTML

<html>

<head>

    <title>PHP login system</title>

    <style>

        body {

            background: #eee;

        }

        #frm {

            border: solid gray 1px;

            width: 25%;

            border-radius: 2px;

            margin: 120px auto;

            background: white;

            padding: 50px;

        }

        #btn {

            color: #fff;

            background: #337ab7;

            padding: 7px;

            margin-left: 70%;

        }

    </style>

</head>

<body>

    <div id="frm">

        <h1>Login</h1>

        <form name="f1" action="prog22.php" onsubmit="return **validation**()" method="POST">

            <p><label> UserName: </label>

                <input type="text" id="user" name="user" /></p>

            <p?<label> Password: </label>

                <input type="password" id="pass" name="pass" /></p>

            <p><input type="submit" id="btn" value="Login" /></p>

        </form>

    </div>

    <script>

        function **validation**() {

            var id = document.f1.user.value;

            var ps = document.f1.pass.value;

            if (id.length == "" && ps.length == "") {

**alert**("User Name and Password fields are empty");

                return false;

            } else {

                if (id.length == "") {

**alert**("User Name is empty");

                    return false;

                }

                if (ps.length == "") {

**alert**("Password field is empty");

                    return false;

                }

            }

        }

    </script>

</body>

</html>

Connect.php

<?php

    $host = "localhost";

    $user = "root";

    $password = '';

    $db\_name = "demo";

    $con = mysqli\_connect($host, $user, $password, $db\_name);

    if(**mysqli\_connect\_errno**()) {

        die("Failed to connect with MySQL: ". **mysqli\_connect\_error**());

    }

?>

PHP Code

<?php

include('connect.php');

$username = $\_POST['username'];

$password = $\_POST['pass'];

    //to prevent from mysqli injection

    $username = stripcslashes($username);

    $password = stripcslashes($password);

    $username = mysqli\_real\_escape\_string($con, $username);

    $password = mysqli\_real\_escape\_string($con, $password);

    $sql = "select \*from login where username = '$username' and password = '$password'";

    $result = mysqli\_query($con, $sql);

    $row = mysqli\_fetch\_array($result, MYSQLI\_ASSOC);

    $count = **mysqli\_num\_rows**($result);

    if($count == 1){

        echo "<h1><center> Login successful </center></h1>";

    }

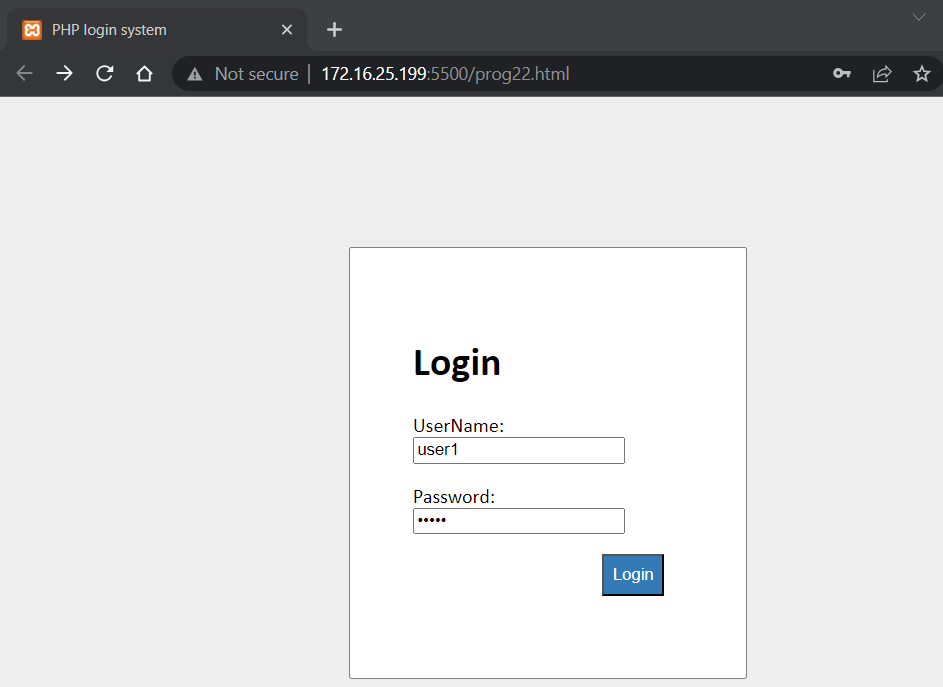
    else{

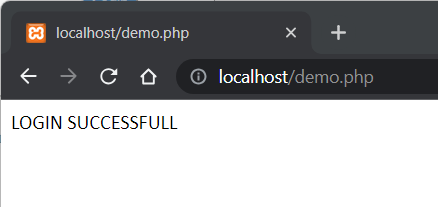
        echo "<h1> Login failed. Invalid username or password.</h1>";

    }

?>

22.Output





23. File Handling Using PHP:

a. Write a php program to Read from existing file.

b. Write a php program to Write a file.

a.

<?php

$filename = 'example.txt';

// Check if the file exists

if (file\_exists($filename)) {

    // Open the file for reading

    $file = fopen($filename, 'r');

    // Read and output the file contents

    while (!feof($file)) {

        echo fgets($file) . "<br>";

    }

    // Close the file

    fclose($file);

} else {

    echo "File not found.";

}

?>

b.

<?php

$filename = 'example.txt';

$file = fopen($filename, 'w');

// Write content to the file

fwrite($file, "Hello, world!\n");

fwrite($file, "This is a test file.");

// Close the file

fclose($file);

echo "File written successfully.";

?>

23.a.Output

A screenshot of a computer

Description automatically generated

23.b.Output

A screenshot of a computer

Description automatically generated with medium confidence

A screenshot of a computer

Description automatically generated