10. a) Write a PHP for User validation web application, where the user submits a login name and password to the server. The name and password are checked against the data already available in Database and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.

Index.html

```
<html>
<body>
<div>
<form action="Login.php" method="post">
LOGIN FORM<br/>
LOGIN FORM<br/>
VUSERNAME:
<input type="text" name="uname" ><br/>
PASSWORD:
<input type="password" name="pass" ><br/>
<input type="submit" name="submit" value="Login"><br/>
</form>
</div>
</body>
</html>
```

Login.php

```
<?php
$uname=$_POST["uname"];
$pass=$_POST["pass"];
//_POST global variable which is used to collect form data after submitting an HTML form with
method="post".
$con=mysqli_connect("localhost","root","","test");
if(!$con){ // not empty
die('Could not connect: '.mysqli_connect_error()); // same as exit function
echo 'Connected successfully<br/>';
$query="select * from user where name='$uname' and pass='$pass'";
$records=mysqli_query($con,$query);
if(mysqli_num_rows($records)>=1)
header("Location: success.html"); // The header() is a pre-defined network function of PHP,
which sends a raw HTTP header to a client.
else{
echo "User Entered wrong credentials";
?>
```

success.html

<html>

<body>

<h1> Login Successfull </h1>

</body>

</html>

Outputs:

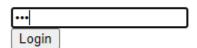


LOGIN FORM

USERNAME:

raju

PASSWORD:





Login Successfull

b) Write a PHP for A simple calculator web application that takes two numbers and an operator (+,-,/,*and %) from an HTML page and returns the result page with the operation performed on the operands.

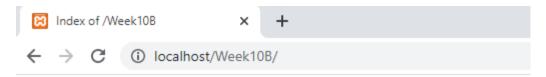
Calc.html

<html>

<body>

```
<form action="calc.php" method="POST" >
       Enter First Number:
       <input type="text" name="op1"/><br />
       Enter Second Number:
       <input type="text" name="op2"/><br />
       Enter Operator:
       <input type="text" name="operator"/><br />
       <input type="submit" value="Submit" name="submit" />
       </form>
       </body>
       </html>
Calc.php
       <?php
       if(isset($_POST["submit"]) && isset($_POST["op1"]) && isset($_POST["op2"]) &&
       isset($_POST["operator"])){
       $op1=(int)$_POST["op1"];
       $op2=(int)$_POST["op2"];
       $operator=$_POST["operator"];
       if($operator=="+"){
       echo "Addition of ".$op1." and ".$op2." is ".($op1+$op2);
       }else if($operator=="-"){
       echo "Subtraction of ".$op1." and ".$op2." is ".($op1-$op2);
       }else if($operator=="*"){
       echo "Multiplication of ".$op1." and ".$op2." is ".($op1*$op2);
       }else if($operator=="/"){
       if($op2!=0){
       echo "Division of ".$op1." and ".$op2." is ".($op1/$op2);
       }else{
       echo "second number cannot be zero";
       }
       }else if($operator=="%"){
       echo "Remainder of ".$op1." and ".$op2." is ".($op1%$op2);
       }
       }?>
```

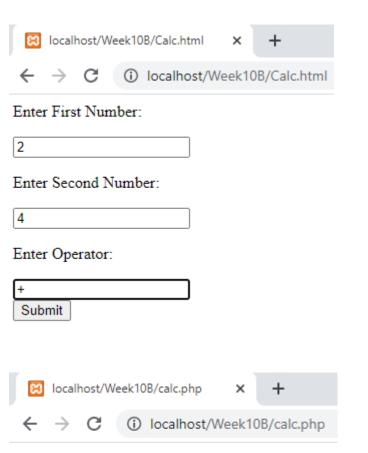
Output:



Index of /Week10B



Apache/2.4.53 (Win64) OpenSSL/1.1.1n PHP/8.1.4 Server at localhost Port 80



Addition of 2 and 4 is 6

11) Write PHP Code Validate the following fields of registration page.

- i) Name (it should contains alphabets and length at least 6 characters)
- ii) Password(it should not be less than 6 characters)
- iii) Email id (it should not contains any invalid character and must follow the standard

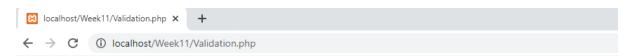
pattern name@domain.com)

iv) Phone number (it should contain 10 digits only)

Validation.php

```
<html>
<body>
<center><h2>Validation Form</h2>
<form method="post">
Name: <input type="text" name="uname"><br>
Password: <input type="text" name="pass"><br>
Email ID: <input type="text" name="email"><br>
Phone Number: <input type="text" name="phone"><br>
<input type="submit" name="submit" value="Validate">
</form>
</center>
</body>
</html>
<?php
if(isset($_POST['submit']))
$uname = $_POST['uname'];
$pass = $_POST['pass'];
$email = $_POST['email'];
$phone = $_POST['phone'];
flag = 1;
if(!$uname) //(emptyempty($_POST["name"]))
        $nameErr = "Name is required";
        //echo "Name not entered!<br>";
else
               if(ctype alpha($uname)==0)
               //echo "Name contains numeric characters<br>";
               $nameErr = "Name contains numeric characters<br>";
               $flag=0;
else if(strlen($uname)<6)
echo "Name is less than 6 characters<br>";
$flag=0;
if(!$pass)
echo "Password not entered!<br>";
else
```

```
if(strlen($pass)<6)
echo "Password is less than 6 characters<br/>sty";
$flag=0;
if(!$email)
echo "Email not entered!<br>";
if (!filter_var($email, FILTER_VALIDATE_EMAIL))
echo "Email address is Incorrect<br>";
$flag=0;
if(!$phone)
echo "Phone number not entered!<br>";
else {
if(ctype_digit($phone)==0) {
echo "Phone Number cannot contain alphabets<br/><br/>;
$flag=0;
else if(strlen($phone)!=10) {
echo "Phone Number is not 10 digits long<br/><br/>;
$flag=0;
if($flag)
echo "All fields are validated!";
?>
OutpPut:
```



Validation Form



Validation Form

Name:		
Password:		
Email ID:		
Phone Number	:	
	Validate	

All fields are validated!

Alternate Validation program,

```
<!DOCTYPE html>
<html>
<head>
<style>
.error {color: #FF0001;}
</style>
</head>
<body>
<?php
// define variables to empty values
$nameErr = $emailErr = $PasswordErr = $mobilenoErr = "";
$name = $email = $password = $mobileno = "";
//Input fields validation
if ($_SERVER["REQUEST_METHOD"] == "POST") {
//String Validation
  if (empty($_POST["name"])) {
     $nameErr = "Name is required";
  } else {
    $name = input_data($_POST["name"]);
      // check if name only contains letters and whitespace
      if (!preg_match("/^[a-zA-Z]*$/",$name)) {
         $nameErr = "Only alphabets and white space are allowed";
  }
  //Email Validation
  if (empty($_POST["email"])) {
       $emailErr = "Email is required";
  } else {
       $email = input_data($_POST["email"]);
      // check that the e-mail address is well-formed
      if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
         $emailErr = "Invalid email format";
```

```
}
  }
  //Password Validation
       if(empty($_POST["password"]))
       $PasswordErr = "Password not entered!<br/>';
       else
        {
               $password = input_data($_POST["password"]);
               if(strlen ($password) <6)
        {
               $PasswordErr = "Password is less than 6 characters<br/>sty";
  //Number Validation
  if (empty($_POST["mobileno"])) {
       $mobilenoErr = "Mobile no is required";
  } else {
       $mobileno = input_data($_POST["mobileno"]);
       // check if mobile no is well-formed
       if (!preg_match ("/^[0-9]*$/", $mobileno) ) {
       $mobilenoErr = "Only numeric value is allowed.";
    //check mobile no length should not be less and greator than 10
    if (strlen ($mobileno) != 10) {
       $mobilenoErr = "Mobile no must contain 10 digits.";
  }
function input_data($data) {
 $data = trim($data);
 $data = stripslashes($data);
 $data = htmlspecialchars($data);
 return $data:
?>
<h2>Registration Form</h2>
<span class = "error">* required field </span>
<br>><br>>
<form method="post" action="<?php echo htmlspecialchars($ SERVER["PHP SELF"]); ?>"
>
  <input type="text" name="name">
  <span class="error">* <?php echo $nameErr; ?> </span>
  <br>><br>>
  E-mail:
  <input type="text" name="email">
  <span class="error">* <?php echo $emailErr; ?> </span>
  <br>><br>>
       Password:
  <input type="password" name="password">
```

```
<span class="error">* <?php echo $PasswordErr; ?> </span>
  <br>><br>>
  Mobile No:
  <input type="text" name="mobileno">
  <span class="error">* <?php echo $mobilenoErr; ?> </span>
  <br>><br>>
  <input type="submit" name="submit" value="Submit">
  <br>><br>>
</form>
<?php
  if(isset($_POST['submit'])) {
  if($nameErr == "" && $emailErr == "" && $mobilenoErr == "" && $PasswordErr == "" )
    echo "<h3 color = #FF0001> <b>You have sucessfully registered.</b> </h3>";
    echo "<h2>Your Input:</h2>";
    echo "Name: " .$name;
    echo "<br>";
    echo "Email: " .$email;
    echo "<br>";
    echo "password: " .$password;
    echo "<br>";
    echo "Mobile No: " .$mobileno;
    echo "<br>";
  } else {
    echo "<h3> <b>You didn't filled up the form correctly.</b> </h3>";
?>
</body>
</html>
```

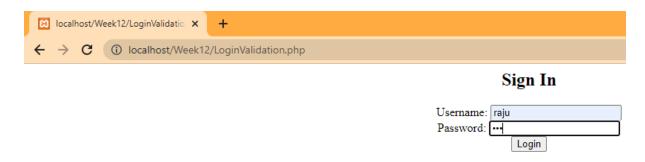
12) A web application for implementation using PHP. The user is first served login page which takes user's name and password. After submitting the details the server checks these values against the data from a database and takes the following decisions If name and password match serves a welcome page with user's full name If name matches and password doesn't match, then server 'password mismatch' page If name is not found in the full name, it stores, the login name, password and full name in the database.(hint: Use session for storing the submitted login name and password)

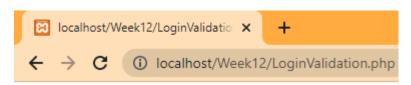
LoginValidation.php

```
<?php
$con = mysqli_connect("localhost", "root", "", "test");
if(!$con)
die(mysqli_error($con));
if(isset($_POST['submit'])) {
$uname = $_POST['user'];
pwd = POST['pass'];
if($uname and $pwd) {
$res = mysqli_query($con,"select * from student where name='$uname' and password
= '\$pwd''');
if(mysqli_num_rows($res)>0) {
$row = mysqli_fetch_assoc($res);
echo '<h1>Welcome '.$row['fullname'].'</h1>';
exit;
$res = mysqli_query($con,"select * from student where name='$uname'");
if(mysqli_num_rows($res)>0) {
echo '<center><h3>Password Mismatch!<h3></center>';
else {
echo '<center>User is not available.<h2>Registration Form</h2><form
method="post">Full Name: <input type="text" name="name"><br/>br>Username:
<input
type="text" name="user"><br>Password: <input type="password"
name="pass"><br>Retype
Password: <input type="password" name="pass1"><br><input type="submit"
name="register"
value="Register"></form></center>';
exit;
}
}
if(isset($_POST['register'])) {
$uname = $_POST['user'];
ne = \POST['name'];
pwd = POST['pass'];
pwd1 = POST[pass1'];
if($uname and $name and $pwd and $pwd1)
```

```
if(strcmp($pwd,$pwd1)!=0) echo "Passwords are not matched!";
else {
    $res = mysqli_query($con,"insert into users values('$name','$pwd','$uname')");
    echo 'Inserted Successfully';
}
}
?>
    <center><h2>Sign In</h2><form method="post">
Username: <input type="text" name="user"><br>
    Password: <input type="password" name="pass"><br>
    <input type="submit" name="submit" value="Login">
    </form></center>
```

Output:





Welcome rajukiran