# WEB TECHNOLOGIES

## WEEK – 1

**Question:** Design the following static web pages required for an online book store website.

1) **HOME PAGE:** The static home page must contain three frames. Top frame : Logo and the website name and links to Home page, Login page, Registration page, Catalogue page and Cart page (the description of these pages will be given below). Left frame: At least four links for navigation, which will display the catalogue of respective links. For e.g.: When you click the link "CSE" the catalogue for CSE Books should be displayed in the Right frame. Right frame: The pages to the links in the left frame must be loaded here. Initially this page contains description of the website

| Logo | Website Name | | | |
|------|-------|--------------|-----------|------|
| Home | Login | Registration | Catalogue | Cart |
| CSE<br>ECE<br>EEE<br>CIVIL | Description of the Website | | | |

**Dept.html**

```
<!DOCTYPE html>
<head>
   <title>Departments Page</title>
</head>
<body>
   <font face="Arial Black" size="4">
      <table align="center" height="100%" cellpadding="40">
         <tr>
```

```
            <td><a href="mca.html"
target="des_page">MCA</a></td>

        </tr>

        <tr>

            <td><a href="mba.html"
target="des_page">MBA</a></td>

        </tr>

        <tr>

            <td><a href="bca.html"
target="des_page">BCA</a></td>

        </tr>

    </table>

     </font>

</body>

</html>
```

**Desc.html**

```
<!DOCTYPE html>

<html lang="en">

<head>

   <title>Document</title>

</head>

<body>

     <p align="center">

     Shri Vishnu Engineering College For Women is located in
Bhimavaram - the central part of Coastal Andhra.The area generally
known for its commercial activities has recently established itself as
a Center for Academics.  The campus is located in Vishnupur which
is 3 km from Bhimavaram on Tadepalligudem Road.   The campus
spreads around 100 acres landscape known for its salubrious climate
```

and presents congenial atmosphere to pursue higher studies. Our infrastructure is vibrant in nature because of constant attempt to maintain pace with the development available. The infrastructure acts as a facilitator for the effective delivery of our curriculum. Apart from the common central facilities the colleges has well-equipped laboratories, lecture halls, drawing and seminar halls etc. The organization provides adequate infrastructural support for all sports activities which provide students physical fitness and personality development inturn cultivate in them sportsman spirit, team spirit, leadership and talent.

```
        </p>

</body>

</html>
```

## Head.html

```
<!DOCTYPE html>
<html lang="en">
<head>
   <title>Head Page</title>
</head>
<body>
   <font face="Arial Black" size="3">
        <table border="1" cellspacing="2" cellpadding="5" width="100%">
      <tr>
        <td align="center"><img src="logo.jpg" alt="Vishnu logo" width="40" height="40"></td>
        <td colspan="4" align="center"> Shri Vishnu Engineering College For Women</td>
      </tr>
      <tr>
        <td align="center"><a href="desc.html" target="des_page">Home</a></td>
        <td align="center"><a href="login.html" target="des_page">Login</a></td>
        <td align="center"><a href="registration.html" target="des_page">Registration</a></td>
```

```
            <td       align="center"><a       href="catalogue.html"
target="des_page">Catalogue</a></td>
            <td        align="center"><a        href="cart.html"
target="des_page">Cart</a></td>
        </tr>
</table>
</font>
</body>
</html>
```

**Program:**

**Home.html:**

```
<!DOCTYPE html>

<head>

    <title>Home Page</title>

</head>

    <frameset rows="20,80">

        <frame src = "head.html" name="head_page">

            <frameset cols="15,85">

                <frame src="dept.html" name="dept_page">

                <frame src="desc.html" name="des_page">

            </frameset>

    </frameset>

</html>
```

**Output:**



## 2) LOGIN PAGE:

This page looks like below



**Program:**

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Login Page</title>
</head>
<body>
    <center>
```

```html
<font face="Arial Black" size="4"><u><b>LOGIN FORM</b></u></font>
<br><br>
<form name="f1" action="" method="post">
  <table frame="box" cellspacing="10">
    <tr>
      <td>Login</td>
      <td><input type="text" size="25"></td>
    </tr>
    <tr>
      <td>Password</td>
      <td><input type="password" size="25"></td>
    </tr>
    <tr>
      <td colspan="2" align="center"><input type="submit" value="SUBMIT">     
      <input type="reset" value="RESET"></td>
    </tr>
  </table>
</form>
</center>
</body>
</html>
```

**Output:**
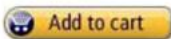


## 3) CATOLOGUE PAGE:

The catalogue page should contain the details of all the books available in the Website in a table. The details should contain the following:

1. Snapshot of Cover Page

2. Book Name

3. Author Name

 4. Publisher

5. Price

6. Add to cart button

| Logo | Website Name | | | |
|---|---|---|---|---|
| Home | Login | Registration | Catalogue | Cart |
| CSE | | Book : XML Bible<br>Author : Winston<br>Publication : Wiely | $ 40.5 | Add to cart |
| ECE | | Book : AI<br>Author : S.Russell<br>Publication : Princeton hall | $ 63 | Add to cart |
| EEE | | | | |
| CIVIL | | Book : Java 2<br>Author : Watson<br>Publication: BPB Publications | $ 35.5 | Add to cart |
| | | Book : HTML in 24 hours<br>Author : Sam Peter<br>Publication : Sam publication | $ 50 | Add to cart |

**PROGRAM:**

```
<!DOCTYPE html>

<html lang="en">

<head>

   <title>Catalogue</title>

</head>

<body>

   <table width="100%" height="100%" cellspacing="30">

      <tr>

      <td><img        src="lost_temple.jpg"        width="100"
height="100"></td>

   <td>Name: Sudha Murthy <br>

   Title: The Magic of the Lost Temple<br>

   Publications: Span

   </td>

   <td>Price:$50</td>

   <td><button><img  src="cart.jpg"  alt="add_to_cart"  height="60"
width="60"></button></td>
```

```html
</tr>
<tr>
    <td><img src="harry_potter.jpg" width="100" height="100"></td>
    <td>Name: J.K.Rowling <br>
    Title: HarryPotter and the Philospher's Stone<br>
    Publications: RR
    </td>
    <td>Price:$30</td>
    <td><button><img src="cart.jpg" alt="add_to_cart" height="60" width="60"></button></td>
    <tr>
    <td><img src="room.jpg" width="100" height="100"></td>
    <td>Name: Ruskin Bond <br>
    Title: The Room on the Roof<br>
    Publications: SS
    </td>
    <td>Price:$45</td>
    <td><button><img src="cart.jpg" alt="add_to_cart" height="60" width="60"></button></td>
</tr>
<tr>
    <td><img src="midnight.jpg" width="100" height="100"></td>
    <td>Name: William Shakespeare<br>
    Title: A Midsummer Night's Dream<br>
    Publications: WW
    </td>
    <td>Price:$25</td>
```
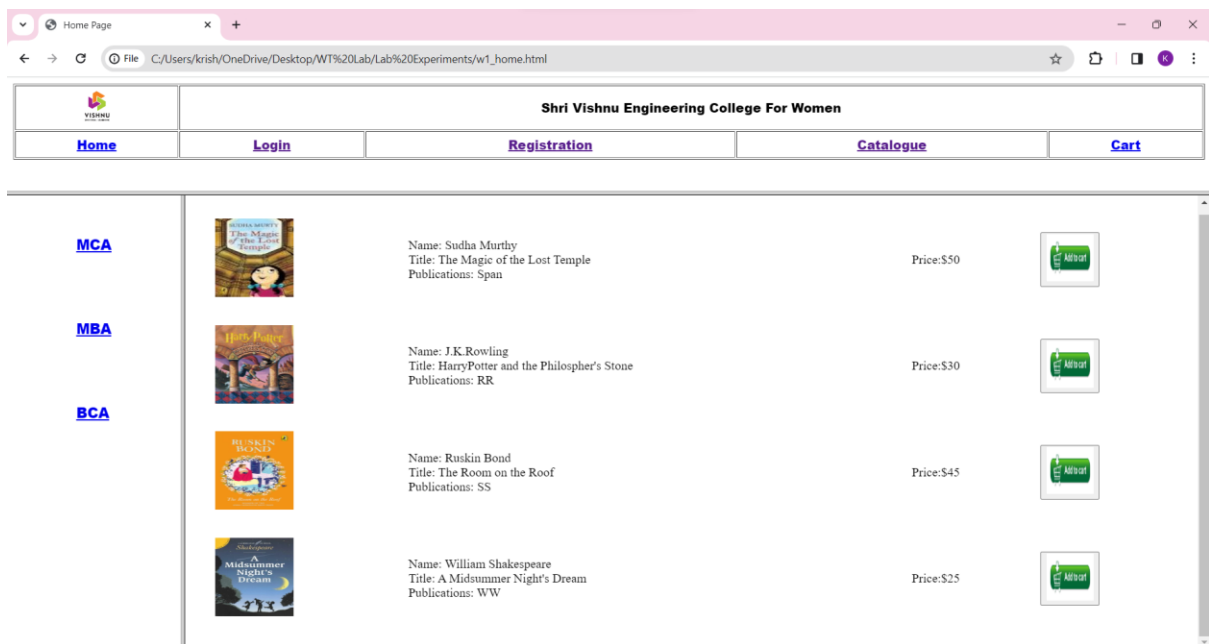
```
        <td><button><img  src="cart.jpg"  alt="add_to_cart"  height="60"
width="60"></button></td>

      </tr>

    </table>

</body>

</html>
```

**OUTPUT:**

**WEEK – 2**

**Question:** Design Cart page and Registration page

**Program:**

**4) CART PAGE:**

The cart page contains the details about the books which are added to the cart.

The cart page should look like this:

| Logo | Website Name | | | |
|------|------|------|------|------|
| Home | Login | Registration | Catalogue | Cart |
| CSE | **Book name** | **Price** | **Quantity** | **Amout** |
| ECE | Java 2 | $35.0 | 2 | $70 |
| EEE | XML bible | $40.5 | 1 | $40.5 |
| CIVIL | | | **Total Amount  -** | $110.5 |

**PROGRAM:**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <script>
        function sum1(){
        var num1 = document.getElementById('price1').value;
        var num2 = document.getElementById('quantity1').value;
            document.getElementById('amount1').value=num1*num2;
            }
```

```
        Function sum2(){
        var num1 = document.getElementById('price2').value;
        var num2 = document.getElementById('quantity2').value;
            document.getElementById('amount2').value=num1*num2;
        }
        function sum(){
        var num1 = parseFloat(document.getElementById('amount1').value);
        var num2 = parseFloat(document.getElementById('amount2').value);
            document.getElementById('amount').value=num1+num2;
        }
    </script>
</head>
<body>
    <form action="" >
        <table cellspacing="5" cellpadding="6">
            <tr>
                <th>Book Name</th>
                <th>Price</th>
                <th>Quantity</th>
                <th>Amount</th>
            </tr>
            <tr>
                <td><input type="text" id="book1"></td>
                <td><input type="text" id="price1"></td>
                <td><input type="text" id="quantity1" ></td>
                <td><input     type="text"     id="amount1"     onfocus="sum1()"
readonly></td>
            </tr>
```

```
<tr>
    <td><input type="text" id="book2"></td>
    <td><input type="text" id="price2"></td>
    <td><input type="text" id="quantity2" oninput="sum2()"></td>
    <td><input type="text" id="amount2" readonly></td>
</tr>
<tr>
    <td colspan="3" style="text-align: right;"><label for="amount">Amount:</label></td>
    <td><input type="text" id="amount" readonly onfocus="sum()"></td>
</tr>
</table>
</form>
</body>
</html>
```

**OUTPUT:**

## 5) REGISTRATION PAGE:

Create registration "form" with the following fields

      1)Name (Text field)

      2)Password (password field)

      3)E-mail id (text field)

      4)Phone number (text field)

      5)Sex (radio button)

      6)Date of birth (3 select boxes)

      7)Languages known (check boxes – English, Telugu, Hindi, Tamil)

      8)Address (text area)

## PROGRAM:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>REGISTRATION PAGE</title>
</head>
<body>
<form>
    <table style="border: 3px solid black; margin-top:3%;" cellpadding="10" align="center">
        <tr>
```

```html
<td colspan="100%" align="center">
  <u><h1 style="color: #000000;">REGISTRATION PAGE</h1></u>
</td>
</tr>
<tr>
  <td>
    <label for="name">NAME:</label>
  </td>
  <td>
    <input type="text" id="name" size="30" placeholder="Enter your Name">
  </td>
</tr>
<tr>
  <td>
    <label for="pwd">PASSWORD:</label>
  </td>
  <td>
    <input type="password" id="pwd" size="30" placeholder="Enter Password">
  </td>
</tr>
<tr>
  <td>
    <label for="mail">EMAIL ID:</label>
  </td>
  <td>
```

```html
            <input    type="email"    name="mail"    id="mail"    size="30"
placeholder="Enter your E-mail">
        </td>
    </tr>
    <tr>
      <td>
        <label for="num">PHONE NUMBER:</label>
      </td>
      <td>
        <input    type="text"    name="phone"    id="num"    size="15"
placeholder="Enter your Phone Number">
      </td>
    </tr>
    <tr>
      <td>
        <label for="gender">GENDER</label>
      </td>
      <td>
        <input type="radio" name="gender" id="male" value="male">
<label for="male">MALE</label>
        <input      type="radio"      name="gender"      id="female"
value="female"> <label for="female">FEMALE</label>
      </td>
    </tr>
    <tr>
      <td>
        <label for="dob">DATE OF BIRTH</label>
      </td>
      <td>
```

```html
        <input type="date" name="dob" id="dob">
      </td>
    </tr>
    <tr>
      <td>
        <label for="lang">LANGUAGES KNOWN</label>
      </td>
      <td>
        <input type="checkbox" name="lang" id="eng" value="eng"><label for="eng">ENGLISH</label>
        <input type="checkbox" name="lang" id="tel" value="tel"><label for="tel">TELUGU</label>
        <input type="checkbox" name="lang" id="hin" value="hin"><label for="hin">HINDI</label>
        <input type="checkbox" name="lang" id="tam" value="tam"><label for="tam">TAMIL</label>
      </td>
    </tr>
    <tr>
      <td><label for="add">ADDRESS</label></td>
      <td>
        <textarea name="add" id="add" cols="25" rows="10" placeholder="Enter your Address"></textarea>
      </td>
    </tr>
    <tr>
      <td colspan="100%" align="center">
        <input type="submit" value="SUBMIT">
        <input type="reset" value="RESET">
```

```
                  </td>

              </tr>

          </table>

      </form>

  </body>

  </html>
```

## Output :

**WEEK – 3**

**Question:**

Design a web page using CSS (Cascading Style Sheets) which includes the following:

1) Use different font, styles: In the style definition you define how each selector should work (font, color etc.). Then, in the body of your pages, you refer to these selectors to activate the styles.
2) Set a background image for both the page and single elements on the page. You can define the background image for the page like this:
3) Control the repetition of the image with the background-repeat property. As background-repeat tiles the image until the entire page is filled, just like an ordinary background image in plain HTML.
4) Define styles for links as

      A:link
      A:visited
      A:active
      A:hover

**3a.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Usage of different font,styles and colors</title>
    <link rel="stylesheet" type="text/css" href="3a.css">
</head>
<body>
    <h1>This header is in red</h1>
    <h2>This header is in blue</h2>
    <p>This is normal text</p>
</body>
</html>
```

**3a.css**

```css
h1{
    color:red;
    text-transform: capitalize;
}
h2{
    color:blue;
    text-decoration: overline;
}
p{
    font-style: italic;
}
```

**OUTPUT:**



**3b.html**

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Setting background image</title>
    <style type="text/css">
```

```
        body{
            background-image:url("bg.jpg");
            background-repeat:no-repeat;
            background-size: "60%";
        }
    </style>
</head>
<body text="#ee78a2">
    <h2>Life is beautiful!!!</h2>
</body>
</html>
```
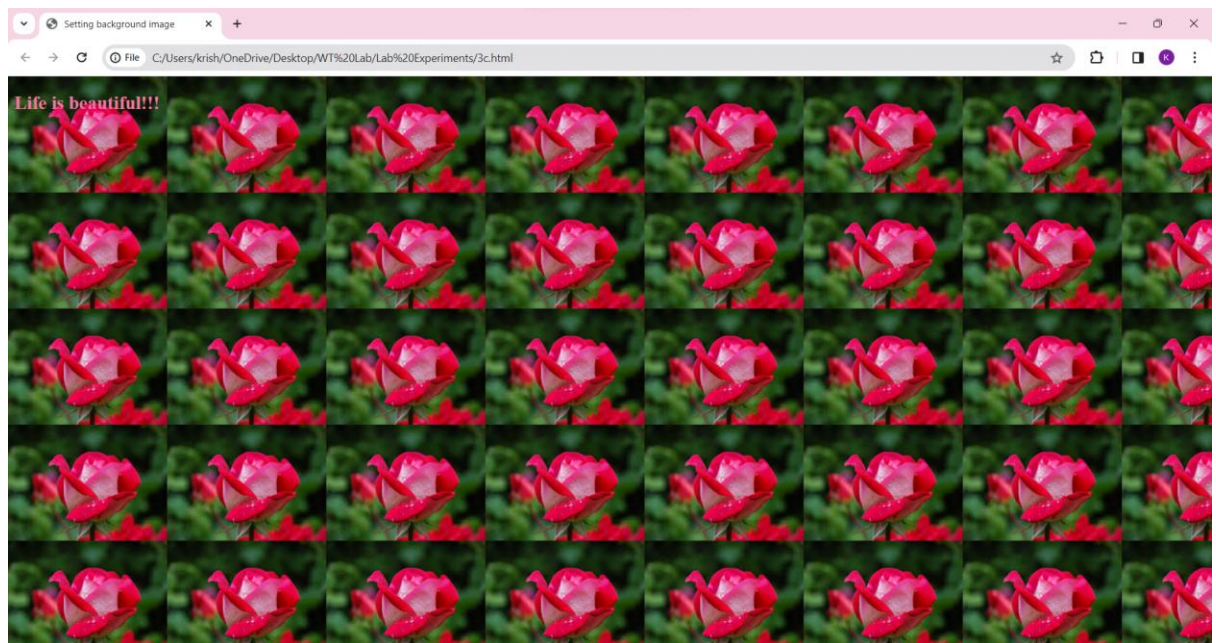
**OUTPUT:**



**3c.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
```

```html
  <title>Setting background image</title>
  <style type="text/css">
    body{
      background-image:url("bg.jpg");
      background-size: "60%";
    }
  </style>
</head>
<body text="#ee78a2">
  <h2>Life is beautiful!!!</h2>
</body>
</html>
```

**OUTPUT:**



**3d.html**

```html
<!DOCTYPE html>
<html lang="en">
```

```html
<head>
  <style>
    a:link{
      color:red;
    }
    a:visited{
      color:green;
    }
    a:hover{
      color:hotpink;
    }
    a:active{
      color:blue;
    }
  </style>
</head>
<body>

  <h2>CSS Links</h2>
  <p><b><a href="3c.html" target="_blank">This is a link</a></b></p>
</body>
</html>
```

# OUTPUT:



**CSS Links**

**This is a link**

**WEEK – 4**

**Question:**

**VALIDATION:** Write JavaScript to validate the following fields of the above registration page.

1. Name (Name should contains alphabets and the length should not be less than 6 characters).

2. Password (Password should not be less than 6 characters length).

3. E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)

4. Phone number (Phone number should contain 10 digits only).

**PROGRAM:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    td{
      font-size: larger;
    }
    .center{
      margin-left: auto;
      margin-right: auto;
```

```
        }
    </style>
    <script>
        function validate(){
            var name = document.getElementById('name').value;
            var password = document.getElementById('pwd').value;
            var phone_no = document.getElementById('phone').value;
            var regex = /^[a-zA-Z0-9_]{6,}$/;
            var regexpass = /^[a-zA-Z0-9_]{6,}$/;
            var regexp = /[0-9]{10}/;
            console.log(name);
            if    (regex.test(name)    &&    regexpass.test(password)    &&
regexp.test(phone_no)) {
                window.alert("successful");
            }
            else{
                if (!regex.test(name) )
                    window.confirm("Invalid username");
                else if (!regexpass.test(password) )
                    window.confirm("Invalid password");
                else
                    window.confirm("Invalid phone number");
            }
        }
    </script>
</head>
<body>
    <h1 style="text-align: center;">Registration Page</h1>
```

```html
<form action="">
    <table cellpadding="10" cellspacing="10" class="center">
      <tr>
        <td><label for="name">Name: </label></td>
        <td><input type="text" name="name" id="name"></td>
      </tr>
      <tr>
        <td><label for="pwd">password: </label></td>
        <td><input type="password" name="pwd" id="pwd"></td>
      </tr>
      <tr>
        <td><label for="email">Email: </label></td>
        <td><input type="email" name="email" id="email"></td>
      </tr>
      <tr>
        <td><label for="phone">Phone Number: </label></td>
        <td><input type="tel" name="phone" id="phone"></td>
      </tr>
      <tr>
        <td colspan="2" style="text-align: center;"><button onclick="validate()">submit</button></td>
      </tr>
    </table>
  </form>
</body>
</html>
```
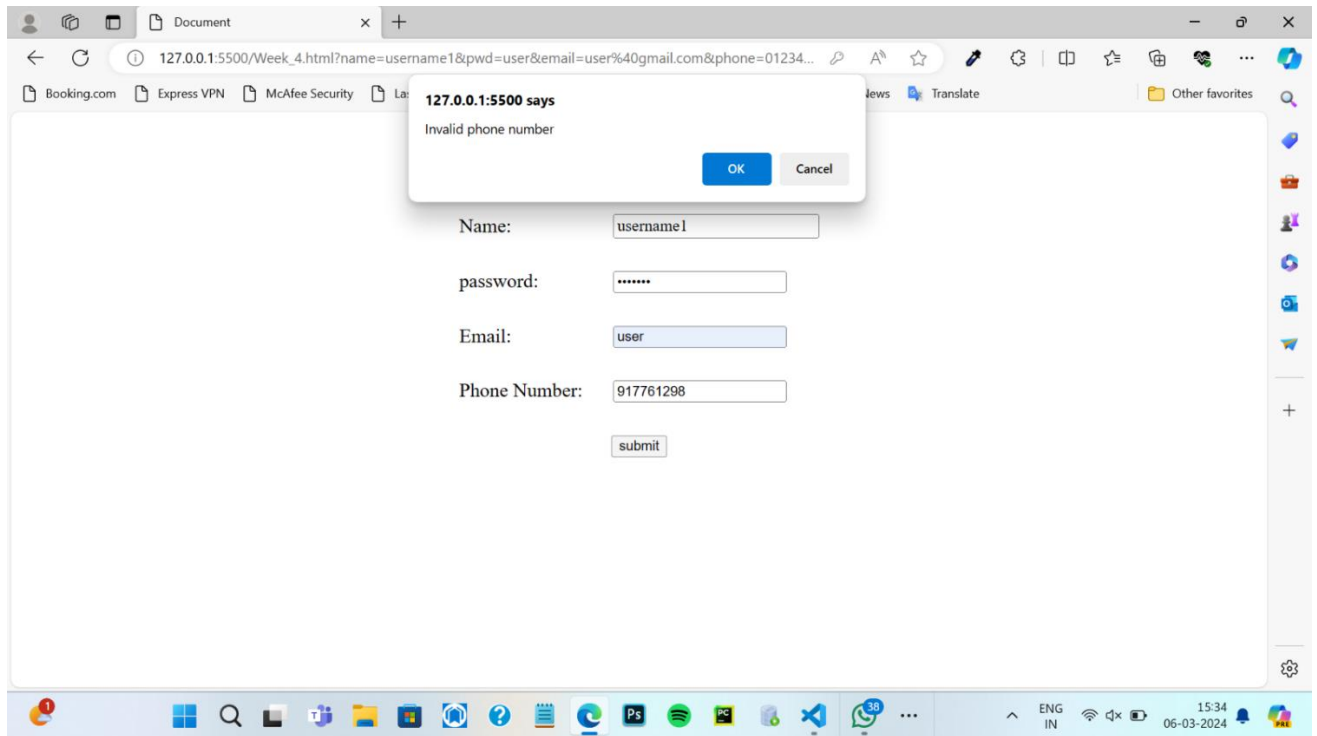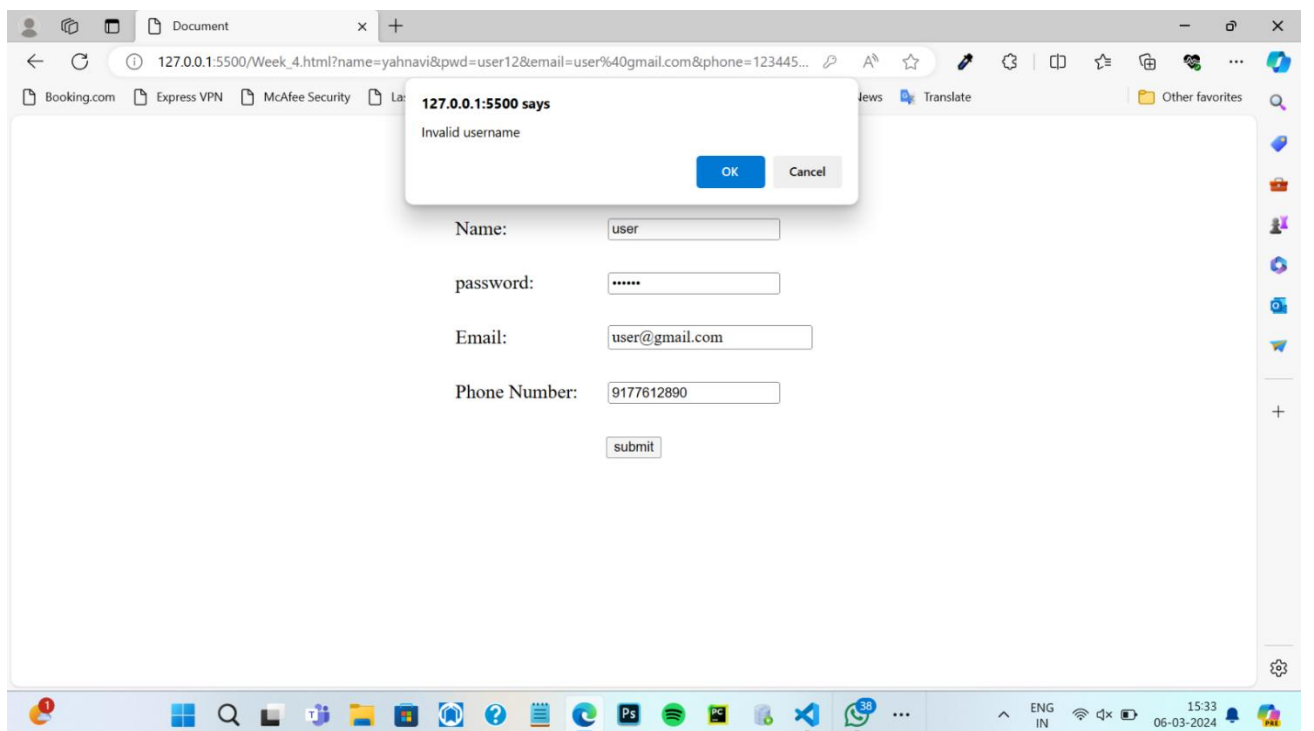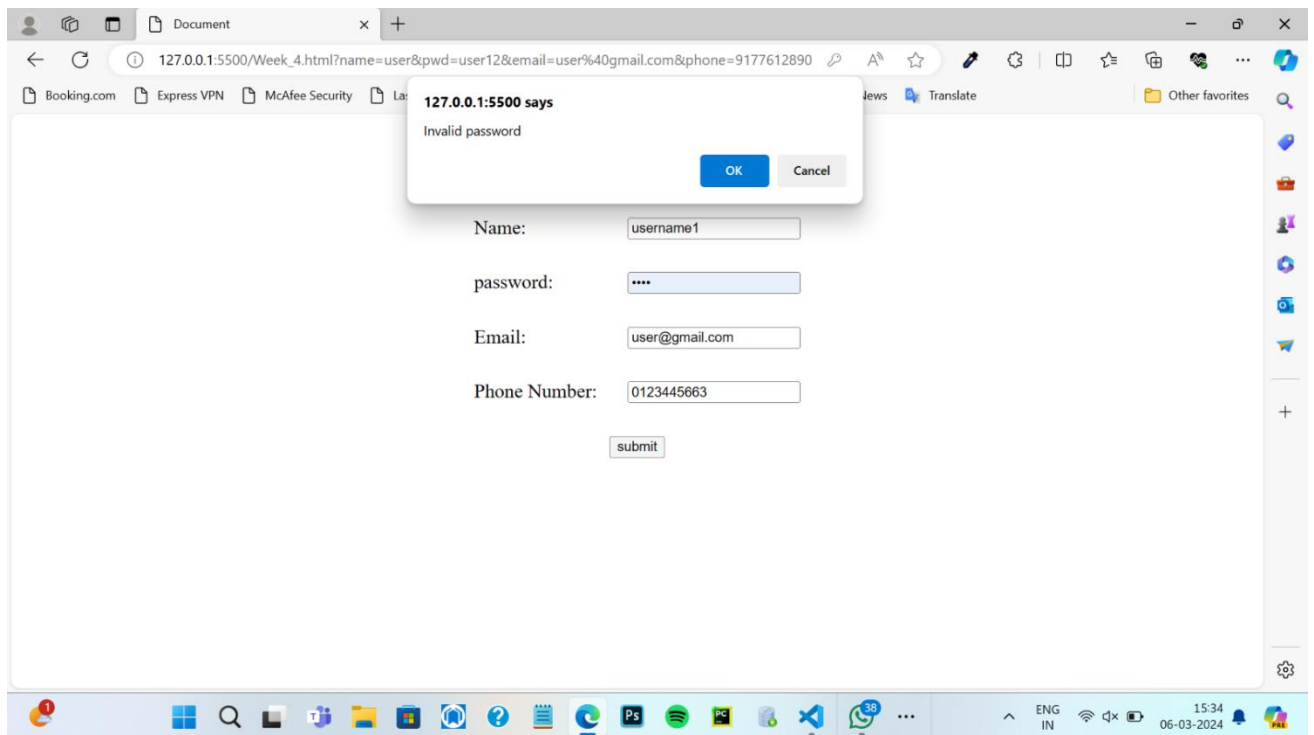
**OUTPUT:**
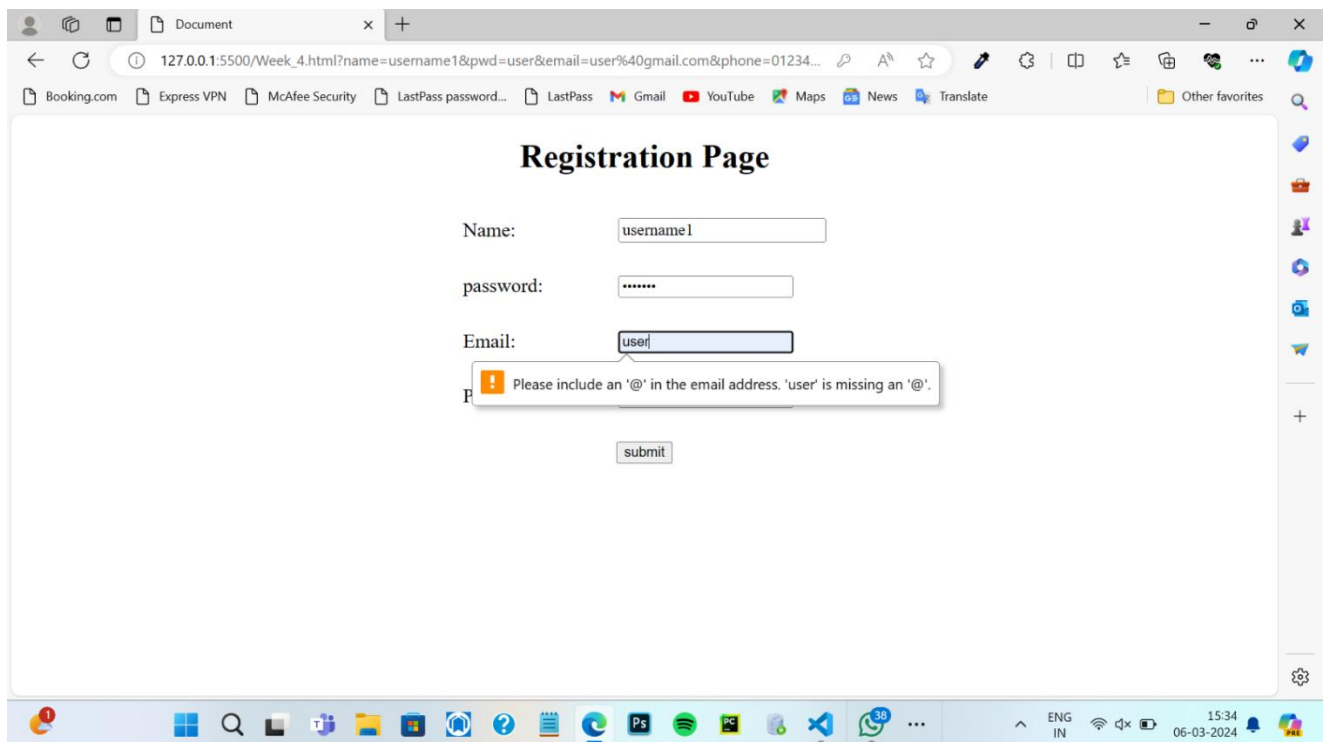
**WEEK – 5**

**Question:**

**a) Write an XML file which will display the Book information which includes the following:**

      1) Title of the book

      2) Author Name

      3) ISBN number

      4) Publisher name

      5) Edition

      6) Price

**b) Write a Document Type Definition (DTD) to validate the above XML file.**

**c) Display the XML file as follows:**

      The contents should be displayed in a table. The header of the table should be in color GREY. And the Author names column should be displayed in one color and should be capitalized and in bold. Use your own colors for remaining columns. Use XML schemas XSL and CSS for the above purpose. Note: Give at least for 4 books. It should be valid syntactically. Hint: You can use some xml editors like XML-spy.

**Program – 5a:**

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="week-5.xsl"?>

<bookstore>

  <book>

    <title>Web programming</title>

    <author>Chrisbates</author>

    <ISBN>123-456-789</ISBN>

    <publisher>wiley</publisher>
```

```xml
      <edition>3</edition>
      <price>560</price>
   </book>
   <book>
      <title>Internet worldwideweb</title>
      <author>Cditel&amp;ditel</author>
      <ISBN>123-456-781</ISBN>
      <publisher>person</publisher>
      <edition>2</edition>
      <price>830</price>
   </book>
   <book>
      <title>Coding fundamentals</title>
      <author>John</author>
      <ISBN>123-456-987</ISBN>
      <publisher>william</publisher>
      <edition>8</edition>
      <price>400</price>
   </book>
   <book>
      <title>Linux Programming</title>
      <author>Albert</author>
      <ISBN>123-456-237</ISBN>
      <publisher>Stewert</publisher>
      <edition>4</edition>
      <price>799</price>
   </book>
```

```
</bookstore>
```

**Program – 5b:**

```
<?xml version="1.0" encoding="UTF-8"?>

<!ELEMENT bookstore (book+)>

<!ELEMENT book (title, author, ISBN, publisher, edition, price)>

<!ELEMENT title (#PCDATA)>

<!ELEMENT author (#PCDATA)>

<!ELEMENT ISBN (#PCDATA)>

<!ELEMENT publisher (#PCDATA)>

<!ELEMENT edition (#PCDATA)>

<!ELEMENT price (#PCDATA)>
```

**Program – 5c:**

```
<?xml version="1.0" encoding="UTF-8"?>

<xsl:stylesheet                                                version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

<xsl:template match="/">

  <html>

    <body>

      <h2>My Books Collection</h2>

      <table border="1">

        <tr bgcolor="#808080">

          <th>Title</th>

          <th>Author</th>

          <th>ISBN </th>

          <th>Publisher</th>

          <th>Price</th>

          <th>Edition</th>
```

```
        </tr>
        <xsl:for-each select="bookstore/book">
        <tr>
            <td bgcolor="#FFFFAD"><xsl:value-of select="title"/></td>
                        <td    bgcolor="#ADD8E6"><b><xsl:value-of
select="author"/></b></td>
            <td bgcolor="#FFB6C1"><xsl:value-of select="ISBN"/></td>
                        <td    bgcolor="#FFFFED"><xsl:value-of
select="publisher"/></td>
            <td bgcolor="#90EE90"><xsl:value-of select="price"/></td>
          <td bgcolor="#DFC5FE"><xsl:value-of select="edition"/></td>
        </tr>
        </xsl:for-each>
      </table>
    </body>
  </html>
</xsl:template>
</xsl:stylesheet>
```

**OUTPUT 5c:**

## My Books Collection

| Title | Author | ISBN | Publisher | Price | Edition |
|---|---|---|---|---|---|
| Web programming | Chrisbates | 4328 | wiley | 560 | 3 |
| Internet worldwideweb | Arvind | 6781 | Gokul | 830 | 2 |
| Coding fundamentals | John | 6987 | william | 400 | 8 |
| Linux Programming | Albert | 1237 | Stewert | 799 | 4 |

**WEEK – 6**

**Question:** Design a static web page and make the screen responsive using bootstrap.

**Program:**

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Week 6</title>

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-QWTKZyjpPEjISv5WaRU9OFeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" crossorigin="anonymous">

</head>

<body>

    <h3  style="text-align:  center;  color:  #bb00ff;  background-color: bisque;"> WEEK 6 : Bootstrap </h3>

  <div class="container-fluid">

    <nav class="navbar navbar-expand-lg navbar-light bg-info">

      <a class="navbar-brand" href="#" style="color: white;">

        Week 6 - responsive screens using bootstrap. Learn from :

      </a>

                        <div     class="collapse     navbar-collapse" id="navbarSupportedContent">

        <ul class="navbar-nav mr-auto">

          <li class="nav-item active">
```
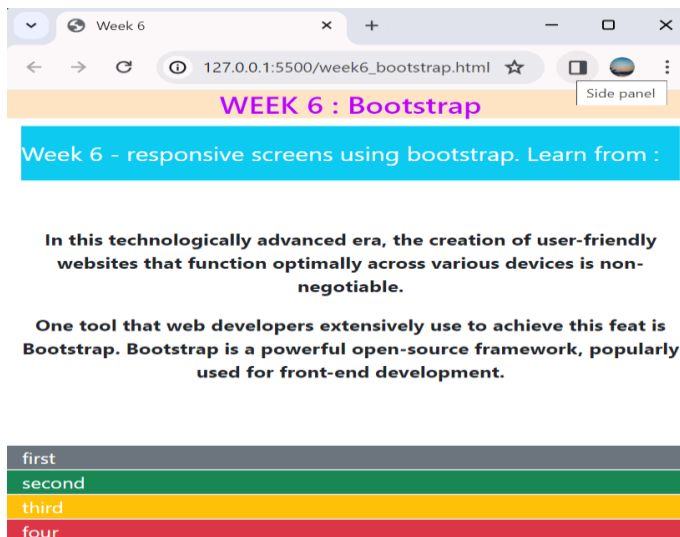
```html
                              <a    class="nav-link"    style="color:    white;"
href="https://getbootstrap.com/docs/5.3/components/navbar/"
target="_blank">Official documentation</a>

          </li>

          <li class="nav-item active">

                              <a    class="nav-link"    style="color:    white;"
href="https://www.w3schools.com/bootstrap/"
target="_blank">w3schools</a>

          </li>

          <li class="nav-item active">

                              <a    class="nav-link"    style="color:    white;"
href="https://en.wikipedia.org/wiki/Bootstrap_(front-end_framework)"
target="_blank">Wikipedia</a>

          </li>

        </ul>

      </div>

    </nav>

  </div>

  <br>

  <br>

  <p style="text-align: center;"><b>In this technologically advanced era,
the creation of user-friendly websites that function optimally across various
devices is non-negotiable.</b></p>

  <p  style="text-align:  center;"><b>One  tool  that  web  developers
extensively use to achieve this feat is Bootstrap. Bootstrap is a powerful
open-source    framework,    popularly    used    for    front-end
development.</b></p>

  <br>

  <br>

  <div class="container-fluid">

    <div class="row">
```

```html
        <div class="col-lg-3 col-md-6 col-sm-12 border bg-secondary"
style="color: white;">first</div>

        <div class="col-lg-3 col-md-6 col-sm-12 border  bg-success"
style="color: white;">second</div>

        <div class="col-lg-3 col-md-6 col-sm-12 border bg-warning"
style="color: white;">third</div>

        <div class="col-lg-3 col-md-6 col-sm-12 border bg-danger"
style="color: white;">four</div>

    </div>

  </div>

                                                            <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.
min.js"                                       integrity="sha384-
YvpcrYf0tY3lHB60NNkmXc5s9fDVZLESaAA55NDzOxhy9GkcIdslK1e
N7N6jIeHz" crossorigin="anonymous"></script>

</body>

</html>
```

**Output :**

# WEEK – 7  Install Tomcat Using the Windows Service Installer

Follow the steps below to install Tomcat using the Windows Service Installer.

1. Open the downloaded Windows Service Installer file to start the installation process.

2. In the Tomcat Setup welcome screen, click Next to proceed.
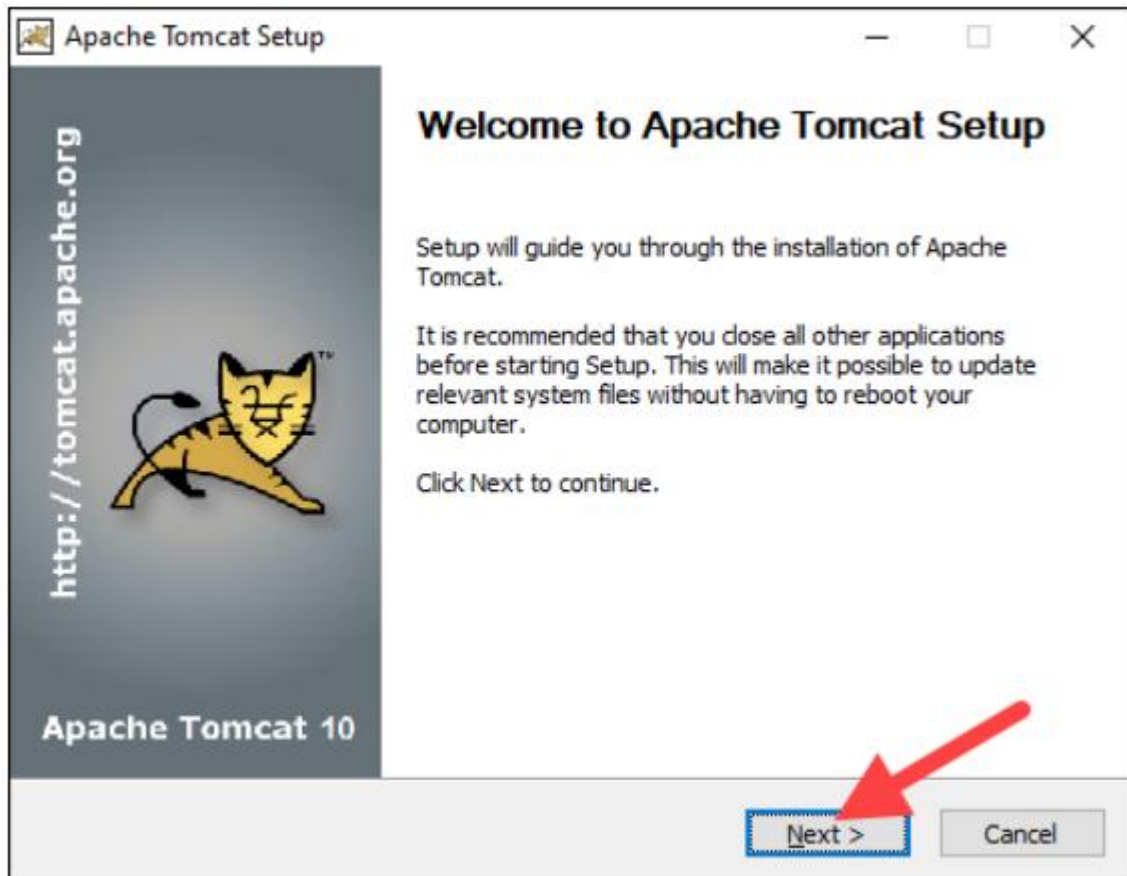


1. Read the License Agreement and if you agree to the terms, click I Agree to proceed to the next step.
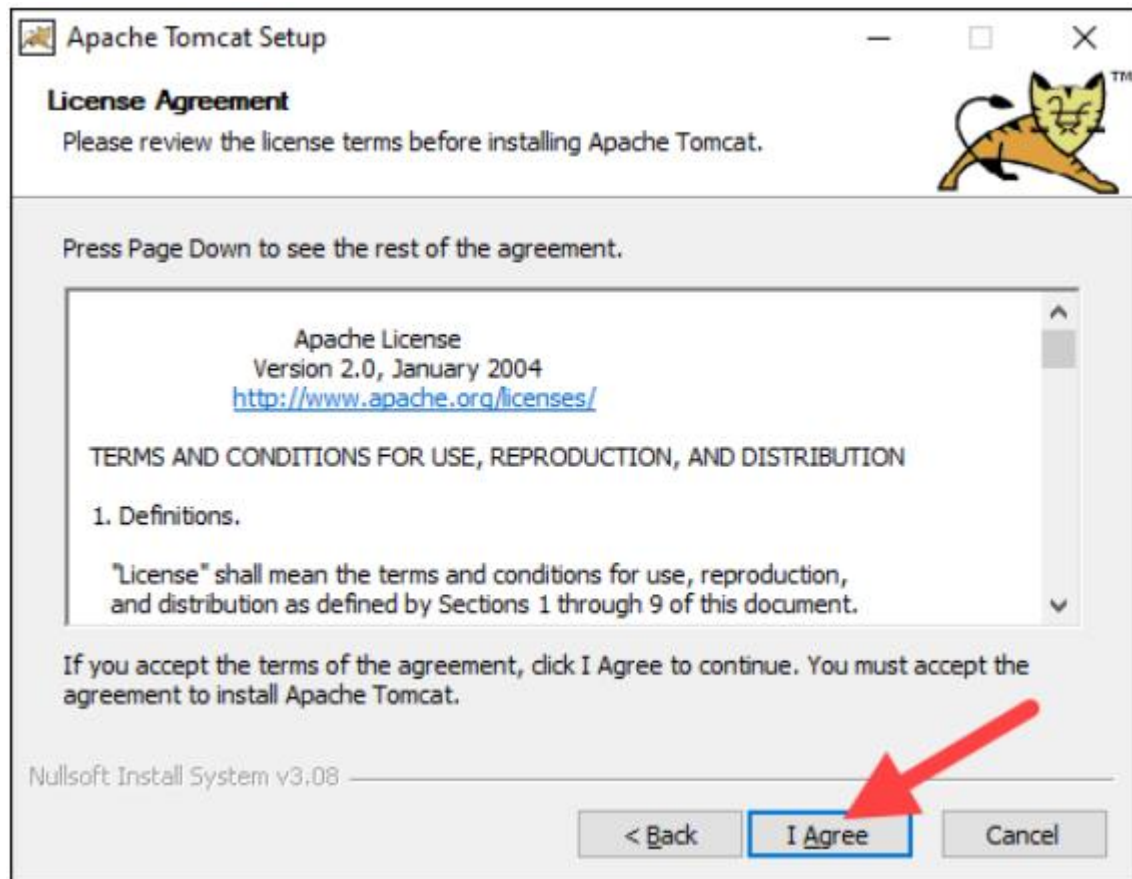
2. In the Tomcat component selection screen, choose Full in the dropdown menu to ensure the wizard installs the Tomcat Host Manager and Servlet and JSP examples web applications. Alternatively, keep the default Normal installation type and click Next.
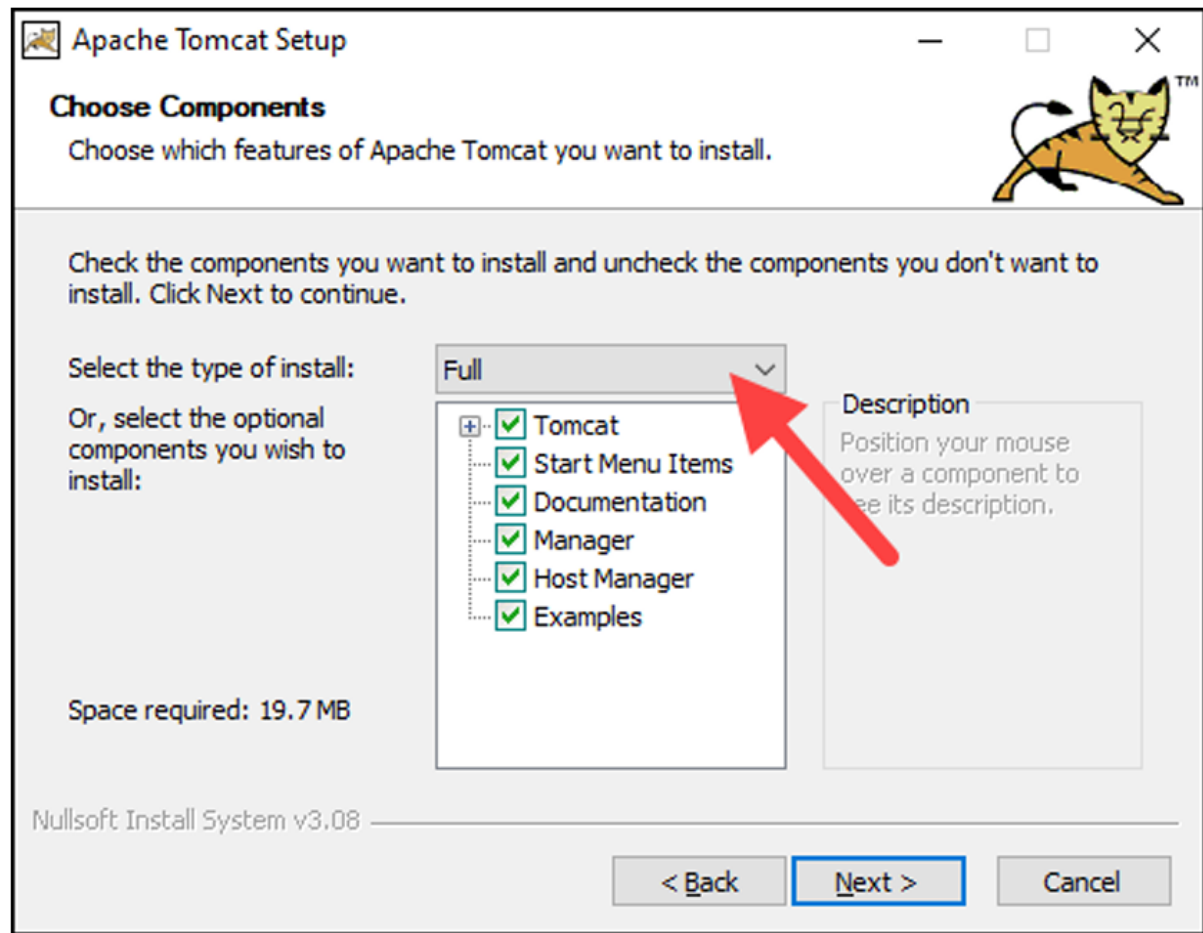
3. The next step configures the Tomcat server. For instance, enter the administrator login credentials or choose a different connection port. When finished, click Next to proceed to the next step.

4. The next step requires you to enter the full path to the JRE directory on your system. The wizard auto-completes this if you have previously set up the Java environment variables . Click Next to proceed to the next step.
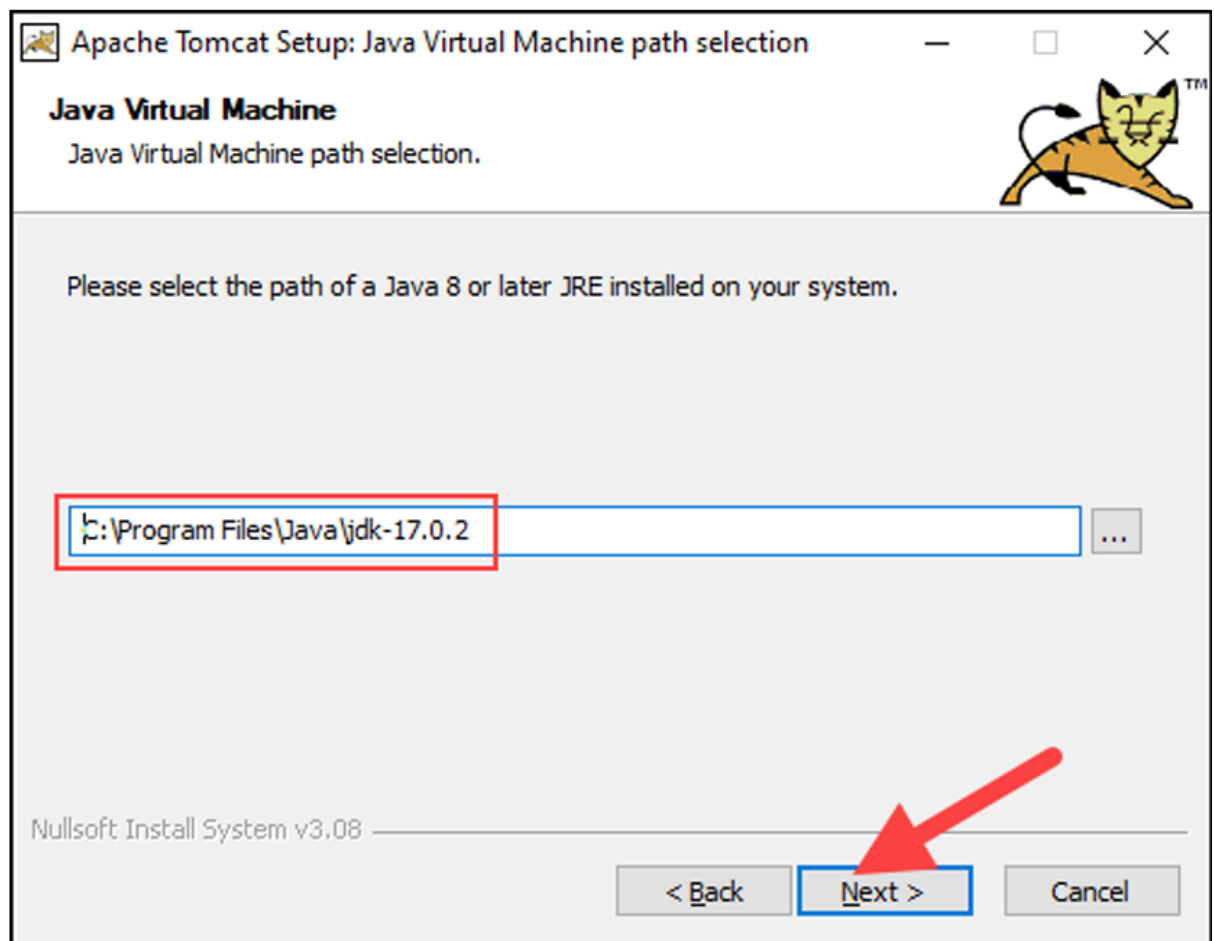
5. Choose the Tomcat server install location or keep the default one and click Install.
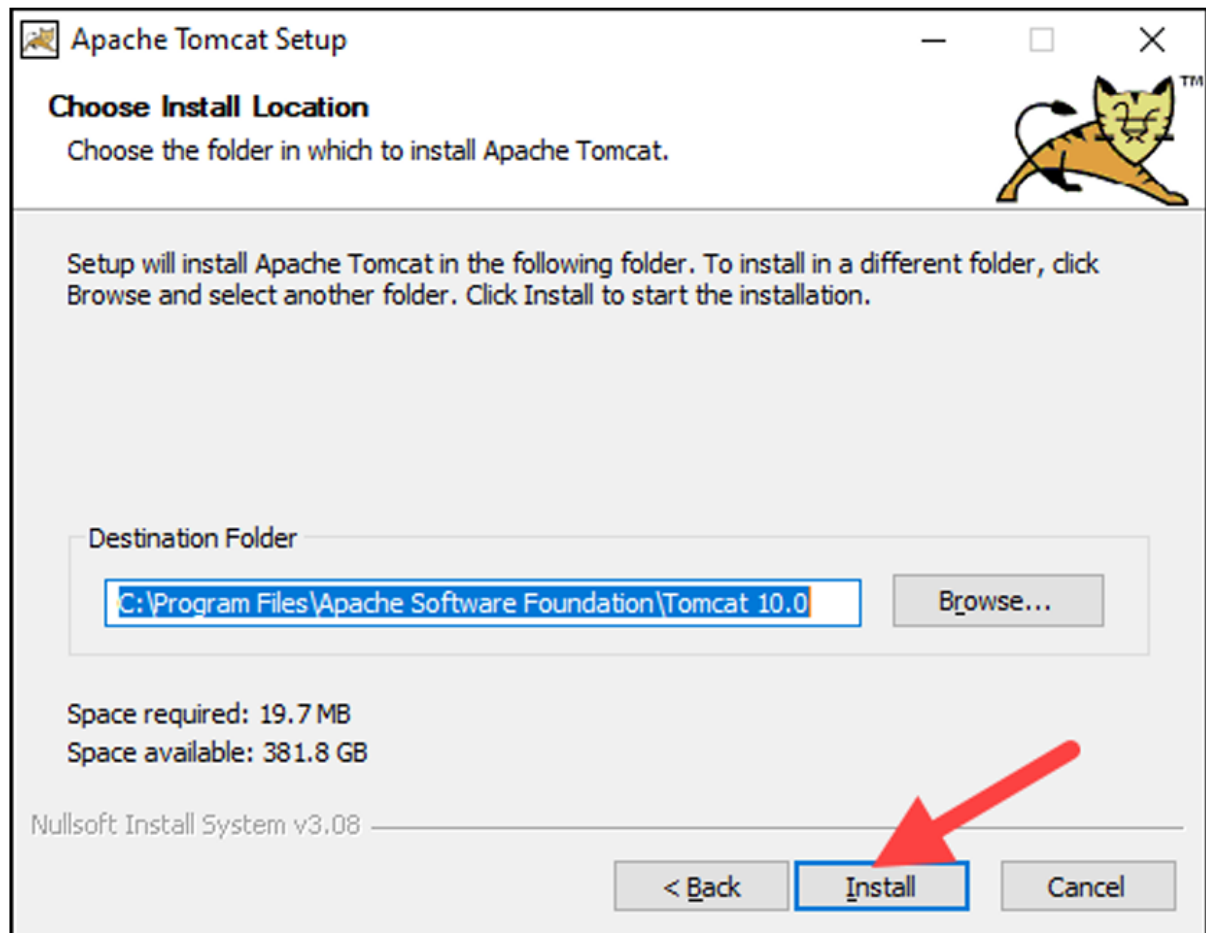
6. Check the Run Apache Tomcat box to start the service after the installation finishes. Optionally, check the Show Readme box to see the Readme file. To complete the installation, click Finish.
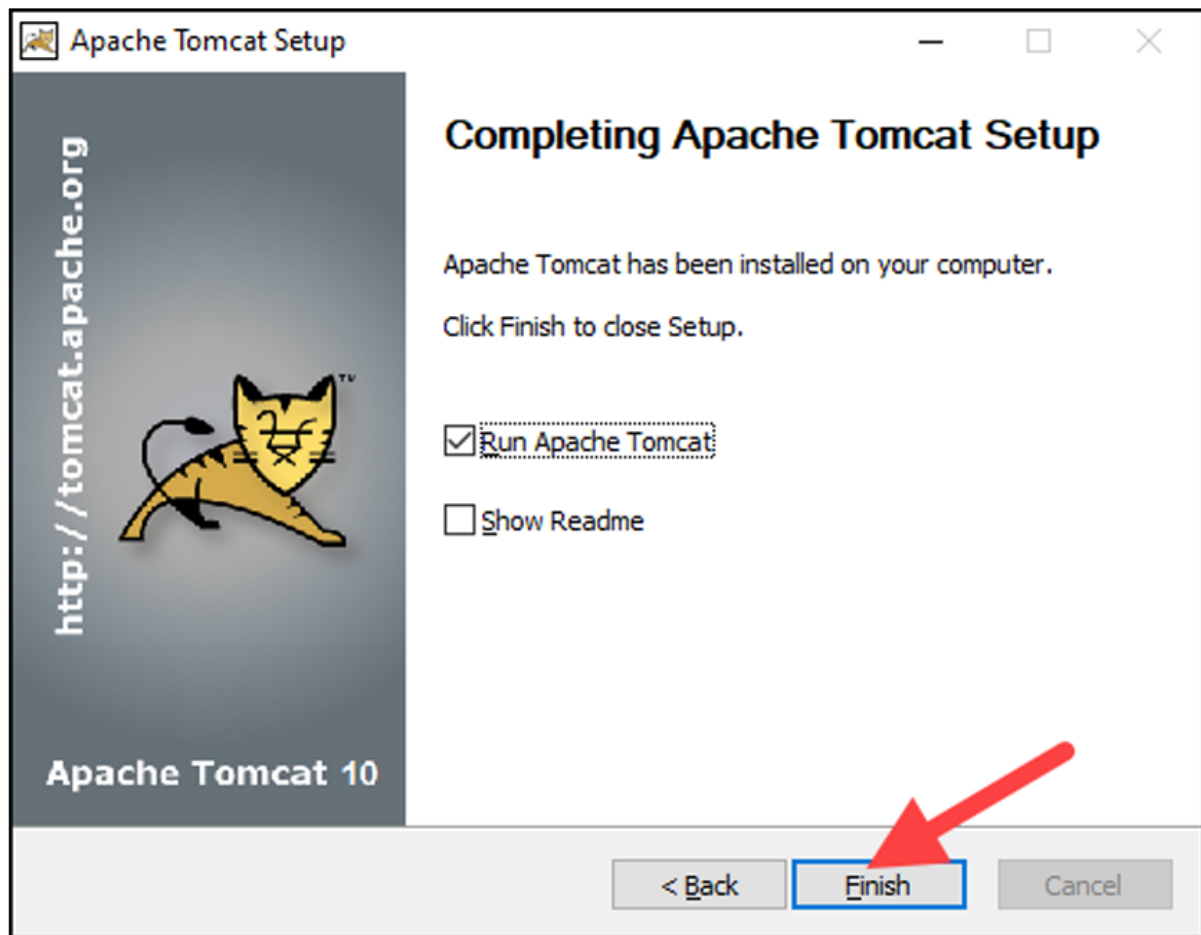
7. A popup window appears that starts the Tomcat service. After the process completes, the window closes automatically. The Apache Tomcat web server is now successfully installed .
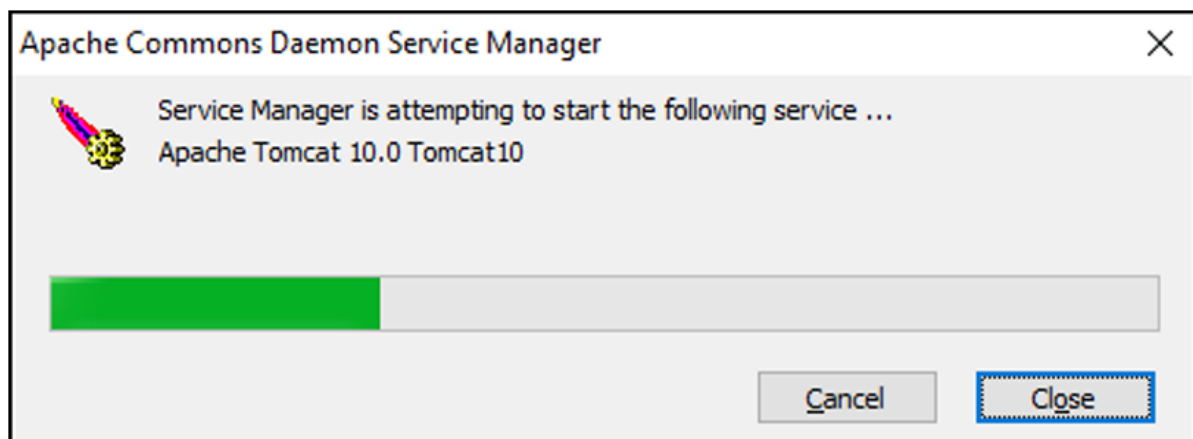
# WEEK – 8

**Question: Write a java program that generates a step-by-step guide for creating a servlet using the Tomcat server**

**step-by-step guide for creating a servlet using the Tomcat server**

1. Create a directory structure
2. Create a Servlet
3. Compile the Servlet
4. Create a deployment descriptor
5. Start the server and deploy the project
6. Access the servlet

**Index.html**

```html
<html>
<body>
<form action="welcome" method="get">
Enter your name<input type="text" name="name"><br>
<input type="submit" value="login">
</html>
</body>
```

**Web.xml**

```xml
<web-app>

<servlet>
<servlet-name>sonoojaiswal</servlet-name>
<servlet-class>DemoServ</servlet-class>
</servlet>

<servlet-mapping>
<servlet-name>sonoojaiswal</servlet-name>
<url-pattern>/welcome</url-pattern>
</servlet-mapping>

</web-app>
```

**DemoServ.java**

```
import javax.servlet.http.*;
import javax.servlet.*;
import java.io.*;
public class DemoServ extends HttpServlet{
public void doGet(HttpServletRequest req,HttpServletResponse res)throws ServletException,IOException
{
res.setContentType("text/html");
PrintWriter pw=res.getWriter();
String name=req.getParameter("name");
pw.println("Welcome "+name);
}}
```

**Output**

Welcome Rama Rao
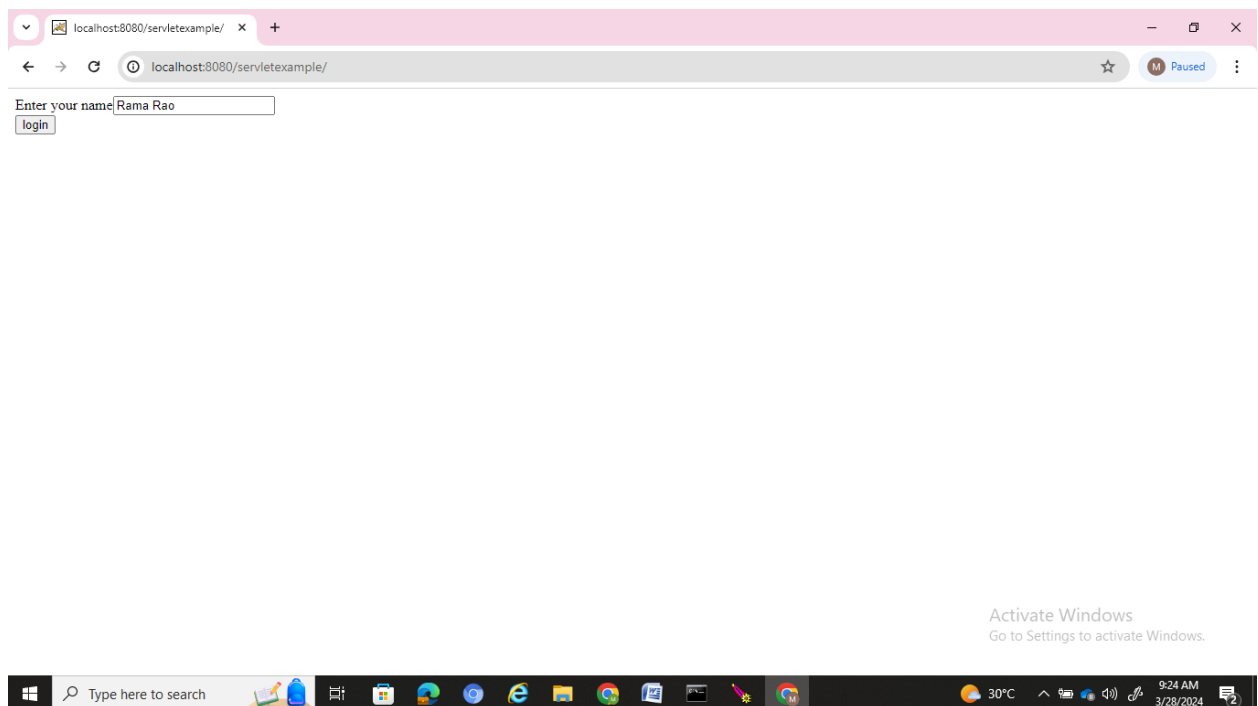
**Week 9**

**Write a servlet cookie to store the name of the user in the cookie object and accessing it in another servlet**

**step-by-step guide for creating a servlet cookie using the Tomcat server**

1. Create a directory structure
2. Create a Servlet
3. Compile the Servlet
4. Create a deployment descriptor
5. Start the server and deploy the project
6. Access the servlet

**Index.html**

```
<form action="servlet1">
Name:<input type="text" name="userName"/><br/>
<input type="submit" value="go"/>
</form>
```
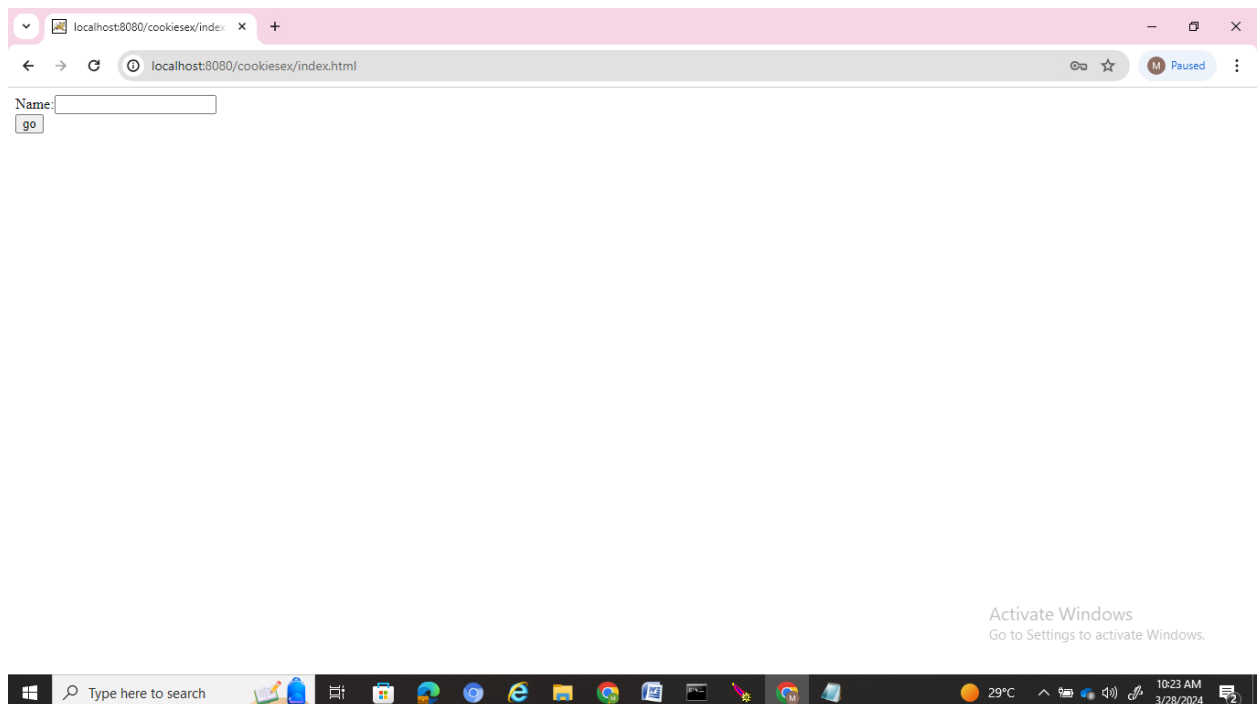
**Web.xml**

```
<web-app>
<servlet>
<servlet-name>s1</servlet-name>
<servlet-class>FirstServlet</servlet-class>
</servlet>

<servlet-mapping>
<servlet-name>s1</servlet-name>
<url-pattern>/servlet1</url-pattern>
</servlet-mapping>

<servlet>
<servlet-name>s2</servlet-name>
<servlet-class>SecondServlet</servlet-class>
</servlet>

<servlet-mapping>
<servlet-name>s2</servlet-name>
<url-pattern>/servlet2</url-pattern>
</servlet-mapping>

</web-app>
```

**FirstServlet.java**

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


public class FirstServlet extends HttpServlet {

 public      void      service(HttpServletRequest      request,
HttpServletResponse response){
  try{

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

  String n=request.getParameter("userName");
  out.print("Welcome "+n);

  Cookie ck=new Cookie("uname",n);//creating cookie object
  response.addCookie(ck);//adding cookie in the response

  //creating submit button
  out.print("<form action='servlet2'>");
  out.print("<input type='submit' value='go'>");
  out.print("</form>");

  out.close();

    }catch(Exception e){System.out.println(e);}
 }
}
```
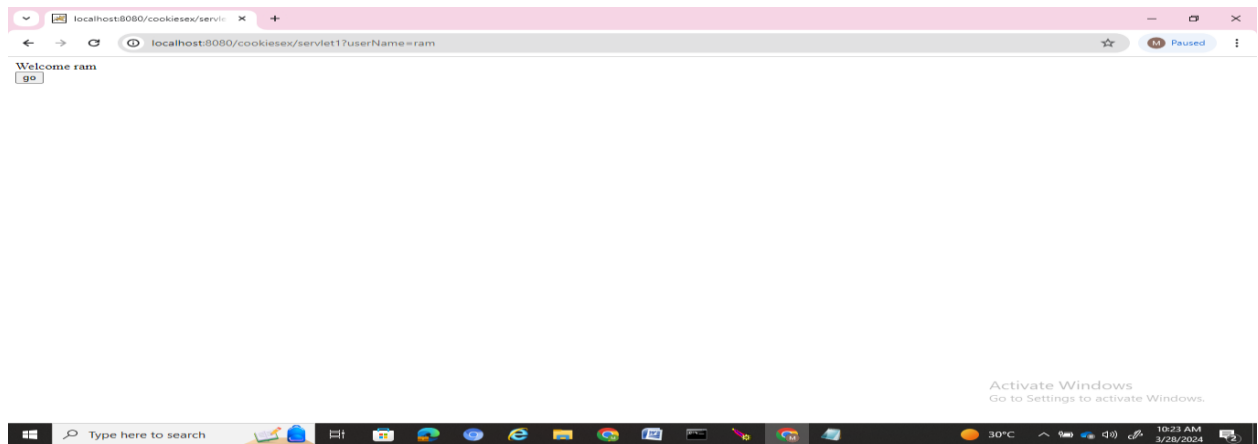
## SecondServlet.java

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

public class SecondServlet extends HttpServlet {

public void service(HttpServletRequest request,
HttpServletResponse response){
   try{

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

   Cookie ck[]=request.getCookies();
   out.print("Hello "+ck[0].getValue());

   out.close();

      }catch(Exception e){System.out.println(e);}
   }


}
```

Hello ram

**Week-10:**

Install a database (Mysql or Oracle). Create a table which should contain at least the following fields: name, password, email-id, phone number (these should hold the data from the registration form). Practice 'JDBC' connectivity. Write a java program/servelet/JSP to connect to that database and extract data from the tables and display them. Experiment with various SQL queries. Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page

**Registration.html:**

```html
<html>
<head>
<title>Registration page</title>
</head>
<body bgcolor="#00FFFf">
<form METHOD="POST" ACTION="register">
<CENTER>
<table>
<center>
<tr> <td> Username </td>
<td><input type="text" name="usr"> </td> </tr>
<tr><td> Password </td>
<td><input type="password" name="pwd"> </td> </tr>
<tr><td>Age</td>
<td><input type="text" name="age"> </td> </tr>
<tr> <td>Address</td>
<td> <input type="text" name="add"> </td> </tr>
<tr> <td>email</td>
<td> <input type="text" name="mail"> </td> </tr>
<tr> <td>Phone</td>
<td> <input type="text" name="phone"> </td> </tr>
```

```html
<tr> <td colspan=2 align=center> <input type="submit" value="submit"> </td> </tr>
</center>
</table>
</form>
</body>
</html>
```

**Login.html**

```html
<html>
<head>
<title>Registration page</title>
</head>
<body bgcolor=pink> <center> <table>
<form METHOD="POST" ACTION="authent">
<tr> <td> Username </td>
<td><input type="text" name="usr"></td> </tr>
<tr> <td> Password </td>
<td> <input type="password" name="pwd"> </td> </tr>
<tr> <td align=center colspan="2"><input type="submit" value="submit"></td> </tr>
</table> </center>
</form>
</body>
</html>
```

**Ini.java:**

```java
import
javax.servlet.*;
```

```java
import     java.sql.*;
import     java.io.*;
public   class   Ini
extends
GenericServlet

{
private String user1,pwd1,email1;

public  void  service(ServletRequest  req,ServletResponse  res)
throws ServletException,IOException
{
user1=req.getPara
meter("ser");
pwd1=req.getPara
meter("pwd");
email1=req.getPar
ameter("email");
res.setContentTyp
e("text/html");
PrintWriter
out=res.getWriter(
); try

  {
  Class.forName("oracle.jdbc.driver.OracleDriver");
  Connection
con=DriverManager.getConnection("jdbc:oracle:thin:@195.100.101
.158:1521:cclab","scott","tiger");                  PreparedStatement
```

```java
st=con.prepareStatement("insert into personal values(?,?,?,?,?,?)");
st.setString(1,user1);

st.setString(2,pwd1);

st.setString(3,"25");

st.setString(4,"hyd");

st.setString(5,email1);

st.setString(6,"21234"

); st.executeUpdate();

con.close();
  }
catch(SQLException s)
{  out.println("not found "+s);
}
catch(ClassNotFoundException c)
{
out.println("n

ot found "+c);

}
} }
```
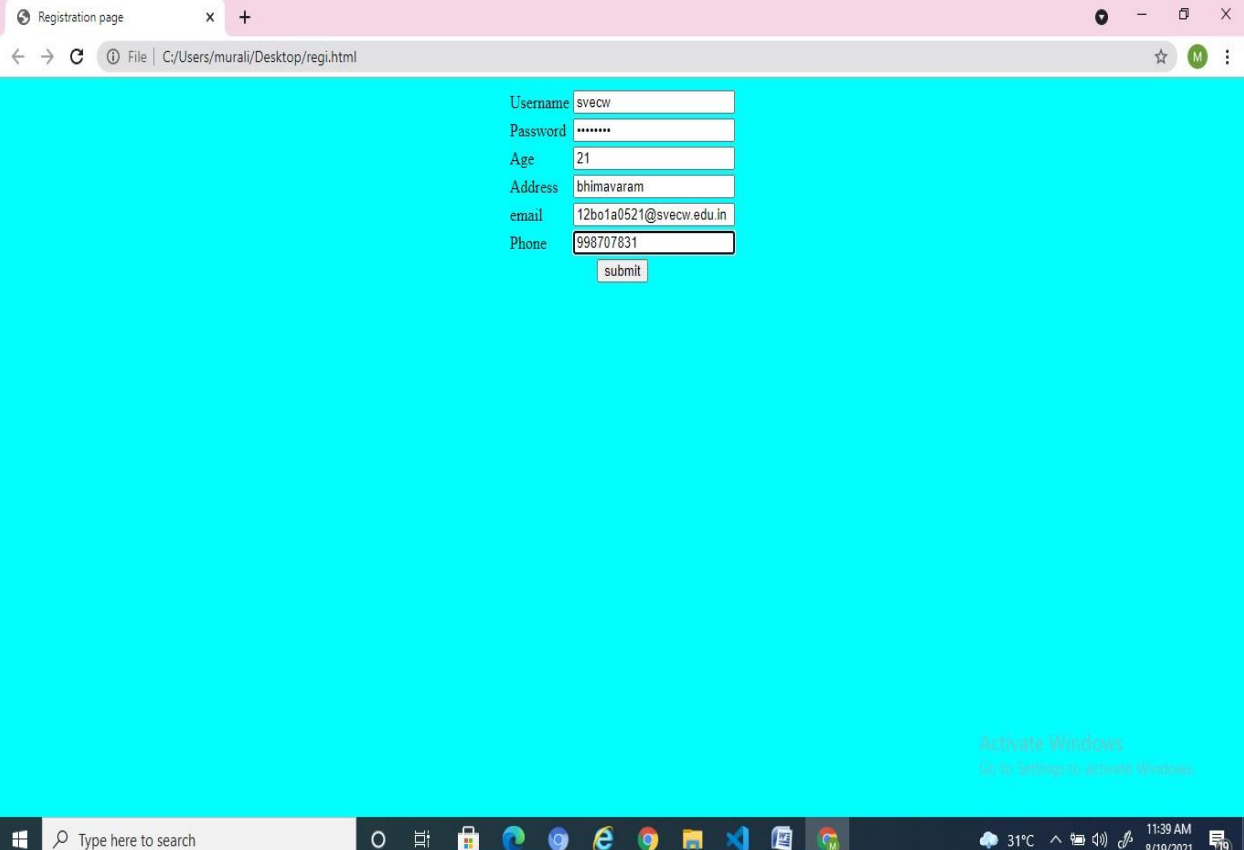
**web.xml:**
```xml
<web-app>
<servlet>
<servlet-name>init1</servlet-name>
<servlet-class>Ini</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>init1</servlet-name>
```

```
<url-pattern>/regis</url-pattern>
</servlet-mapping>
</web-app>
```

**OUTPUT:**