PROGRAM NO.: 1

AIM: Design Login Page using HTML tags: Login page must contain Login field, Password field, Submit and Reset buttons (also include email address)

THEORY:

- The <html> tag represents the root of an HTML document. It is the container for all other HTML elements (except for the <!DOCTYPE> tag).
- The <head> element is a container for metadata (data about data) and is placed between the <html> tag and the <body> tag.
- The <body> element contains all the contents of an HTML document, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The <form> tag is used to create an HTML form for user input.
- The <input> tag specifies an input field where the user can enter data. he<input> element can be displayed in several ways, depending on the type attribute.

CODE:

```
<html>
    <head>
        <title> Login Page </title>
    </head>
    <body align=center>
        <h3><u><b> LOGIN FORM </b></u></h3>
            <form>
                <label> Username: </label>
            <input type="text" name="username">
                <br><br>
                <label> Email: </label>
                <input type="text" name="email">
                <br><br>
```
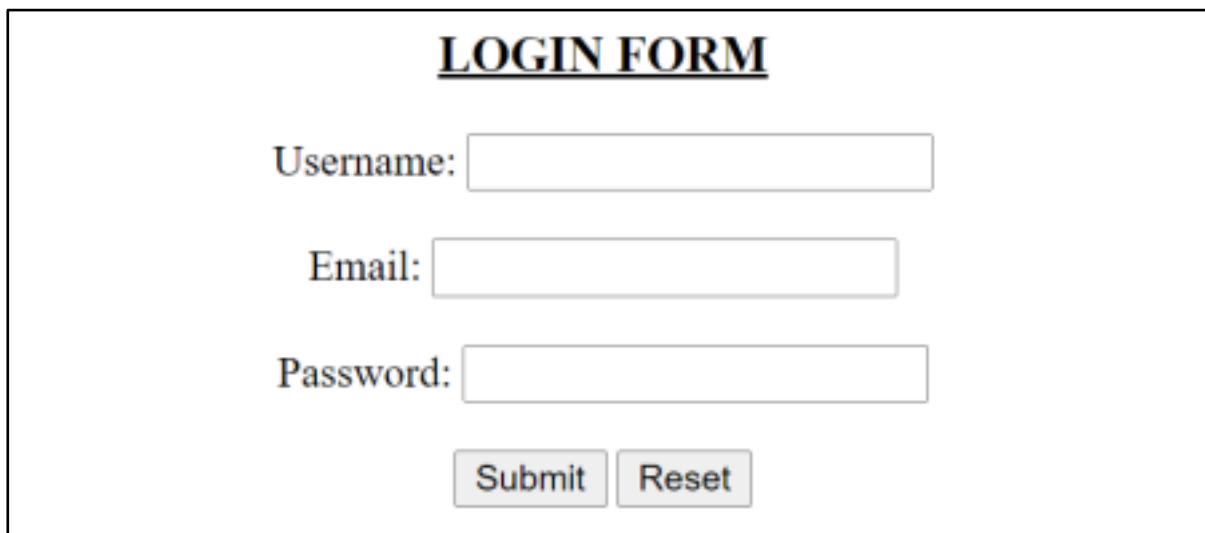
```
<label> Password: </label>
<input type="password" name="pswd">
<br><br>
<input type="submit">
<input type="reset">
</form>
```

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

OUTPUT:

LOGIN FORM

Username:

Email:

Password:

Submit   Reset

RESULT: A Login Page using HTML tags containing a Login field, Password field, Submit and Reset buttons was designed and implemented successfully.

PROGRAM NO.: 2

AIM: Design the following static web pages required for an online book store web site. HOME PAGE: The static home page must contain three frames.

    1) Top frame: Logo and the college name and links to home page, Login page, Registration page, Catalogue page and Cart page (the description of these pages will be given below). 2) Left frame: At least three 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.

    3) Right frame: The pages to the links in the left frame must be loaded here. Initially this page contains description of the web site.

THEORY:

- The <html> tag represents the root of an HTML document. It is the container for all other HTML elements (except for the <!DOCTYPE> tag).

- The <head> element is a container for metadata (data about data) and is placed between the <html> tag and the <body> tag.

- The <body> element contains all the contents of an HTML document, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.

- The <frameset> tag in HTML is used to define the frameset. The <frameset>element contains one or more frame elements.

- The <frame> tag is used to define one particular window (frame) within a <frameset>.

CODE:

(Main Frame Page)

```
<!DOCTYPE html>
<html>
    <head>
        <title>Home page</title>
    </head>
```

```
        <frameset rows="20, 80">
                <frame src="p2_header.html" name="head_page">
                <frameset cols="15, 85">
                        <frame src="p2_left.html" name="dept_page">
                        <frame src="p2_landing.html" name="des_page">
                </frameset>
```

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```
        </frameset>
</html>
```

(Top Frame Page → p2_header.html)

```
<!DOCTYPE html>
<html>
<head>
<title>Head Page</title>
<style>
body { background-color:#E2FBFF; }
td { text-align: center; }
</style>
</head>
<body>
<font face="Arial Black" size="3">
<table border="1" cellspacing="0" cellpadding="0"
width="100%"><tr>
<td>
<imgsrc="nhcelogo.jpg" width="100" height="80"/>
</td>
<td colspan="4">
<h2>NEW HORIZON COLLEGE OF ENGINEERING</h2>
<h3> Bengaluru </h3>
</td>
</tr>
<tr>
<td>
```

```html
<a href="p2_landing.html" target="des_page">HOME</a>
</td>
<td>
<a href="../P1/p1_loginpage_with_css.html"
target="des_page">LOGIN</a></td>
<td>
<a href="../P1/p1_userform_practice_2.html"
target="des_page">REGISTRATION</a></td>
<td>
```

```html
<a href="../P3/p3_catalogue.html"
target="des_page">CATALOGUE</a></td>
<td>
<a href="cart.html" target="des_page">CART</a>
</td>
</tr>
</table>
</font>
</body>
</html>
```

(Left Frame Page → p2_left.html)
```html
<!DOCTYPE html>
<html>
<head>
    <style>
        body { background-color:#D6EAF8; }
        h1 { padding-bottom: 130px; }
    </style>
</head>
<body>
<center>
    <h1><a href="cse_cat.html"
target="des_page">CSE</a></h1><h1><a
```

```
href="ise_cat.html"
target="des_page">ISE</a></h1><h1><a
href="aiml_cat.html"
target="des_page">AIML</a></h1></center>
</body>
</html>
```

(Right Frame Page → p2_landing.html)

```
<!DOCTYPE html>
<html>
    <head>
        <style>
            body { background-color:#EBF5FB; }
            h1 { font-size:40px; }
```

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```
            p { font-size:30px; }
        </style>
    </head>
    <body>
    <center>
        <h1> Welcome to New Horizon College of Engineering! </h1>
        <p>
        New Horizon College of Engineering is an Autonomous college
        affiliated to   Visvesvaraya  Technological  University  (VTU),
        approved  by  the  All  India  Council   for  Technical  Education
        (AICTE) & University Grants Commission (UGC). It is  accredited
        by NAAC with 'A' grade & National Board of Accreditation (NBA).
        New Horizon college of Engineering is located in the heart of the
        IT capital of India,  Bangalore. The college campus is situated in
        the IT corridor of Bangalore  surrounded by MNCs and IT giants.
        </p>
        <br>
        <p>
        NHCE  has  a  scenic  and  serene  campus  that  provides  an
```

environment which is conducive for personal and intellectual growth. The infrastructure acts as a facilitator for the effective delivery of the curriculum. NHCE boasts of state-of-the art facilities for its students. They are given utmost encouragement in their areas of interest by providing hi-tech facilities backed by faculty support.

```
            </p>
        </center>
    </body>
</html>
```

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OUTPUT:

On Loading the page:

Login page:

HOME	LOGIN	REGISTRATION	CATALOGUE	CART

CSE

ISE

AIML

LOGIN FORM

Username:

Email:

Password:

Submit Reset

Registration page:

HOME	LOGIN	REGISTRATION	CATALOGUE	CART

CSE

ISE

AIML

USER ENTRY FORM

Enter your name:

Enter your age:

Enter your password:

Enter your address:

Enter your pincode:

Enter your email ID:

Gender: ○ Male ○ Female

Languages known: ○ C ○ C++ ○ Java ○ Python

Submit Reset

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Catalogue:

HOME	LOGIN	REGISTRATION	CATALOGUE	CART

CSE

ISE

AIML

Cover Page	Book name	Author	Publisher	Price	Add to cart
ALGORITHMS	Introduction to Algorithms	Thomas H. Cormen	MIT Press	1350	
Compilers	Compilers: Principles, Techniques, and Tools	Alfred Aho	Pearson	900	
World Wide Web					

Cart:

Under Construction!

CSE Catalogue:

	Cover Page	Book name	Author	Publisher	Price	Add to cart
CSE	Compilers	Compilers: Principles, Techniques, and Tools	Alfred Aho	Pearson	900	
ISE	Algorithms	Introduction to Algorithms	Thomas H. Cormen	MIT Press	1350	
AIML	World Wide Web					

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ISE Catalogue:

	Cover Page	Book name	Author	Publisher	Price	Add to cart
CSE	World Wide Web	Programming the World Wide Web	Thomas H. Cormen	Pearson	1050	
ISE	Algorithms	Introduction to Algorithms	Thomas H. Cormen	MIT Press	1350	
AIML	Compilers					

AIML Catalogue:

	Cover Page	Book name	Author	Publisher	Price	Add to cart
CSE		Introduction to Algorithms	Thomas H. Cormen	MIT Press	1350	
ISE		Programming the World Wide Web	Thomas H. Cormen	Pearson	1050	
AIML	Compilers					

RESULT: Static web pages required for an online book store web site were designed and implemented successfully.

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PROGRAM NO.: 3

AIM: Design CATALOGUE PAGE: The catalogue page should contain the details of all the books available in the web site in a table. The details should contain the following: 1. Snap shot of Cover Page.

   2. Book name
   3. Author Name.
   4. Publisher.
   5. Price.
   6. Add to cart button.

THEORY:

   • The <html> tag represents the root of an HTML document. It is the

container for all other HTML elements (except for the <!DOCTYPE> tag).

- The <head> element is a container for metadata (data about data) and is placed between the <html> tag and the <body> tag.
- The <body> element contains all the contents of an HTML document, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The <table> tag defines an HTML table. An HTML table may also include <caption>, <colgroup>, <thead>, <tfoot>, and <tbody> elements.
- The <th> tag defines a header cell in an HTML table. The <td> tag defines a standard data cell in an HTML table.

CODE:

```
<!DOCTYPE html>
<html>
<head>
    <style> td { text-align:center; } </style>
</head>
<body>
<center>
    <table border=1 style="width:1250px">
        <tr>
            <th>Cover Page</th>
            <th>Book name</th>
            <th>Author</th>
```

```
            <th>Publisher</th>
            <th>Price</th>
            <th>Add to cart</th>
        </tr>
        <tr>
    <td><imgsrc="B1.jpg" height="200" width="150"></td>
            <td>Introduction to Algorithms</td>
```

```html
            <td>Thomas H. Cormen</td>
            <td>MIT Press</td>
            <td>1350</td>
        <td><imgsrc="cart.png" height="200" width="220"></td>
          </tr>
          <tr>
       <td><imgsrc="B2.jpg" height="200" width="150"></td>
     <td>Compilers: Principles, Techniques, and Tools</td>
            <td>Alfred Aho</td>
            <td>Pearson</td>
            <td>900</td>
        <td><imgsrc="cart.png" height="200" width="220"></td>
          </tr>
          <tr>
       <td><imgsrc="B3.jpg" height="200" width="150"></td>
            <td>Programming the World Wide Web</td>
            <td>Thomas H. Cormen</td>
            <td>Pearson </td>
            <td>1050</td>
        <td><imgsrc="cart.png" height="200" width="220"></td>
          </tr>
      </table>
 </center>
</body>
</html>
```

Course Code: 20CSL66

OUTPUT:

RESULT: A static HTML webpage for a Book Catalogue was designed and implemented successfully.

PROGRAM NO.: 4

AIM: Design a web page using CSS (Cascading Style Sheets) which includes the following: A. 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. B. Set a background image for both the page and single elements on the page. C. Control the repetition of the image with the background-repeat property

THEORY:

- CSS is the language we use to style an HTML document. CSS describes how HTML elements should be displayed.

- The *.class* selector selects elements with a specific class attribute. To select elements with a specific class, write a period (.) character, followed by the name of the class. • The background-image property sets one or more background images for an element. • The background-repeat property sets if/how a background image will be repeated. • By default, a background-image is repeated both vertically and horizontally.

CODE:
(Part A)

```
<!DOCTYPE html>
<html>
<head>
    <style>

        /*Simple Selector*/
        h1 {
            color: red;
        }

        /*Class Selector*/
        h2.myclass_1 {
            color: orange;
        }
```

```css
/*Generic Selector*/

.myclass_2 {
        color: blue;
}

/*ID Selector*/
#my_h4 {
        color: green;
}

/*Pseudo-Class Selector*/
h1:hover {
        background-color: red;
        color:white;
}

/*Universal Selector*/
* {
        //font-size: 25px;
}

    </style>
</head>
<body>
    <h1> Rahul M Dinesh / 1NH18CS738 </h1>

    <h2 class="myclass_1"> Rahul M Dinesh /

1NH18CS738 </h2><h3 class="myclass_2">

Rahul M Dinesh / 1NH18CS738 </h3><h4

id="my_h4"> Rahul M Dinesh / 1NH18CS738
```

```
</h4><h5> Rahul M Dinesh / 1NH18CS738 </h5>


</body>
</html>
```

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(Part B)
```
<!DOCTYPE html>
<html>
     <head>
          <style>
               body {
               background-image:url("CSE Dept Logo.png")
                    }
          </style>
     </head>
     <body>
          <h1> Welcome to Departmemt of CSE, NHCE!</h1>
     </body>
</html>
```

(Part C)
```
<!DOCTYPE html>
<html>
     <head>
          <style>
               body {
               background-image:url("CSE Dept Logo.png");
                    background-repeat:no-repeat;
                    }
          </style>
     </head>
     <body>
          <h1> Welcome to Departmemt of CSE, NHCE! </h1>
```

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

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OUTPUT:

Part A (when universal selector line is commented)
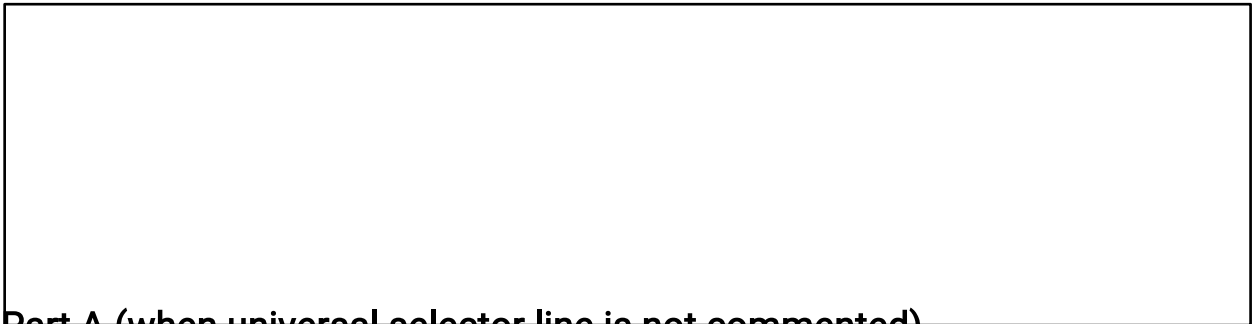
Part A (when universal selector line is not commented)
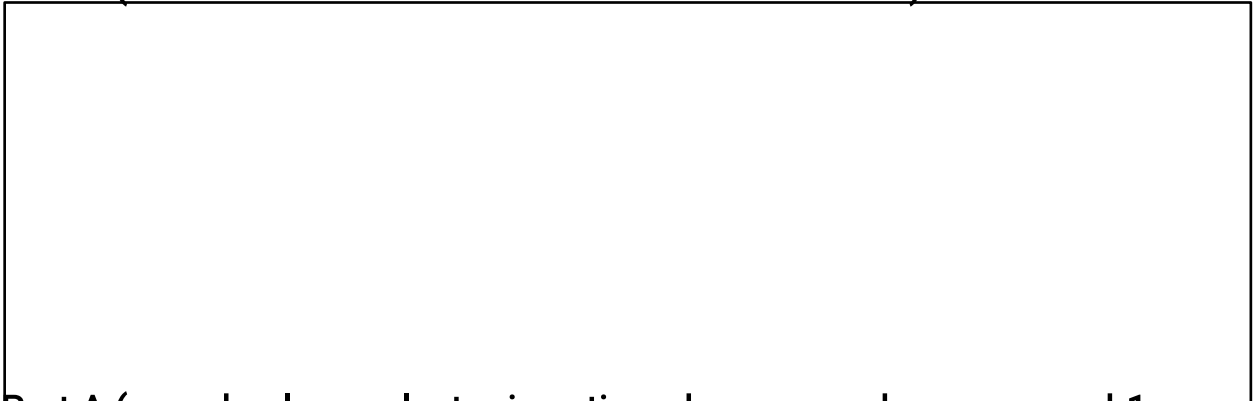
Part A (pseudo-class selector is active when mouse hovers over <h1> element)

Part B:

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Part C:

RESULT: HTML webpages using CSS selectors and background image were designed and implemented successfully.

PROGRAM NO.: 5

AIM: Write an HTML page that contains a selection box with a list of 5 countries. In the above page, when the user selects a country, its capital should be printed next to the list. Also add CSS to customize the properties of the font of the capital.

THEORY:

· A JavaScript function is a block of code designed to perform a
particular task. A JavaScript function is executed when it is called.

· A JavaScript function is defined with the function keyword, followed by
a name, followed by parentheses ().

· Function names can contain letters, digits, underscores, and dollar
signs (same rules as variables).

· The code to be executed, by the function, is placed inside curly brackets:

{} · The getElementById() method returns the element that has the ID
attribute with the specified value.

CODE:

```
<html>
<head>
    <title> Country & Capital </title>
    <script type = "text/javascript">
        functionOnDropDownChange(dropDown)
        {
// dropDown.options to select the drop down list value based on index
   // and store it in some variable for displaying in the browser
  varselectedValue = dropDown.options[dropDown.selectedIndex].value;

  //method to find html element with id "SelectedCapitaltxt" and change
          // the element content (innerHTML) to selectedValue
      document.getElementById("SelectedCapitaltxt").innerHTML
              = selectedValue;
```

```
          }
        </script>
    </head>
    <body>
```

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```
        <form action= "">
<select name="Countries" onChange = "OnDropDownChange(this);">
                <option value=""> ..Select a country...</option>
                <option value="New Delhi"> India </option>
         <option value="Washington D.C."> United States </option>
            <option value="London"> United Kingdom </option>
                <option value="Jerusalem"> Israel </option>
                <option value="Moscow"> Russia </option>
            </select>
            <h1 style="color: blue; font-family: verdana; font-size: 20pt;"
                id="SelectedCapitaltxt" type="text"></h1>
        </form>
    </body>
</html>
```

OUTPUT:

RESULT: Designed and implemented an HTML webpage that changes dynamically to display the   selected country's capital with CSS styles successfully.

PROGRAM NO.: 6

AIM: Write an HTML page including java script that takes a given set of integer numbers and shows them after sorting in descending and ascending order.

THEORY:

 · The sort() method sorts the items of an array. The sort order can be
   either alphabetic or numeric, and either ascending (up) or descending
   (down).

 · By default, the sort() method sorts the values as strings in alphabetical

and ascending order. · Because of this, the sort() method will produce an

incorrect result when sorting numbers. · To handle numeric sorting, sort()

can take a *compareFunction* parameter that defines an alternate sorting

order.

CODE:

```
<!DOCTYPE html>
<html>
<head>
    <title>JS Sort Numbers</title>
</head>
<body>
    <h2>JavaScript Array Sort</h2>
    <p>Click the button to sort the array.</p>

    <button onclick="Descending()">Descending Order</button>
    <button onclick="Ascending()">Ascending Order</button>

    <p id="demo"></p>

    <script type = "text/javascript">
            var points = [90, 80, 60, 70, 20, 40, 50, 100, 10, 30];
```

```
document.getElementById("demo").innerHTML = points.join(", ");
function Descending()
{
    points.sort(function(a, b){return b - a});
document.getElementById("demo").innerHTML = points.join(", ");
}
```

```
function Ascending()
{
    points.sort(function(a, b){return a - b});
document.getElementById("demo").innerHTML = points.join(", ");
}
</script>
</body>
</html>
```

OUTPUT:
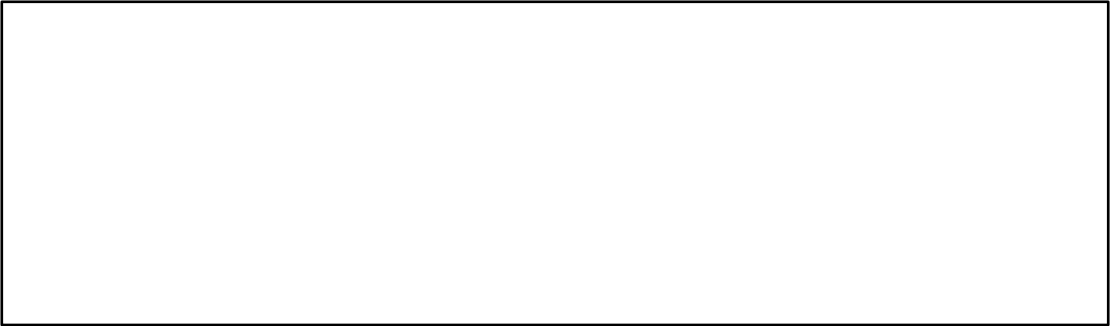
On Loading:

After clicking on Descending order button
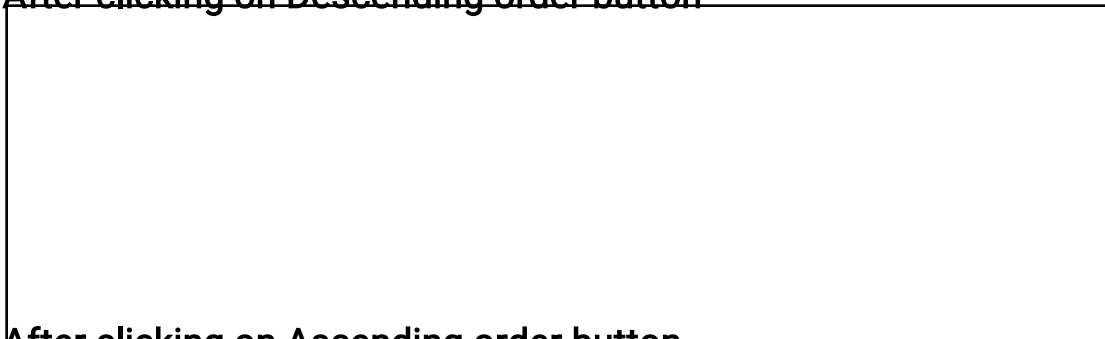
After clicking on Ascending order button

RESULT: An HTML page including java script that takes a given set of integer numbers and shows them after sorting in descending and ascending order was designed and implemented successfully.

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PROGRAM NO.: 7

AIM: Design an XML document to store information about Airline system which has the following information: airline number, name, destination, year of manufacturing, price. Create sample data for three airlines. Create CSS style sheet and display it.

THEORY:

• XML stands for eXtensibleMarkup Language.

• XML is a software- and hardware-independent tool for storing and transporting data. • XML was designed to be both human- and machine-readable.

• In XML, tags or elements are user-defined. The first element of XML document is called root element. A simple XML document contain opening tag and closing tag. • XML tags are case sensitive i.e., <root> and <Root> both tags are different. The XML tags are used to define the scope of elements in XML document.

• In order to display the XML file using CSS, link XML file with CSS.

CODE:
(XML file)

```
<?xml version="1.0" ?>
<?xml-stylesheet type="text/css" href="p7_xml_css.css" ?>
```

```
<airline>
        <ad><program>Airline Information System</program></ad>
        <info>
                <ad><heading> American Airlines </heading></ad>
                <ad> Flight number: <Anumber> AA001 </Anumber></ad>
                <ad> Name: <name> Rahul M Dinesh </name></ad>
                <ad> Destination: <dest> Seattle </dest></ad>
                <ad> Year Of Manufacturing: <yom> 2010 </yom></ad>
                <ad> Price: <price> 1,20,000 </price></ad>
        </info>
        <info>
                <ad><heading> Emirates </heading></ad>
                <ad> Flight number: <Anumber> EK101 </Anumber></ad>
                <ad> Name: <name>RohithArsha</name></ad>
                <ad> Destination: <dest> Dubai </dest></ad>
                <ad> Year Of Manufacturing: <yom> 2012 </yom></ad>
```

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```
                <ad> Price: <price> 90,000 </price></ad>
        </info>
        <info>
                <ad><heading> British Airways </heading></ad>
                <ad> Flight number: <Anumber> BA001
                </Anumber></ad><ad> Name:
                <name>Shivanand G
                Prabhu</name></ad><ad> Destination: <dest>
                London </dest></ad>
                <ad> Year Of Manufacturing: <yom> 2016
                </yom></ad><ad> Price: <price> 1,00,000
                </price></ad>
        </info>
</airline>

(CSS file)
ad {
```

```css
        display: block;
        font: bold 20px Times;
        color: brown;
        line-height: 30px;
}
program {
        text-decoration: underline;
        font-size:30px;
        color:red; }
heading {
        font: bold 25px Times;
        color: blue; }
airline {
        margin-top: 10px;
        margin-left: 10px;
        color: black; }
info {
        color: gray;
        padding: 100px; }
Anumber, name {
        color: red;
        font-size: 20px;
```

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```css
        font-weight: normal; }
dest {
        color: blue;
        font-size: 20px;
        font-weight: normal; }
yom, price {
        color: green;
        font-size: 20px;
        font-weight: normal; }
```

OUTPUT:

RESULT: An XML document to store information on an Airline System was designed and implemented successfully.

PROGRAM NO.: 8

AIM: Design an XML document to store information about patients in a hospital. Information about patients must include name (in 3 parts, first name, middle name, last name), age, room number, primary insurance company – including member identification number, group number, known medical problems, and known drug allergies. Both attributes and nested tags must be included. Create a CSS style sheet for the above XML document and use it to create a display of that document.

(XML file)

```
<?xml version="1.0"?>
<?xml-stylesheet type="text/css" href="style.css"?>

<hospital>
    <ad><heading> Hospital - Patient Data </heading></ad>

    <ad>----------------------------------------</ad>
    <patient>
        <ad><heading_small> Name </heading_small></ad>
        <name>
    <adl>First name: <fname>Aishwarya</fname></adl>
    <adl>Midle name: <mname>Satish</mname></adl>
            <adl>Last name: <lname> Kumar </lname></adl>
        </name>

        <ad>Age: <age> 23 </age></ad>
        <ad>Room number: <rnum> 201 </rnum></ad>

        <ad><heading_small> Primary Insurance </heading_small></ad>
        <insurancecompany type="primary">
            <adl>Insurance name: <insurancename> LIC
            </insurancename></adl><adl>Primary ID: <pnum>
            15647 </pnum></adl>
            <adl>Group ID: <gnum> 54 </gnum></adl>
        </insurancecompany>
```

```
<ad><heading_small> Secondary Insurance
</heading_small></ad><insurancecompany
type="secondary">
        <adl>Insurance name: <insurancename> HDFC
        </insurancename></adl><adl>Primary ID: <pnum> 564
        </pnum></adl>
        <adl>Group ID: <gnum> 9462 </gnum></adl>
</insurancecompany>

<ad>Existing medical problems: <medicalprobs> Asthma
</medicalprobs></ad><ad>Existing allergies: <knownallergies> Dust
</knownallergies></ad></patient>
<ad>----------------------------------------</ad>
<patient>
        <ad><heading_small> Name </heading_small></ad>
        <name>
<adl>First name: <fname> Johnathan </fname></adl>
        <adl>Midle name: <mname> H </mname></adl>
        <adl>Last name: <lname> Smith </lname></adl>
        </name>

        <ad>Age: <age> 64 </age></ad>
        <ad>Room number: <rnum> 501 </rnum></ad>

        <ad><heading_small> Primary Insurance </heading_small></ad>
        <insurancecompany type="primary">
            <adl>Insurance name:
          <insurancename>Dhanalaxmi</insurancename>

            </adl>
            <adl>Primary ID: <pnum> 746 </pnum></adl>
            <adl>Group ID: <gnum> 74 </gnum></adl>
        </insurancecompany>

        <ad><heading_small> Secondary Insurance
        </heading_small></ad><insurancecompany
```

```
            type="secondary">
                <adl>Insurance name:
           <insurancename> LIC Jeevan</insurancename>
                </adl>
                <adl>Primary ID: <pnum> 23 </pnum></adl>
                <adl>Group ID: <gnum> 647 </gnum></adl>
        </insurancecompany>

        <ad>Existing medical problems: <medicalprobs> Diabetes
    </medicalprobs></ad><ad>Existing allergies: <knownallergies>
    Azithromycin </knownallergies></ad></patient>
    <ad>----------------------------------------</ad>
    <patient>
        <ad><heading_small> Name </heading_small></ad>
        <name>
                <adl>First name: <fname> Shiv </fname></adl>
     <adl>Midle name: <mname> Shankar </mname></adl>
            <adl>Last name: <lname> Narayan </lname></adl>
        </name>

        <ad>Age: <age> 35 </age></ad>
        <ad>Room number: <rnum> 201 </rnum></ad>

        <ad><heading_small> Primary Insurance </heading_small></ad>
        <insurancecompany type="primary">
                <adl>Insurance name: <insurancename> SBI Life
                </insurancename></adl><adl>Primary ID: <pnum> 57465
                </pnum></adl>
                <adl>Group ID: <gnum> 5434 </gnum></adl>
        </insurancecompany>

    <ad><heading_small> Secondary Insurance </heading_small></ad>
        <insurancecompany type="secondary">
                <adl>Insurance name:
           <insurancename> Axis Health </insurancename>
                </adl>
```

<adl>Primary ID: <pnum> 732 </pnum></adl>

<adl>Group ID: <gnum> 124 </gnum></adl>

</insurancecompany>

<ad>Existing medical problems: <medicalprobs> High B.P. </medicalprobs></ad><ad>Existing allergies: <knownallergies>Paracetamol</knownallergies></ad></patient>

<ad>---</ad>

</hospital>

(CSS file)

ad { display:block; font: bold 20px Times; color: brown; line-height:30px; }

heading { font: bold 25px Times; color:blue; text-decoration: underline; }

adl { display:block; font: bold 20px Times; color: brown; line-height:30px; padding-left:35px; }

heading_small { font: bold 20px Times; color:purple; }

patient { color:gray; padding: 100px; }

fname, mname, lname { color:red; font-size:20px; font-weight: normal; }

age, rnum { color:fuchsia; font-size:20px; font-weight: normal; }

insurancename, pnum, gnum { color:blue; font-size:20px; font-weight: normal; } medicalprobs, knownallergies { color:green; font-size:20px; font-weight: normal; }
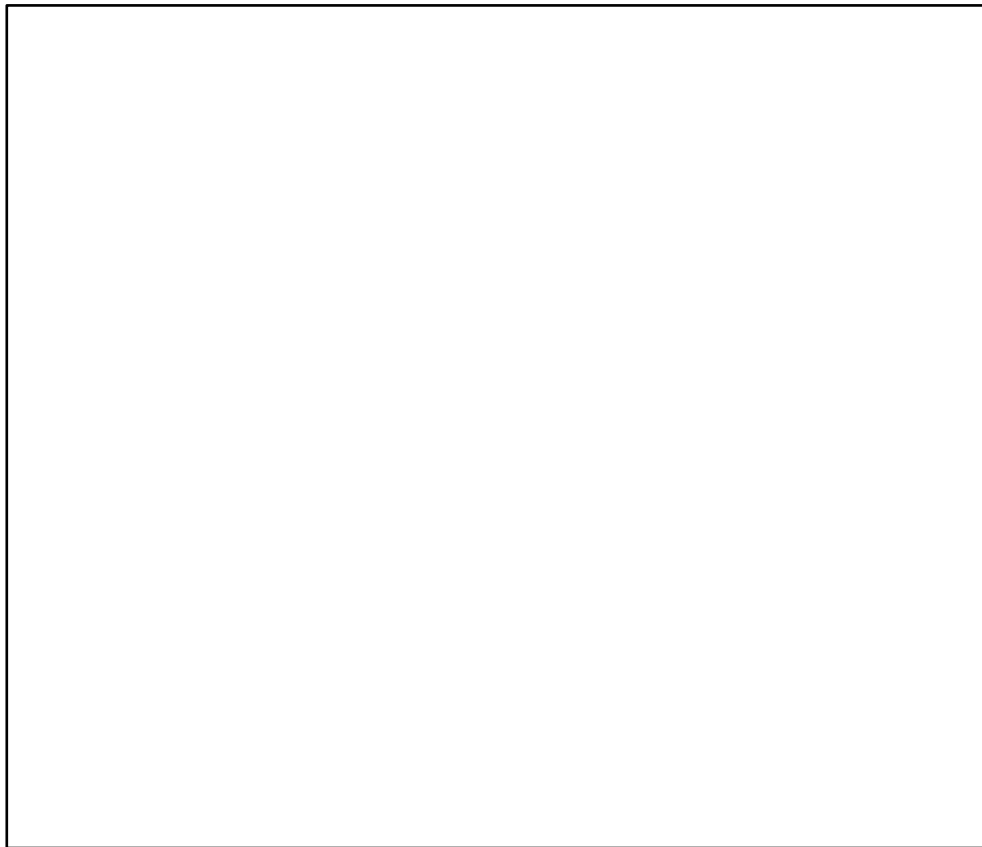
RESULT: An XML document to store information about patients in a hospital along with CSS styling was designed and implemented successfully.

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PROGRAM NO.: 9

AIM: Create the XSLT style sheet to format all the patient elements of the XML, document of program 8 and use it to create a display of whole element

(XML file)

```
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="style.xsl"?>
<hospital>
     <patient>
          <name>
               <fname>Aishwarya</fname>
               <mname>Satish</mname>
               <lname> Kumar </lname>
```

```xml
        </name>
        <age> 23 </age>
        <rnum> 201 </rnum>
        <insurancecompany type="primary">
                <insurancename> LIC </insurancename>
                <pnum> 15647 </pnum>
                <gnum> 54 </gnum>
        </insurancecompany>
        <insurancecompany type="secondary">
                <insurancename> HDFC </insurancename>
                <pnum> 564 </pnum>
                <gnum> 9462 </gnum>
        </insurancecompany>
        <medicalprobs> Asthma </medicalprobs>
        <knownallergies> Dust </knownallergies>
</patient>
<patient>
        <name>
                <fname> Johnathan </fname>
                <mname> H </mname>
                <lname> Smith </lname>
        </name>

        <age> 64 </age>
        <rnum> 501 </rnum>
        <insurancecompany type="primary">
                <insurancename>Dhanalaxmi</insurancename><pnum> 746 </pnum>
                <gnum> 74 </gnum>
        </insurancecompany>
        <insurancecompany type="secondary">
                <insurancename> LIC Jeevan</insurancename><pnum> 23 </pnum>
                <gnum> 647 </gnum>
        </insurancecompany>
        <medicalprobs> Diabetes </medicalprobs>
```

```xml
        <knownallergies> Azithromycin
    </knownallergies></patient>
    <patient>
        <name>
            <fname> Shiv </fname>
            <mname> Shankar </mname>
            <lname> Narayan </lname>
        </name>
        <age> 35 </age>
        <rnum> 201 </rnum>
        <insurancecompany type="primary">

            <insurancename> SBI Life </insurancename>
            <pnum> 57465 </pnum>
            <gnum> 5434 </gnum>
        </insurancecompany>
        <insurancecompany type="secondary">
            <insurancename> Axis Health </insurancename>
            <pnum> 732 </pnum>
            <gnum> 124 </gnum>
        </insurancecompany>


        <medicalprobs> High B.P. </medicalprobs>
        <knownallergies>Paracetamol</knownallergies>
    </patient>
</hospital>
```

(XSL file)
```xml
<?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>
<head>
<style>
```

```
td {
text-align: center;;
 }
</style>
</head>
<body>
<h2>Hospital patients</h2>
<table border="1">
<tr bgcolor="yellow">
  <th colspan="3">Name</th>
  <th rowspan="2">Age</th>
  <th rowspan="2">Room number</th>
  <th colspan="3">Primary Insurance</th>
  <th colspan="3">Secondary Insurance</th>
  <th rowspan="2">Existing Medical Problems</th>
  <th rowspan="2">Existing Allergies</th>
</tr>
<tr bgcolor="yellow">
  <th>First Name</th>
  <th>Middle Name</th>
  <th>Last Name</th>
  <th>Insurance Name</th>
  <th>Personal ID</th>

  <th>Group ID</th>
  <th>Insurance Name</th>
  <th>Personal ID</th>
  <th>Group ID</th>
</tr>
<xsl:for-each select="hospital/patient">
<tr>
        <td> <xsl:value-of select="name/fname"/> </td>
        <td> <xsl:value-of select="name/mname"/> </td>
        <td> <xsl:value-of select="name/lname"/> </td>
        <td> <xsl:value-of select="age"/> </td>
        <td> <xsl:value-of select="rnum"/> </td>
        <td>
```

```
            <xsl:value-of  select="insurancecompany[@type='primary']/insurancename"/>
        </td>
        <td>
        <xsl:value-of  select = "insurancecompany[@type='primary']/pnum"/>
        </td>
        <td>
        <xsl:value-of select="insurancecompany[@type='primary']/gnum"/>
        </td>
        <td>
        <xsl:value-of
    select="insurancecompany[@type='secondary']/insurancename"/>
        </td>
        <td>
        <xsl:value-of select="insurancecompany[@type='secondary']/pnum"/>
        </td>
        <td>
        <xsl:value-of select="insurancecompany[@type='secondary']/gnum"/>
        </td>
        <td> <xsl:value-of select="medicalprobs"/> </td>
        <td> <xsl:value-of select="knownallergies"/> </td>
        </tr>
</xsl:for-each>
</table> </body> </html>
</xsl:template>  </xsl:stylesheet>
```

PROGRAM NO.: 10

AIM: Write PHP program to find transpose of a matrix and addition of two matrix.

THEORY:
- PHP is a server scripting language, and a powerful tool for making
  dynamic and interactive Web pages.
- It is a programming language that allows web developers to create
  dynamic content that interacts with databases.
- PHP is basically used for developing web based software

applications. • In PHP, a variable starts with the $ sign, followed by the name of the variable. • PHP echo or print can be used to display HTML markup, javascript, text or variables.

CODE:

```php
<?php
    $a = array(array(1,2,3),array(4,5,6),array(7,8,9));
    $b = array(array(7,8,9),array(4,5,6),array(1,2,3));
    $m=count($a); 3
    $n=count($a[2]); 3
    $p=count($b);
    $q=count($b[2]);
    echo "The first matrix :"."<br/>";
    for ($row = 0; $row < 3; $row++)
    {
        for ($col = 0; $col < 3; $col++)
        echo " ".$a[$row][$col];
        echo "<br/>";
    }
    echo "The second matrix :"."<br/>";
    for ($row = 0; $row < $p; $row++)
    {
        for ($col = 0; $col < $q; $col++)
        echo " ".$b[$row][$col];
        echo "<br/>";
    }
    echo "The transpose for the first matrix is:"."<br/>";

    for ($row = 0; $row < $m; $row++)  row=0 1 2
    {
        for ($col = 0; $col < $n; $col++)  col=0,1,2
        echo " ".$a[$col][$row]; a[0][0]  a[1][0] a[2][0]
        echo "<br/>";
    }
    echo "The addition of matrices is:"."<br/>";
    for ($row = 0; $row < 3; $row++)
```

```
        {
                for ($col = 0; $col < 3; $col++)
                echo " ".$a[$row][$col]+$b[$row][$col]." "; a[0][1]+b[0][1]=1+7=8
                echo "<br/>";
        }
?>
```

PROGRAM NO.: 11

AIM: Develop PHP program to find page HITS (Number of times page visited) and to display the count

THEORY:
   • A session is a way to store information (in variables) to be used across multiple pages. • Unlike a cookie, the information is not stored on the user's computer.

- A session is started with the session_start() function.
- Session variables are set with the PHP global variable: $_SESSION.

CODE:

```
<?php
    session_start();
    if (!($_SESSION['views']))  count=0 to 1
            $_SESSION['views']=1;
    else
            $_SESSION['views']++;  1 to 2
    echo "<h1> No of views= $_SESSION[views] </h1> " ;
?>
```

PROGRAM NO.: 12

AIM: Create database using MySQL command to perform manipulation operations

THEORY:

- A Front-end HTML page is used to collect the details required for inserting into/querying the database.
- PHP $_POST is a PHP super global variable which is used to collect

form data after submitting an HTML form with method="post".
$_POST is also widely used to pass variables.

- The *die()* is an inbuilt function in PHP. It is used to print message and exit from the current php script.
- The mysqli_connect() function opens a new connection to the MySQL server. • The mysqli_select_db() function is used to change the default database for the connection. • The mysqli_query() function performs a query against a database.
- The mysqli_fetch_array() function fetches a result row as an associative array, a numeric array, or both.
- The mysqli_fetch_row() function fetches one row from a result-set and returns it as an enumerated array.

CODE:
(HTML Page - Front End)

```html
<!DOCTYPE html>
<html>
<body bgcolor="aabbcc">

     <h3 style="margin:0px;">Recording a Student's details</h3>
<form action = "insert.php" method = "post">
               <table border="0">
                 <tr>
                     <td>Enter Name:</td>
                <td><input type = "text" name = "sname"></td>
                 </tr>
                 <tr>
                 <td>Enter Address Line 1:</td>
                <td><input type = "text" name = "address1"></td>
```

```html
                 </tr>
                 <tr>
                 <td>Enter Address Line 2:</td>
```

```html
        <td><input type = "text" name = "address2"></td>
            </tr>
            <tr>
                <td>Enter Email-id: </td>
            <td><input type = "text" name = "email"></td>
                </tr>
                <tr>
                        <td></td>
                </tr>
                <tr>
                </tr>
                <tr>
            <td><input type = "submit" value = "Submit"></td>
            <td><input type = "Reset" value = "Reset"></td>
                </tr>
                </br>
            </table>
    </form>

        <hr>

        <h3>Searching for a Student's details</h3>
        <form action = "search1.php" method = "post">
            Enter the name to be searched: <input type = "text"
            name = "search"><br/>
            <br/>
            <input type = "submit" value = "Submit">
            <input type = "reset" value = "Reset">
        </form>

        <hr>

    <h3 style="margin-bottom:0px;">Updating a Student's details</h3>
```

```html
<form action = "update.php" method = "post">
    <table border="0">
        <tr>
            <td>Enter the name of the person:</td>
            <td><input type = "text" name = "sname"></td>
        </tr>
        <tr>
            <td>Enter new Address Line 1:</td>
            <td><input type = "text" name = "address1"></td>
        </tr>
        <tr>
            <td>Enter new Address Line 2:</td>
            <td><input type = "text" name = "address2"></td>
        </tr>
        <tr>
            <td>Enter new Email-id: </td>
            <td><input type = "text" name = "email"></td>
        </tr>
        <tr>
            <td></td>
        </tr>
        <tr>
        </tr>
        <tr>
            <td><input type = "submit" value = "Submit"></td>
            <td><input type = "Reset" value = "Reset"></td>
        </tr>
        </br>
    </table>
</form>

<hr>

<h3>Deleting a Student's details</h3>
<form action = "delete.php" method = "post">
Enter the name to be deleted: <input type = "text" name ="sname">
```

```
                                <br/>
                                <br/>
                                <input type = "submit" value = "Submit">
                                <input type = "reset" value = "Reset">
                        </form>
        </body>
        </html>
```

(Insertion code - insert.php)

```php
<?php
        $sname=$_POST["sname"];
        $address1=$_POST["address1"];
        $address2=$_POST["address2"];
        $email=$_POST["email"];
        $mysql = mysqli_connect("localhost", "root")
                or die("Can't connect to DB");
        mysqli_select_db($mysql, "WFTL_P12")
                or die("Can't select DB");
        mysqli_query($mysql, "insert into student values('$sname','
        $address1',' $address2', '$email')")
                or die("Query failed to insert");
        $result = mysqli_query($mysql,"select * from student");
?>

<html>
<head><title>PHP and MYSQL</title></head>
<body bgcolor="aabbcc">
<h3>Student Details</h3>
<table border="1">
<tr>
<th>Name</th>
<th>Address Line 1</th>
<th>Address Line 2</th>
<th>E-mail ID</th>
                        </tr>
<?php
```

```php
                while($array=mysqli_fetch_row($result)):
                        echo
                                "<tr>
                                    <td>$array[0]</td>
                                    <td>$array[1]</td>
                                    <td>$array[2]</td>
                                    <td>$array[3]</td>
                                </tr>";
                endwhile;
        ?>
<?mysqli_free_result($result);?>
<?mysqli_close($mysql);?>
</table>
</body>
</html>
```

(Search code - search.php)

```php
<html>
<body bgcolor="aabbcc">
<?php
    $search = $_POST["search"];
    $mysql= mysqli_connect("localhost","root") or
    die(mysqli_error());
    mysqli_select_db( $mysql,"WFTL_P12");
    $sql= "select * from student where sname like
    '%$search%' " ; $result= mysqli_query($mysql,
    $sql) ;
    if(mysqli_num_rows($result) == 0)
        echo "<h1> No records found! </h1>";
    else {
        echo "<table border='1'>
                <tr>
                    <th>Name</th>
                    <th>Addresss1</th>
```

```php
                        <th>Addresss2</th>
                    <th>Email</th></tr> " ;

            while($row=mysqli_fetch_array($result))
```

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```php
                {
                    echo "<tr>" ;
                    echo "<td> $row[sname] </td>" ;
                    echo "<td> $row[address1] </td>" ;
                    echo "<td> $row[address2] </td>" ;
                    echo "<td> $row[email] </td>" ;
                    echo "</tr>" ;
                }
                echo "</table>";
        }
        mysqli_close( $mysql);
    ?>
    </body>
    </html>
```

(Update code - update.php)

```php
<?php
        $sname=$_POST["sname"];
        $address1=$_POST["address1"];
        $address2=$_POST["address2"];
        $email=$_POST["email"];

        $mysql = mysqli_connect("localhost", "root")
                or die("Can't connect to DB");

        mysqli_select_db($mysql, "WFTL_P12")
                or die("Can't select DB");

        $query = "select count(*) from student where sname='$sname'";
        $count= mysqli_query($mysql, $query);
```

```php
        if (mysqli_fetch_array($count)[0] > 0)
        {
                $query = "update student set address1='$sname',
                address1='$address1',  address2='$address2',
                email='$email' where sname='$sname'"
                mysqli_query($mysql, $query);
                echo "<h1> Update successful! </h1>";
```

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```php
        }
        else
                echo("<h1> Name not found! </h1>");
    ?>
```

(Deletion code - delete.php)

```php
<?php
        $sname=$_POST["sname"];

        $mysql = mysqli_connect("localhost", "root")
                or die("Can't connect to DB");

        mysqli_select_db($mysql, "WFTL_P12")
                or die("Can't select DB");

        $count= mysqli_query($mysql, "select count(*) from student where
        sname='$sname'"); if (mysqli_fetch_array($count)[0] > 0)
        {
mysqli_query($mysql, "delete from student where sname='$sname'");
                echo "<h1> Delete successful! </h1>";
        }
        else
                echo("<h1> Name not found! </h1>");
    ?>
```
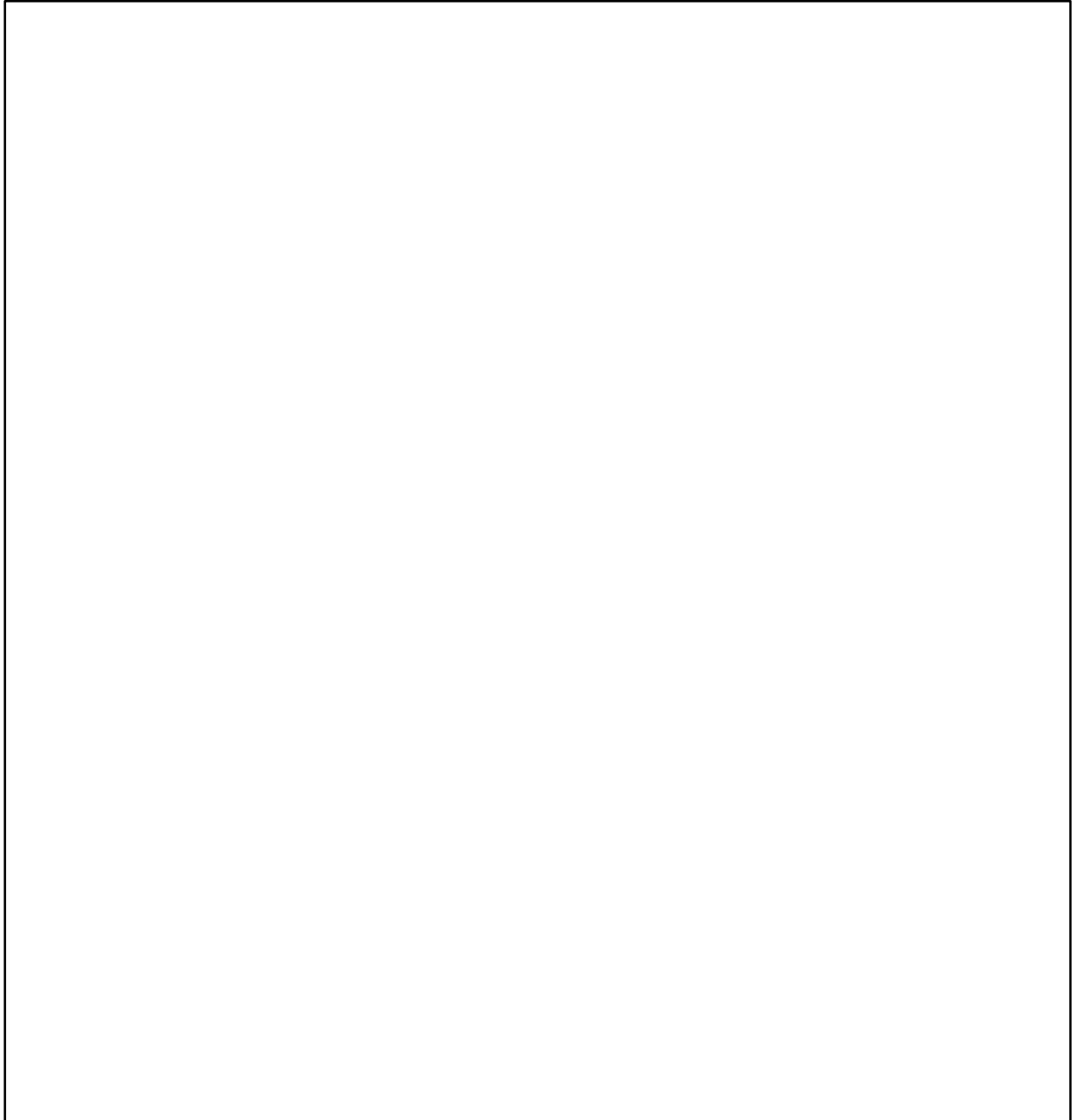
Course Code: 20CSL66

OUTPUT:

On Loading:

Course Code: 20CSL66

Before Inserting:

After Inserting:

Course Code: 20CSL66

Before Search:

After Search (Successful):

After Search (Unsuccessful):

Page No: 48

Course Code: 20CSL66

Before Update:

After Update:

Searching the same name to see if update was successful:

Course Code: 20CSL66

Before Delete:

After Delete:

Searching the same name to see if delete was successful:

RESULT: An HTML page which is used as the front-end and corresponding PHP pages which are used for the back-end to perform various MySQL database operations was designed and implemented successfully.