1. **Write a PHP script to print prime numbers between 1-50**

```php
<?php
$count = 0;
$num = 2;
while ($count < 15 )
{
$div_count=0;
for ( $i=1; $i<=$num; $i++)
{
if (($num%$i)==0)
{
$div_count++;
}
}
if ($div_count<3)
{
echo $num." , ";
$count=$count+1;
}
$num=$num+1;
}
?>
```
OUTPUT

2 3 5 7 11 13 17 19 23 29 31 37 41 43 47

2.a)PHP Script to find the length of a string.

```php
<?php
$str1 = 'Hey';
echo strlen($str1);
?>
```

OUTPUT: 3

2.b)PHP Script to Count no of words in a string.

```php
<?php
$str = "Hey i just met you";
$len = str_word_count($str);
echo $len;
?>
```

//output:5

2.c)PHP Script to Reverse a string
```php
<?php
```

```php
        function Reverse($str){
                return strrev($str);
        }

        $str = "HELLO";
        echo Reverse($str)
        ?>
```

//output:OLLEH

2.d)PHP Script to Search for a specific string.

```php
        <?php
        $substring = "know";
        $mystring = "If you know i know";

        if(strpos($mystring, $substring) !== false){
           echo "Word Found!";
        } else{
           echo "Word Not Found!";
        }
        ?>
```

//output:Word Found!

3) Write a PHP script to merge two arrays and sort them as numbers, in descending order.

```php
    <?php
    $a1=array(1,3,15,7,5);
    $a2=array(4,3,20,1,6);
    $num=array_merge($a1,$a2);
    array_multisort($num,SORT_DESC,SORT_NUMERIC);
    print_r($num);
    ?>
```

Array ([0] => 20 [1] => 15 [2] => 7 [3] => 6 [4] => 5 [5] => 4 [6] => 3 [7] => 3 [8] => 1 [9] => 1)

4) Write a PHP script that reads data from one file and write into another file.

```
<!DOCTYPE html>
<html>
<body>
<?php
$myfile = fopen("abc.html", "r") or die("Unable to open file!");
echo fread($myfile,filesize("abc.html"));
fclose($myfile);
?>
</body>
</html>


<html>
<body>
<text align="center"> AJAX = Asynchronous JavaScript and XML<br>
CSS = Cascading Style Sheets<br>
HTML = Hyper Text Markup Language<br>
PHP = PHP Hypertext Preprocessor<br>
SQL = Structured Query Language<br>
SVG = Scalable Vector Graphics<br>
XML = EXtensible Markup Language
</body>
</html>
```

```
AJAX = Asynchronous JavaScript and XML
CSS = Cascading Style Sheets
HTML = Hyper Text Markup Language
PHP = PHP Hypertext Preprocessor
SQL = Structured Query Language
SVG = Scalable Vector Graphics
XML = EXtensible Markup Language
```

5) Develop static pages for your project

Login.html

```
<!DOCTYPE html>
<html>
   <head>
      <meta charset="utf-8">
      <title>Login</title>
      <link rel="stylesheet" href="slogin.css">
      <body>
         <div class="login-box">
            <h1>Login</h1>
```
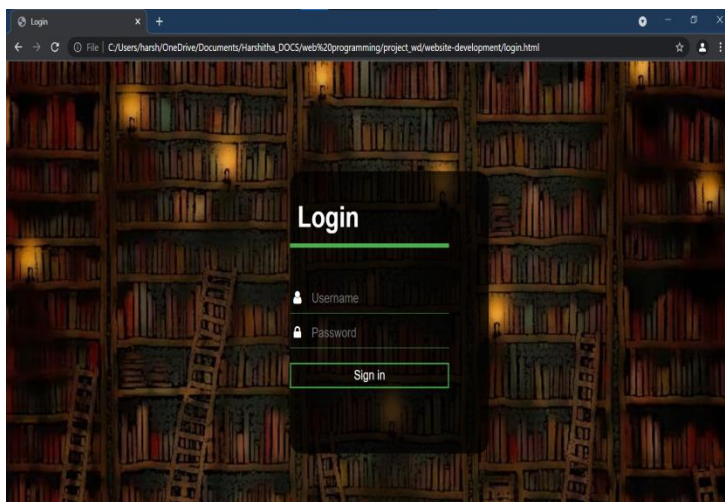
```
                  <div class="textbox">
                     <i class="fa fa-user" aria-hidden="true"></i>
                     <input type ="text" placeholder = "Username" name="" value="">
                  </div>
                  <div class="textbox">
                     <i class="fa fa-lock" aria-hidden="true"></i>
                     <input type ="password" placeholder = "Password" name="" value="">
                  </div>
                  <input class="btn" type="button" name="" value="Sign in">
               </div>
            </body>
         </head>
</html>
```

OUTPUT:

<u>Genre.html</u>

```
<html>
<head>
<style>
     body {
```

```
        background-image: url("https://thumbs.dreamstime.com/b/fence-painted-turquoise-color-
background-texture-fence-board-painted-turquoise-background-color-139085922.jpg");
      }
    </style>
<title>
Coverpage
</title>
<style>
.column {
  float: left;
  width: 32.33%;
  padding: 5px;
}


.row::after {
  content: "";
  clear: both;
  display: table;
}
</style>
</head>
<body>
<h1 style="color:brown;"><center>Categories</center></h1>

</br>
</br>
</br>


<div class="row">
  <div class="column">
    <img src="C:\Users\Aarthi\OneDrive\Desktop\website-development\Comic\Comic.jpeg"
height="400" width="400">
<h1 style="color:indigo;">Comics</h1>


  </div>

<div class="row">
  <div class="column">
    <img src="https://i0.wp.com/sfmagazines.com/wp-
content/uploads/2015/12/FSF195206x600.jpg?resize=425%2C600&ssl=1"  height="400"
width="350">

<h1 style="color:indigo;">Sci-fi</h1>

  </div>

<div class="row">
```

```
  <div class="column">
    <img src="C:\Users\Aarthi\OneDrive\Desktop\website-development\Art\art.jpeg"  height="400"
width="400">

<h1 style="color:indigo;">Art</h1>

  </div>
<div class="row">
  <div class="column">
    <img src="https://image.shutterstock.com/image-vector/cinema-night-film-festival-retro-600w-
1193896822.jpg"  height="400" width="350">

<h1 style="color:indigo;">Entertainment</h1>

  </div>
<div class="row">
  <div class="column">
    <img src="https://d1csarkz8obe9u.cloudfront.net/posterpreviews/food-magazine-cover-template-
a05aab02984967898be024b104379ad8_screen.jpg?ts=1561537469"  height="400" width="350">
<h1 style="color:indigo;">Food</h1>




  </div>
<div class="row">
  <div class="column">
    <img src="https://i.pinimg.com/originals/c1/ef/25/c1ef25e8101d892945be263088ac46df.jpg"
height="400" width="400">

<h1 style="color:indigo;">Fashion</h1>

  </div>
<div class="row">
  <div class="column">
    <img src="https://i.pinimg.com/474x/70/24/c7/7024c70c8edf1697a5b216219c36a5c3.jpg"
height="400" width="400">
<h1 style="color:indigo;">Travel</h1>

  </div>
<div class="row">
  <div class="column">
    <img src="https://cdn.shopify.com/s/files/1/1239/4342/products/HENRY-CRUZ-SOCCER-
BG.jpg?v=1522350355"  height="400" width="350">

<h1 style="color:indigo;">Sports</h1>

  </div>


  </div>
```

```
</body>
</html>
```


Navigation.html

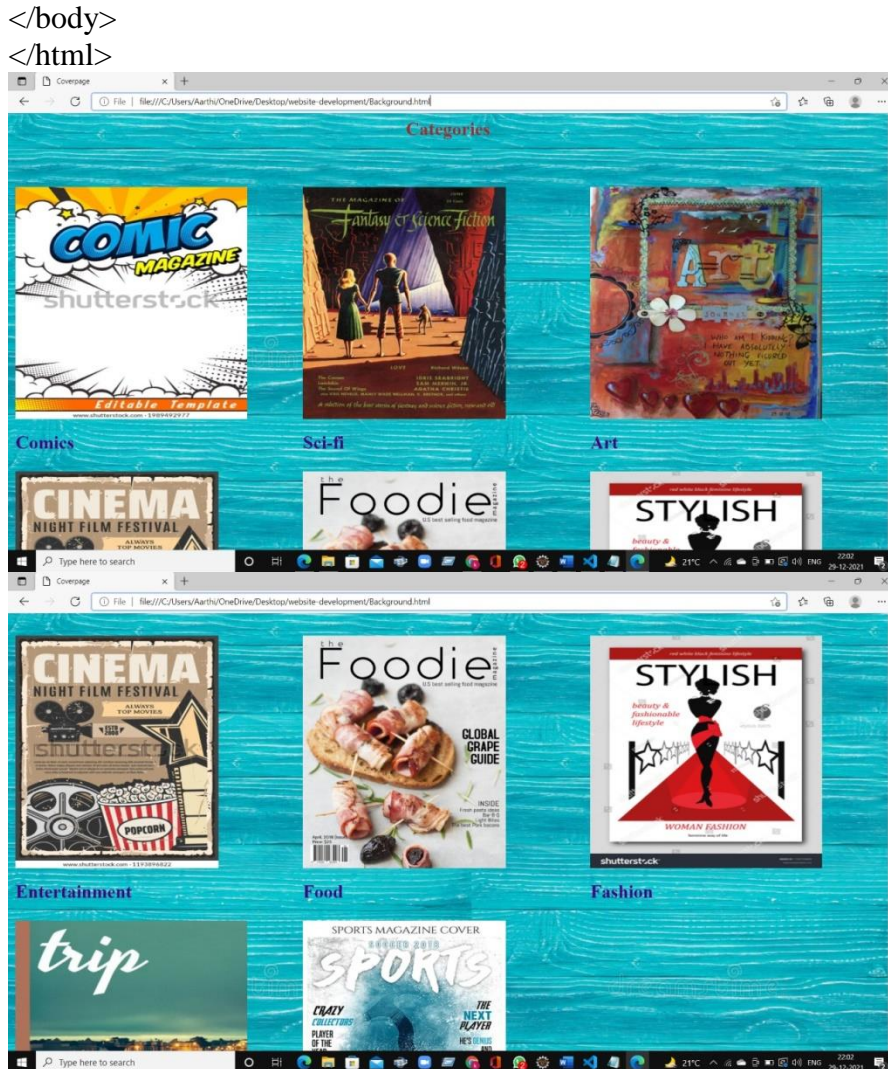```
<head>
  <meta charset="utf-8" />
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/font-awesome/4.3.0/css/font-awesome.min.css">
  <link rel="stylesheet" type="text/css" href="style.css" />
</head>
<body>

  <div class="container bar">
    <label class="floatLeft" for="navBtn"></label>

  </div>
  <div class="container">
    <input type="checkbox" class="navBtn" id="navBtn" />
    <nav>

          <i class="fa fa-heart"></i>Comic

          <i class="fa fa-medkit"></i>Fiction

```

```html
        <li>
          <a href="D:\wp\art image.jpeg"><i class="fa fa-heartbeat"></i>Art</a>
        </li>
        <li>
          <a href="D:\wp\entertainment image.jpeg"><i class="fa fa-ambulance"></i>Entertainment</a>
        </li>
        <li>
          <a href="D:\wp\food image.jpeg"><i class="fa fa-ambulance"></i>Food</a>
        </li>
        <li>
          <a href="D:\wp\fashion image.jpeg"><i class="fa fa-ambulance"></i>Fashion</a>
        </li>
        <li>
          <a href="D:\wp\travel image.jpeg"><i class="fa fa-ambulance"></i>Travel</a>
        </li>
        <li>
          <a href="D:\wp\sports image.jpeg"><i class="fa fa-ambulance"></i>Sports</a>
        </li>
        </ul>
      </nav>
    </div>
```

Navigation.css

```css
/* ============================================================================
Google Fonts
============================================================================== */
@import url(https://fonts.googleapis.com/css?family=PT+Sans:400,400italic,700,700italic);
/* ============================================================================
clearfix
============================================================================== */
.cf:before,
.cf:after {
 content: " ";
 /* 1 */
 display: table;
 /* 2 */
}

.cf:after {
 clear: both;
}

.cf {
 *zoom: 1;
}

/* ============================================================================
html, body and stuff
============================================================================== */
*, *:before, *:after {
 -moz-box-sizing: border-box;
 -webkit-box-sizing: border-box;
 box-sizing: border-box;
}

body {
 font-size: 100%;
 font-family: 'PT Sans', sans-serif;
 background-color: #f3f3f3;
```

```
}

/* ====================================================================
text
==================================================================== */
.left {
  text-align: left;
}

.center {
  text-align: center;
}

.right {
  text-align: right;
}

.justify {
  text-align: justify;
}

.uppercase {
  text-transform: uppercase;
}

/* ====================================================================
padding / margin
==================================================================== */
.padding1rem {
  padding: 1rem;
}

.paddingRight2rem {
  padding: 0 2rem 0 0;
}

/* ====================================================================
links
==================================================================== */
a {
  color: white;
}

/* ====================================================================
headlines
==================================================================== */
/* ====================================================================
awesome Fonts
==================================================================== */
i {
  color: #d1d4d9;
  margin: 0 1rem 0 0;
}

/* ====================================================================
layout
==================================================================== */
.container {
  max-width: 100%;
  margin: 0 auto;
```

```css
  overflow: hidden;
}

.floatLeft {
  float: left;
}

.floatRight {
  float: right;
}

.posAbs {
  position: absolute;
}

.third {
  width: 33.3333%;
}

.half {
  width: 50%;
}

.twoThird {
  width: 66.6666%;
}

.quarter {
  width: 25%;
}

label {
  cursor: pointer;
  border-right: 1px solid #d1d4d9;
  display: block;
  height: 4rem;
  width: 4rem;
  position: relative;
}
label span {
  border-radius: 15%;
  height: 3px;
  width: 32px;
  background-color: white;
  position: absolute;
  top: 50%;
  left: 50%;
  transform: translateY(-50%) translateX(-50%);
  transition: all 0.3s ease-out;
}
label span:before {
  border-radius: 15%;
  position: absolute;
  content: "";
  height: 100%;
  width: 100%;
  background-color: white;
  top: 400%;
  transition: all 0.3s ease-out;
}
```

```css
label span:after {
  border-radius: 15%;
  position: absolute;
  content: "";
  height: 100%;
  width: 100%;
  background-color: white;
  top: -400%;
  transition: all 0.3s ease-out;
}

label:hover span {
  height: 0;
  transition: all 0.3s ease-out;
}
label:hover span:before {
  height: 3px;
  transform: rotate(-45deg);
  transition: all 0.3s ease-out;
}
label:hover span:after {
  height: 3px;
  transform: rotate(45deg);
  transition: all 0.3s ease-out;
}

.bar {
  color: white;
  background-color: #4a4e54;
  line-height: 4rem;
  border: 1px solid grey;
}

nav {
  border-left: 1px solid #d1d4d9;
  border-right: 1px solid #d1d4d9;
  border-bottom: 1px solid #d1d4d9;
  max-width: 300px;
  background-color: white;
  transform: translateX(-100%) scale(1, 0.1);
  transform-origin: top left;
  transition: all 0.3s ease-out;
}
nav ul {
  margin: 0;
  padding: 0;
  list-style: none;
}
nav ul li {
  border-top: 1px solid #efefef;
  opacity: 0;
  transform: translateX(-100%);
  transition: all 0.6s ease-out;
}
nav ul li a {
  transition: all 0.3s ease-out;
  line-height: 1rem;
  text-decoration: none;
  color: #8a8d92;
  display: block;
```

```
  padding: 1rem;
}
nav ul li:first-child {
  border-top: none;
}
nav ul li:hover a {
  color: white;
  background-color: #6d747e;
  transition: all 0.3s ease-out;
}
nav ul li:hover a i {
  color: white;
}

.navBtn:checked ~ nav {
  transform: translateX(0);
  transition: all 0.3s ease-out;
}

.navBtn:checked ~ nav ul li {
  opacity: 1;
  transform: translateX(0);
  transition: all 0.6s ease-out;
}

.navBtn {
  display: none;
}
```
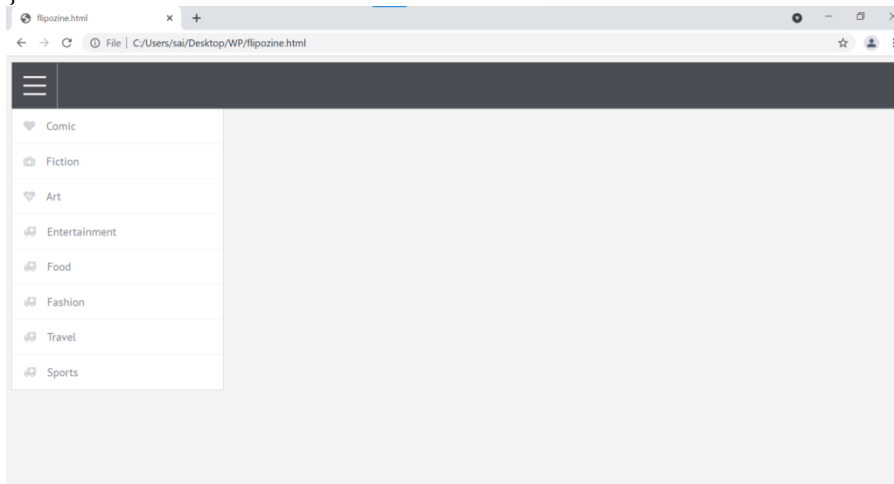

7) Validate the Login page using JavaScript.

```
<html>
<body bgcolor="pink"><br><br><br>
<script language="javascript">
function validate()
{
var flag=1;
if(document.myform.id.value==""||
document.myform.pwd.value=="")
```

```
{
flag=0;
} if(flag==1)
{ alert("VALID INPUT");
} else
{ alert("incorrect username or password");
document.myform.focus();
}}
</script>
<form name="myform">
<div align="center"><pre>
<b>LOGIN ID</b>&nbsp&nbsp<input type="text" name="id"><br>
<b>PASSWORD</b>&nbsp&nbsp<input type="password" name="pwd"></pre><br><br>
</div><br><br>
<div align="center">
<input type="submit" value="Submit" onClick="validate()">    
<input type="reset" value="Reset" >
</form></body></html>
```

Form Validation using JavaScript

Registration Form

First Name: [First Name]
Last Name: [Last Name]
Address: [Address]
Gender: ○ Male ○ Female
Email Id: [example@gmail.com]
Mobile: [   ]
Course: [select course ▼]
[Submit] [Reset]

This page says
Name is required
[OK]

Registration Form

First Name: [First Name]
Last Name: [Last Name]
Address: [Address]
Gender: ○ Male ○ Female
Email Id: [example@gmail.com]
Mobile: [   ]
Course: [select course ▼]
[Submit] [Reset]

6. Create and save an XML document on the server, which contains 10 users information. Write a program, which takes User Id as an input and returns the user details by taking the user information from the XML document.

User.xml
```
<?xml version="1.0"?>

<userlist>

<user>
```

```
<userid>usr01</userid>
<username>Bhuvana</username>
<address>Hyderabad</address>
<phone>7786886546</phone>
<email>19wh1a1260@bvrithyderabad.edu.in</email>
</user>
<user>
<userid>usr02</userid>
<username>Howl</username>
<address>London</address>
<phone>4409086578</phone>
<email>abc@gmail.com</email>
</user>

<user>
<userid>usr03</userid>
<username>Ed</username>
<address>Beijing</address>
<phone>6757864689</phone>
<email>bb@gmail.com</email>
</user>

<user>
<userid>usr04</userid>
<username>Catalina</username>
<address>Russia</address>
<phone>9675465754</phone>
<email>hieeimcat@gmail.com</email>
</user>

<user>
<userid>usr05</userid>
<username>Banner</username>
<address>New york</address>
<phone>55577775757</phone>
<email>imhulkgogree@gmail.com</email>
</user>

 <user>
<userid>usr06</userid>
<username>Grey</username>
<address>Scotland</address>
<phone>4345678432</phone>
<email>greyandspots@gmail.com</email>
</user>

 <user>
<userid>usr07</userid>
<username>Laila</username>
<address>Himachal Prades</address>
```

```
<phone>956754785</phone>
<email>imlaila@gmail.com</email>
</user>
 <user>
<userid>usr08</userid>
<username>Winter</username>
<address>Korea</address>
<phone>7878654321</phone>
<email>wintermaster@gmail.com</email>
</user>
<user>
<userid>usr09</userid>
<username>Eugene</username>
<address>Netherlands</address>
<phone>4156783456</phone>
<email>tangledeugene@gmail.com</email>
</user>

<user>
<userid>usr10</userid>
<username>Parker</username>
<address>Brooklyn</address>
<phone>7878676575</phone>
<email>spideywebweb@gmail.com</email>
</user>

</userlist>
```

User.html
```
<html>
 <head>
 <script language="javascript">
 function fncDisplayInfo()
 {
var xhttp=null;
var flag=0;
var userid = document.frm.uname.value;
var xmlDoc = new ActiveXObject("microsoft.xmldom");
xmlDoc.load("user.xml");
var noOfUsers = xmlDoc.getElementsByTagName("userlist")[0].childNodes.length;
 for(var i=0;i<parseInt(noOfUsers);i++)
 {
 var uid
=xmlDoc.getElementsByTagName("user")[i].childNodes[0].childNodes[0].nodeValue;
if(uid == userid)
{
```

```
 document.write("<h1> User Details</h1>");
var userName =
xmlDoc.getElementsByTagName("user")[i].childNodes[1].childNodes[0].nodeValue;
var Address
=xmlDoc.getElementsByTagName("user")[i].childNodes[2].childNodes[0].nodeValue;
var phone =
xmlDoc.getElementsByTagName("user")[i].childNodes[3].childNodes[0].nodeValue;
var email=
xmlDoc.getElementsByTagName("user")[i].childNodes[4].childNodes[0].nodeValue;
document.write("<br><b>User ID :&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp"+uid)
document.write("<br>User Name :&nbsp"+userName);
document.write("<br>Address :&nbsp&nbsp&nbsp&nbsp&nbsp&nbsp "+Address);
document.write("<br>Phone no : &nbsp&nbsp&nbsp&nbsp&nbsp"+phone);
document.write("<br>E - Mail : &nbsp&nbsp&nbsp&nbsp&nbsp&nbsp"+email);
 flag =1;
 break;
 }
}
 if(flag==0)
 {
 alert("InValid User");
 }
}
</script>
</head>
 <body>
<center>
 <h1><b>User Information</h1>
 <form name="frm">
User ID : <input type="text" name="uname"><br>
<input type="button" name="btn" value="Submit" onclick="fncDisplayInfo()">
</form>
</center>
</body>
</html>
```

User Information

User ID : usr01   ✕

Submit

User Details

User ID :   usr01
User Name : Bhuvana
Address :   RTC X roads
Phone no :   7786886546
E - Mail :   19wh1a1260@bvrithyderabad.edu.in

8) Install TOMCAT web server. Implement servlets for registration page of your project.

Hello.java

```java
import jakarta.servlet.http.*;
import jakarta.servlet.*;
import java.io.*;
import java.sql.*;
public class Hello extends HttpServlet{

        public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException{
                response.setContentType("text/html");
                PrintWriter out=response.getWriter();
                String Name=request.getParameter("userName");
                String password=request.getParameter("userPass");
                String email=request.getParameter("userEmail");
                String mobile=request.getParameter("userMobile");
                String dob=request.getParameter("userDOB");
                String gender=request.getParameter("gender");
                String country=request.getParameter("userCountry");
                out.print("Hello "+Name);
                try {
                        Class.forName("com.mysql.cj.jdbc.Driver");
                        Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/wp","root","12345");
                        PreparedStatement ps=con.prepareStatement("insert into wp.registration values(?,?,?,?,?,?,?)");

                        ps.setString(1,Name);
                        ps.setString(2,password);
                        ps.setString(3,email);
                        ps.setString(4,mobile);
                        ps.setString(5,dob);
                        ps.setString(6,gender);
                        ps.setString(7,country);
                        int r=ps.executeUpdate();
                        if(r==0)
                        out.println("insertion failure");
                        else
                        out.println(" your registration is successful");
                        con.close();
                        ps.close();
                }
                catch(Exception e)
                {

                }
```

```
                out.close();
        }
}
```

Web.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="https://jakarta.ee/xml/ns/jakartaee"
xmlns:web="http://xmlns.jcp.org/xml/ns/javaee" xsi:schemaLocation="https://jakarta.ee/xml/ns/jakartaee
https://jakarta.ee/xml/ns/jakartaee/web-app_5_0.xsd" id="WebApp_ID" version="5.0">
  <display-name>WP_SERVLETS</display-name>
  <welcome-file-list>
    <welcome-file>register.html</welcome-file>
  </welcome-file-list>
  <servlet>
    <description></description>
    <display-name>Hello</display-name>
    <servlet-name>Hello</servlet-name>
    <servlet-class>Hello</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>Hello</servlet-name>
    <url-pattern>/Hello</url-pattern>
  </servlet-mapping>
</web-app>
```

Register.html

```html
<html>
  <body>
    <form action="./Hello" method="get">
      <fieldset style="width:20%; background-color:#ccffeb">
        <h2 align="center">Registration form</h2><hr>
        <table>
          <tr>
            <td>Name</td>
            <td><input type="text" name="userName" required /></td>
          </tr>
          <tr>
            <td>Password</td>
            <td><input type="password" name="userPass" required /></td>
          </tr>
          <tr>
            <td>Email Id</td>
            <td><input type="text" name="userEmail" required /></td>
          </tr>
          <tr>
            <td>Mobile</td>
            <td><input type="text" name="userMobile" required/></td>
          </tr>
          <tr>
            <td>Date of Birth</td>
            <td><input type="date" name="userDOB" required/></td>
          </tr>
          <tr>
            <td>Gender</td>
            <td><input type="radio" name="gender" value="male" checked> Male
            <input type="radio" name="gender" value="female"> Female </td></tr>
          <tr>
            <td>Country</td>
            <td><select name="userCountry" style="width:130px">
              <option>Select a country</option>
```

```
            <option>India</option>
            <option>America</option>
            <option>England</option>
            <option>other</option></select>
        </td>
     </tr>
     <tr>
        <td><input type="reset" value="Reset"/></td>
        <td><input type="submit" value="Register"/></td>
     </tr>
   </table>
  </fieldset>
 </form>
</body>
</html>
```

9) Implement JSP FOR YOUR REGISTRATION PAGE
Register.jsp

```jsp
<%@ page import="java.io.*" %>
<%@ page import="java.sql.*" %>

<%
String result="";
String username=request.getParameter("userName");
String password=request.getParameter("userPass");
String phonenumber=request.getParameter("userMobile");
String address=request.getParameter("userAddress");
String city=request.getParameter("userCity");
String state=request.getParameter("userState");
String country=request.getParameter("userCountry");
try
{
Class.forName("com.mysql.cj.jdbc.Driver");
Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/wp","root","12345");
PreparedStatement ps=con.prepareStatement("insert into wp.details_jsp values(?,?,?,?,?,?,?)");
ps.setString(1,username);
ps.setString(2,password);
ps.setString(3,phonenumber);
ps.setString(4,address);
ps.setString(5,city);
ps.setString(6,state);
ps.setString(7,country);
int r=ps.executeUpdate();
if(r==0)
out.println("failure");
else
result="Admin Registered Successfully";
con.close();}
catch (Exception e)
{
        System.out.println(e);

}
%>

<div style="text-align:center">
            <form action="login.html">
             <h1><%=result%></h1><br>
            <input type="submit" value="Go To registration Page">
            </form><br><br>
</div>

Login.html
<html>
  <body>
    <form action="register.jsp" method="get">
```

```html
        <fieldset style="width:20%; background-color:#ccffeb">
          <h2 align="center">Registration form</h2><hr>
          <table>
            <tr>
              <td>username</td>
              <td><input type="text" name="userName" required /></td>
            </tr>
            <tr>
              <td>password</td>
              <td><input type="password" name="userPass" required /></td>
            </tr>
            <tr>
              <td>phonenumber</td>
              <td><input type="text" name="userMobile" required/></td>
            </tr>
            <tr>
              <td>address</td>
              <td><input type="text" name="userAddress" required/></td>
            </tr>
            <tr>
              <td>city</td>
              <td><input type="text" name="userCity" required/></td>
            </tr>
            <tr>
              <td>state</td>
              <td><input type="text" name="userState" required/></td>
            </tr>
              <td>country</td>
              <td><select name="userCountry" style="width:130px">
                <option>Select a country</option>
                <option>India</option>
                <option>America</option>
                <option>England</option>
                <option>other</option></select>
              </td>
            </tr>
            <tr>
              <td><input type="reset" value="Reset"/></td>
              <td><input type="submit" value="Register"/></td>
            </tr>
          </table>
        </fieldset>
      </form>
    </body>
</html>
```

Registration form

username	
password	
phonenumber	
address	
city	
state	
country	Select a country

Reset   Register

Admin Registered Successfully

username	password	phonenumber	address	city	state	country
NULL	NULL	NULL	NULL	NULL	NULL	
NULL	NULL	NULL	NULL	NULL	NULL	
NULL	NULL	NULL	NULL	NULL	NULL	
Bhuvana	NULL	7786886546	Kukatpally	Hyderabad	Telangana	
NULL	NULL	NULL	NULL	NULL	NULL	
Bhuvana	12345	7786886546	Kukatpally	Hyderabad	Telangana	
NULL	NULL	NULL	NULL	NULL	NULL	NULL
Bhuvana	12	7786886546	Kukatpally	Hyderabad	Telangana	India