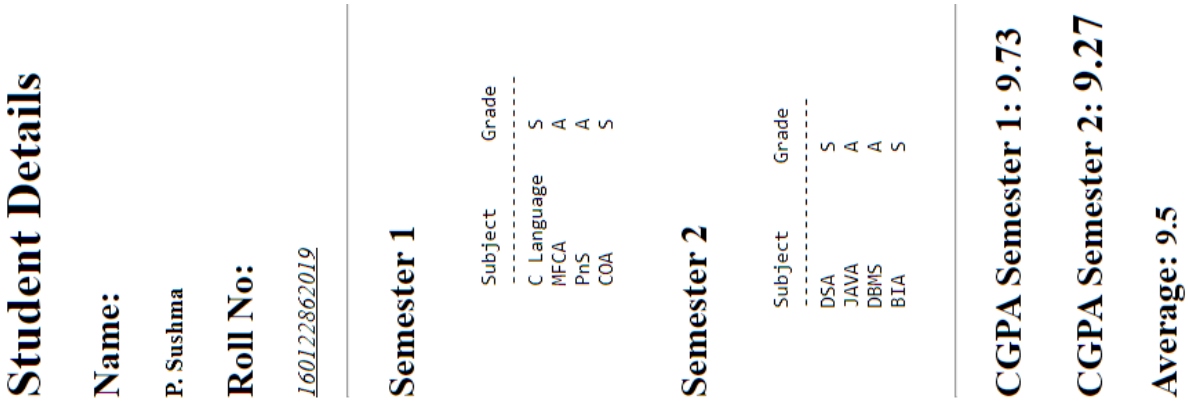
WEB TECHNOLOGY PRACTICAL

HTML

1. **Create, test, and validate an XHTML document for yourself, including marks details semester-wise like name, roll no, semester, marks in subjects, total, per, grade, etc. This document must use several headings and <b>, <i><u>, <pre>, <p> , <big>,<small>, tags with attributes.**

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
   <title>Marks Details</title>
</head>
<body>
   <h1>Student Details</h1>
   <h2>Name:</h2>
   <p><b>P. Sushma</b></p>
   <h2>Roll No:</h2>
   <p><i><u>160122862019</u></i></p>
   <hr/>
   <h2>Semester 1</h2>
   <pre>
        Subject      Grade
        -------------------
        C Language    S
        MFCA          A
        PnS           A
        COA           S
      </pre>
   <h2>Semester 2</h2>
   <pre>
      Subject      Grade
      -------------------
      DSA           S
      JAVA          A
      DBMS          A
      BIA           S
    </pre>
   <hr/>
```

```
    <h2>CGPA Semester 1: 9.73</h2>
    <h2>CGPA Semester 2: <big>9.27</big></h2>
    <h2>Average: <small>9.5</small></h2>
</body>
</html>
```

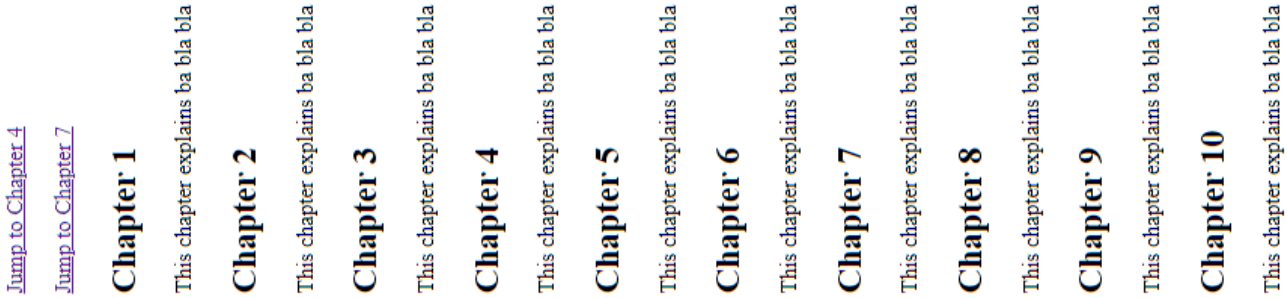


2. Write an XHTML code to create hyperlinks internally and externally

Internally:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<body>
   <p><a href="#C4">Jump to Chapter 4</a></p>
   <p><a href="#C7">Jump to Chapter 7</a></p>
   <h2>Chapter 1</h2>
   <p>This chapter explains ba bla bla</p>
   <h2>Chapter 2</h2>
   <p>This chapter explains ba bla bla</p>
   <h2>Chapter 3</h2>
   <p>This chapter explains ba bla bla</p>
   <h2 id="C4">Chapter 4</h2>
   <p>This chapter explains ba bla bla</p>
   <h2>Chapter 5</h2>
   <p>This chapter explains ba bla bla</p>
   <h2>Chapter 6</h2>
   <p>This chapter explains ba bla bla</p>
   <h2 id="C7">Chapter 7</h2>
   <p>This chapter explains ba bla bla</p>
   <h2>Chapter 8</h2>
   <p>This chapter explains ba bla bla</p>
   <h2>Chapter 9</h2>
   <p>This chapter explains ba bla bla</p>
   <h2>Chapter 10</h2>
   <p>This chapter explains ba bla bla</p>
```

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



Externally:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<body>
   <p><a href="2.xhtml#C4">Jump to Chapter 4</a></p>
   <p><a href="2.xhtml#C7">Jump to Chapter 7</a></p>
</body>
</html>
```

Jump to Chapter 4

Jump to Chapter 7

3. Write an XHTML code to insert images in the web page and images as hyperlinks

image.xhtml:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<body bgcolor="pink">Welcome to CBIT
   <br/>
   <img src="Sachin.jpg" border="2" width="200" height="200" align="left" alt="No Image
found"/>
</body>
</html>
```

Welcome to CBIT

imagelinks.xhtml:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<body>
   <table border="1">
   <caption align="center"> Images in the table </caption>
   <tr>
   <td><a href="Sachin.xhtml"><img src="Sachin.jpg" height="200"
width="200"/><br>Sachin</br></a></td>
   <td><a href="Hyderabad.xhtml"><img src="Hyderabad.jpg" height="200"
width="200"/><br>Hyderabad</br></a></td>
   </tr>
   <tr>
   <td><a href="Cricket.xhtml"><img src="Cricket.jpg" height="200"
width="200"/><br>Cricket</br></a></td>
   <td><a href="Biryani.xhtml"><img src="Biryani.jpg" height="200"
width="200"/><br>Biryani</br></a></td>
   </tr>
   </table>
</body>
</html>
```

Sachin.xhtml:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<body>
   <center> Sachin Tendulkar Home Page </center>
</body>
</html>
```

Hyderabad.xhtml:

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

```
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<body>
   <center> Hyderabad Home Page </center>
</body>
</html>
```

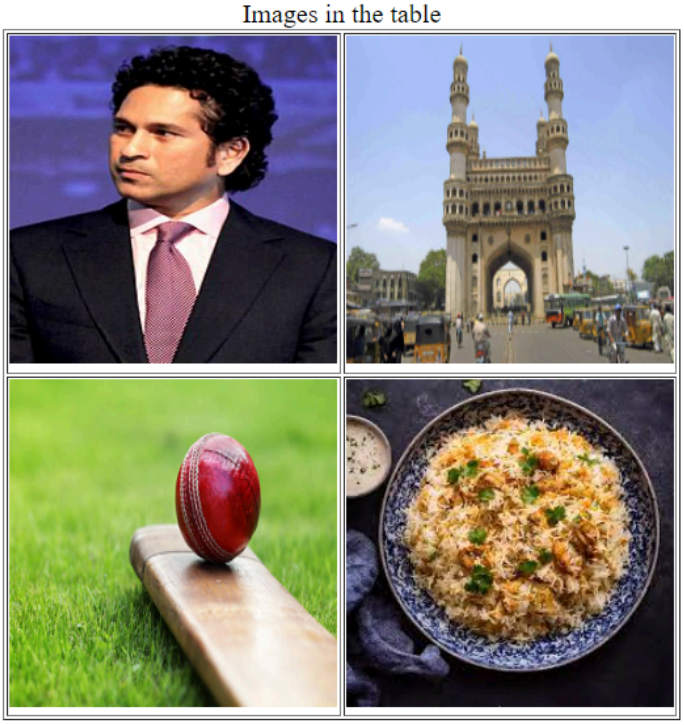
Cricket.xhtml:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<body>
   <center> Cricket Home Page </center>
</body>
</html>
```

Biryani.xhtml:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<body>
   <center> Biryani Home Page </center>
</body>
</html>
```

Images in the table



4. **Create, test, and validate an XHTML document that describes an unordered list of at least four states. Each element of the list must have a nested list of at least three cities in the state**

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
   <title>states and cities</title>
</head>
<body>
   <b>
      <ul>Telangana</ul>
   </b>
   <li>nizamabad</li>
   <li>karimnagar</li>
   <li>warangal</li>
   <b>
      <ul>Andhra pradesh</ul>
   </b>
   <li>vijayawada</li>
   <li>nellore</li>
   <li>tirupati</li>
   <b>
      <ul>Maharasta</ul>
   </b>
   <li>pune</li>
   <li>nagpur</li>
   <li>solapur</li>
   <b>
      <ul>Tripura</ul>
   </b>
   <li>amarpur</li>
   <li>udaipur</li>
   <li>kumarghat</li>
</body>
</html>
```

Telangana

- nizamabad
- karimnagar
- warangal

Andhra pradesh

- vijayawada
- nellore
- tirupati

Maharasta

- pune
- nagpur
- solapur

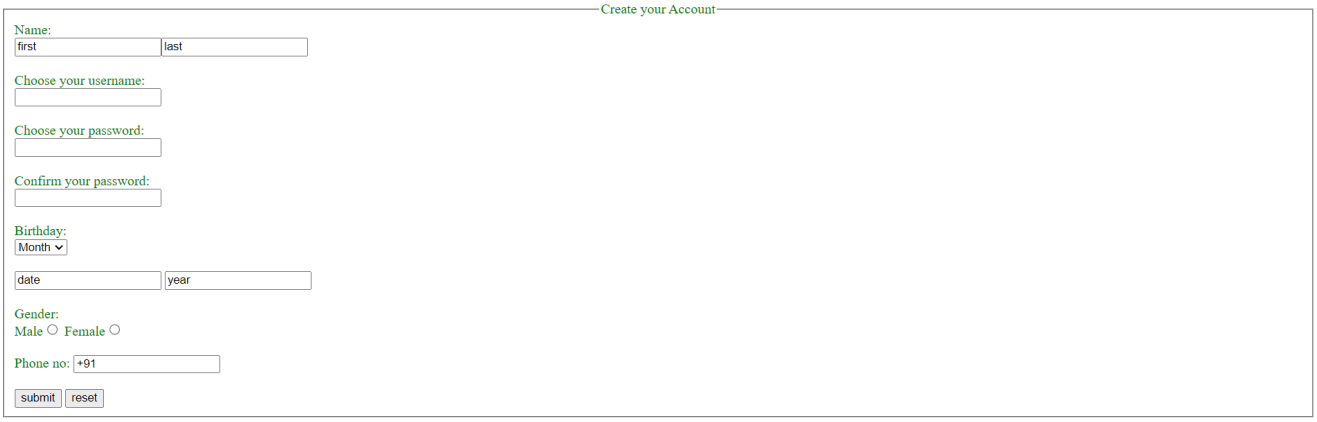
Tripura

- amarpur
- udaipur
- kumarghat

5. **Write an XHTML code to create the form with text fields, radio buttons, checkboxes, a dropdown list, and a text area field.**

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<body style="color:green">
   <fieldset>
      <legend align="center"> Create your Account </legend>
      <form>
         Name:<br/><input type="text" value="first"/><input type="text" value="last"/><br/><br/>
         Choose your username:<br/>
         <input type="text"/><br/><br/>
         Choose your password:<br/>
         <input type="password"/><br/><br/>
         Confirm your password:<br/>
         <input type="password"/><br/><br/>
         Birthday:<br/>
         <select>
            <option value="select" selected="selected">Month</option>
            <option value="j">Jan</option>
            <option value="f">Feb</option>
         </select><br/><br/>
         <input type="text" value="date"/>
         <input type="text" value="year"/>
         <br/><br/>
         Gender:<br/>
         Male<input type="radio" value="m" name="sex"/>
         Female<input type="radio" value="f" name="sex"/><br/><br/>
```

```
            Phone no:
            <input type="text" value="+91"/><br/><br/>
            <input type="submit" value="submit"/>
            <input type="reset" value="reset"/>
        </form>
    </fieldset>
</body>
</html>
```



6. **Create, test, and validate an XHTML document that defines a table with two levels of column labels: an overall label, “Meals”, and three secondary labels, “Breakfast”, “Lunch”, and “Dinner”. There must be two levels of row labels: an overall label, “Foods”, and four secondary labels, “Bread”, “Main Course”, “Vegetable”, and “Dessert”. The cells of the table must contain some grams for each of the food categories**

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <title>Meal Grams Table</title>
</head>
<body>
    <table border="1">
        <colgroup span="1"></colgroup>
        <colgroup span="3"></colgroup>
        <thead>
            <tr>
                <th rowspan="2">FOODS</th>
                <th colspan="4">MEALS</th>
```

```
        </tr>
        <tr>
          <th>Breakfast</th>
          <th>Lunch</th>
          <th>Dinner</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <th>Bread</th>
          <td>50g</td>
          <td>200g</td>
          <td>100g</td>
        </tr>
        <tr>
          <th>Main Course</th>
          <td>60g</td>
          <td>250g</td>
          <td>150g</td>
        </tr>
        <tr>
          <th>Vegetable</th>
          <td>40g</td>
          <td>180g</td>
          <td>120g</td>
        </tr>
        <tr>
          <th>Dessert</th>
          <td>40g</td>
          <td>180g</td>
          <td>120g</td>
        </tr>
      </tbody>
    </table>
</body>
</html>
```

FOODS	MEALS		
	Breakfast	Lunch	Dinner
Bread	50g	200g	100g
Main Course	60g	250g	150g
Vegetable	40g	180g	120g
Dessert	40g	180g	120g

CSS

7. **Write an XHTML code to demonstrate internal style sheets in CSS.**

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
   <style>
      body {
         background-color: pink
      }
      h1 {
         color: red;
         font-size: 40;
      }
      p1 {
         color: blue;
         font-size: 20;
      }
   </style>
</head>
<body>
   <h1>Heading Using Internal Style Sheets</h1>
```

```
    <p1>Paragraph Using Internal Style Sheets<br/>Internal Style Sheets specifies to the single
html page of document
    </p1>
</body>
</html>
```

8. **Write an XHTML code to create an external style sheet by using pseudo-class and attach that style sheet to other documents.**

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <link href="8style.css" rel="stylesheet" type="text/css"/>
</head>
<body> Welcome to
    <a href="http://cbit.ac.in"> CBIT</a>
    <ul>Courses<br/>
        <li>Btech
            <ul>
                <li> CSE</li>
                <li>EEE</li>
                <li>ECE</li>
                <li>Civil</li>
            </ul>
        </li>
        <li>MBA</li>
        <li>MCA</li>
        <li>Mtech</li>
    </ul>
</body>
</html>
```

8style.css:

Welcome to CBIT

Courses

- Btech
  - CSE
  - EEE
  - ECE
  - Civil
- MBA
- MCA
- Mtech

9. Write an XHTML code to demonstrate CSS Padding and CSS Positioning properties.

Relative Positioning.xhtml:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
   <style>
      p {
         position: relative;
         left: 50px;
         right: 20px;
         top: 40px
      }
   </style>
</head>
<body>
   <p>Relative Positioning</p>
</body>
</html>
```

Absolute Positioning.xhtml:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
   <style>
      p {
         position: absolute;
```

```
            left: 50px;
            right: 20px;
            top: 40px
        }
    </style>
</head>
<body>
    <p>Absolute Positioning</p>
</body>
</html>
```

CSS Padding.html:

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
    <style>
        p {
            padding-top: 50px;
            padding-bottom: 50px;
            padding-left: 50px;
            padding-right: 50px
        }
    </style>
</head>
<body>
<p>Padding</p>
</body>
</html>
```

10. Create and test an XHTML document that has six short paragraphs of text that describe various aspects of the state in which you live. You must define three different paragraph styles, p1, p2, and p3. The p1 style must use left and right margins of 20 pixels, a background color of pink, and a foreground color of blue. The p2 style must use left and right margins of 30 pixels, a background color of black, and a foreground color of yellow. The p3 style must use a text-indent of 1 centimeter, a background color of green, and a foreground color of white. The first and fourth paragraphs must use p1, the second and fifth must use p2, and the third and sixth must use p3.

```
<?xml version = "1.0" encoding = "utf-8"?>
<!DOCTYPE html PUBLIC "_//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml111/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
   <title>State Description</title>
   <link rel="stylesheet" type="text/css" href="10style.css" />
</head>
<body>
   <p class="p1">Telangana is a state in southern India known for its rich cultural heritage.
</p>
   <p class="p2">The state of Telangana was formed in 2014, and it has since been a hub for
technology and innovation.</p>
   <p class="p3">Hyderabad, the capital city of Telangana, is renowned for its historical
landmarks and delicious cuisine.</p>
   <p class="p1">Telangana is home to diverse landscapes, including lush greenery and
historical monuments. </p>
   <p class="p2">The state has a unique blend of tradition and modernity, making it a
fascinating place to explore.</p>
   <p class="p3">Telangana's festivals, like Bathukamma, showcase the vibrant cultural
tapestry of the region. </p>
</body>
</html>
```

10style.css:

```
/* style.css */
p.p1 {
   margin-left: 20px;
   margin-right: 20px;
   background-color: pink;
   color: blue;
 }
```

```
p.p2 {
  margin-left: 30px;
  margin-right: 30px;
  background-color: black;
  color: yellow;
}
p.p3 {
  text-indent: 1cm;
  background-color: green;
  color: white;
}
```

Telangana is a state in southern India known for its rich cultural heritage.

The state of Telangana was formed in 2014, and it has since been a hub for technology and innovation.

Hyderabad, the capital city of Telangana, is renowned for its historical landmarks and delicious cuisine.

Telangana is home to diverse landscapes, including lush greenery and historical monuments.

The state has a unique blend of tradition and modernity, making it a fascinating place to explore.

Telangana's festivals, like Bathukamma, showcase the vibrant cultural tapestry of the region.

JAVASCRIPT

11. Write a Java Script to find out the reverse of a number which is entered in the form as follows:

Number: [ ] **Reverse number:** [ ]

```
<html>
<head>
  <script language="javascript">
    var i, n, r = 0, rem;
    function reverse(n) {
      while (n > 0) {
        rem = n % 10;
        r = r * 10 + rem;
        n = parseInt(n / 10);
      }
      return r;
    }
  </script>
<body>
  <form name=f>
    <br/>
    Number : <input type="text" name="t1"> <br/><br/><br/>
    Reverse Number : <input type="text" name="t2"><br/><br/><br/>
```

```
        <input type="button" value="Result"
onclick="document.f.t2.value=reverse(document.f.t1.value);">
    </form>
</body>
</html>
```

Number : 83940

Reverse Number : 4938

Result

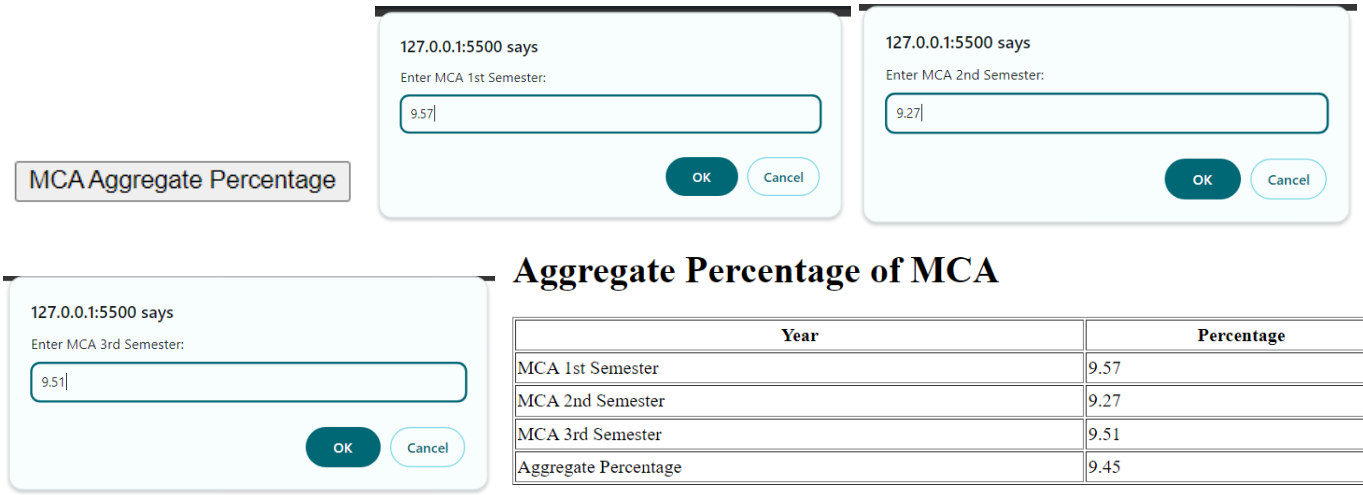
12. Write a Java Script to find out the Aggregate percentage of an MCA student as follows:

For Example

Year	Percentage
MCA I Year	70
MCA II Year	80
MCA III Year	90
Aggregate Percentage	80

```
<html>
<head>
    <title>Aggregate Function</title>
</head>
<body>
    <script language="javascript">
        function agg() {
            var i1, i2, i3;
            document.write("<h1>Aggregate Percentage of MCA</h1>");
            document.write("<table border='1' width='50%' height='20%'>");
            document.write("<tr><th>Year</th><th>Percentage</th></tr>");
            i1 = parseFloat(prompt("Enter MCA 1st Semester:"));
            document.write("<tr><td>MCA 1st Semester</td><td>" + i1 + "</td></tr>");
            i2 = parseFloat(prompt("Enter MCA 2nd Semester:"));
            document.write("<tr><td>MCA 2nd Semester</td><td>" + i2 + "</td></tr>");
            i3 = parseFloat(prompt("Enter MCA 3rd Semester:"));
            document.write("<tr><td>MCA 3rd Semester</td><td>" + i3 + "</td></tr>");
            var aggregate = ((i1 + i2 + i3) / 3).toFixed(2); // limit to 2 decimal places
```

```
            document.write("<tr><td>Aggregate Percentage</td><td>" + aggregate + "</td></tr>");
            document.write("</table>");
        }
    </script>
    <form>
        <br/>
        <input type="button" value="MCA Aggregate Percentage" onClick="agg()">
    </form>
</body>
</html>
```



Aggregate Percentage of MCA

Year	Percentage
MCA 1st Semester	9.57
MCA 2nd Semester	9.27
MCA 3rd Semester	9.51
Aggregate Percentage	9.45

13. Write a JavaScript code to find out the factorial of a given number using a recursive function, the number which is entered in the form as follows.

Number: [ ] **Factorial:** [ ]

```
<html>
<head>
    <script language="javascript">
        var fa = function fact(n) {
            if (n == 1)
                return 1;
            else
                return n * fact(n - 1);
        }
    </script>
</head>
<body>
    <form name="f">
        <br/>
        Number : <input type="text" name="t1"/> <br/><br/><br/>
```

```
        Factorial : <input type="text" name="t2"/><br /><br/><br/>
        <input type="button" value="Result"
onclick="document.f.t2.value=fa(document.f.t1.value);"/>
    </form>
</body>
</html>
```

Number : 8

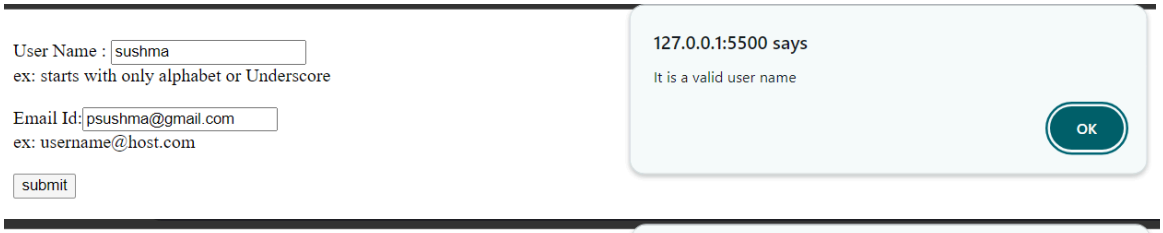
Factorial : 40320

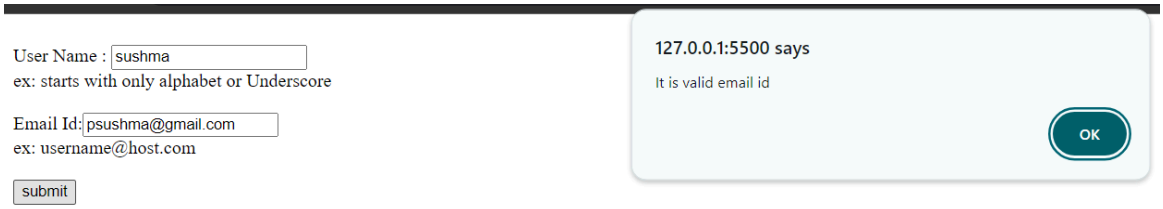
Result

14. Write a JavaScript code to validate the username and email ID using regular expressions, which are entered by the user in the form.

```
<html>
<head>
    <script>
        function check() {
            var y = document.getElementById("u").value;
            var q = /[a-z _]+[a-z _]/;
            if (q.test(y) == false)
                alert("It is not a valid user name");
            else
                alert("It is a valid user name");

            var x = document.getElementById("t").value;
            var p = /[a-z 0-9 - _ . ]+@[a-z]+\.(com)/;
            if (p.test(x) == false)
                alert("It is not a valid email id");
            else
                alert("It is valid email id");
        }
    </script>
</head>
<body>
    <br/>
    User Name : <input type="text" id="u"> <br/>ex: starts with only alphabet or Underscore
<br/><br/>
    Email Id:<input type="text" id="t"> <br/>ex: username@host.com<br/><br/>
    <input type="button" value="submit" onclick="check()">
```

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

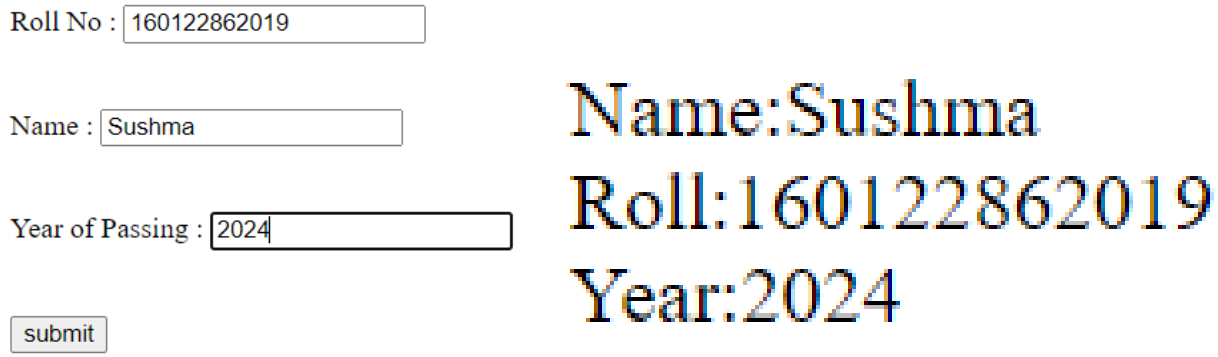




15. Write a JavaScript code to validate the student no, name, and year of passing entered in the form using regular expressions.

```
<html>
<head>
   <script>
      function check() {
         var y = document.getElementById("roll").value;
         var q = /[0-9]/;
         if (y == "")
            alert("rollno should not be empty");
         else if (q.test(y) == false)
            alert("roll no should be in digits");
         var x = document.getElementById("name").value;
         var p = /[a-z A-Z]/;
         if (x == "")
            alert("Name should not be empty");
         else if (p.test(x) == false)
            alert("Name should not be in digits");

         var z = document.getElementById("year").value;
         var r = /[0-9]/;
         if (z == "")
            alert("year of passing not be empty");
         else if (r.test(z) == false)
            alert("year of passing must be in digits");
         else {
            var l = parseInt(z);
            var d = new Date();
            if (l > d.getFullYear())
```

```
            alert("year is invalid");
        }
        document.write("<br>");
        document.write("Name:" + x + "<br>");
        document.write("Roll:" + y + "<br>");
        document.write("Year:" + z + "<br>");
    }
  </script>
</head>
<body>
  <br>
  Roll No :  <input type="text" id="roll"><br><br><br>
  Name   :  <input type="text" id="name"><br><br><br>
  Year of Passing :  <input type="text" id="year"><br><br><br>
  <input type="button" value="submit" Onclick="check()">
</body>
</html>
```



16. Write a JavaScript code to handle the events mouseover and mouseout.

```
<html>
<body>
  <img src="dog.jpg" width="50px" height="50px" onmouseover="big();"
onmouseout="small();" id="i" />
  <script>
    function small() {
      document.getElementById("i").style.width = "20px";
      document.getElementById("i").style.height = "20px";
    }
    function big() {
      document.getElementById("i").style.width = "200px";
      document.getElementById("i").style.height = "200px";
    }
  </script>
```

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

Mouseout

Mouseover

17. Write a JavaScript code to move the content of the element from one place to another place slowly in the webpage.

```
<html>
<head>
   <title>javascript</title>
   <script type="text/javascript">
      var d, x, y;
      function initial() {
         d = document.getElementById('x').style;
         x = d.left;
         y = d.top;
         x = x.match(/\d+/);//initial x
         y = y.match(/\d+/);//initial y
         movetext();
      }
      function movetext() {
         if (x < 130) {
            x++;
            d.left = x + "px";

         }
         if (y < 130) {
            y++;
            d.top = y + "px";

         }
         if ((x != 130) || (y != 130)) {
            setInterval("movetext()", 1000);
         }
      }

   </script>
</head>
<body onload="initial();">
   <p id="x" style="position:absolute;left:10px;top:10px;">CBIT</p>
```

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

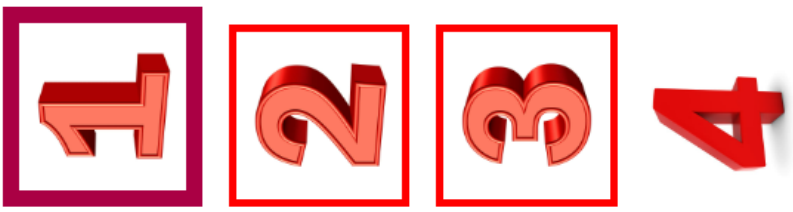

JQUERY

18. Write a JQuery code to demonstrate Attribute Selectors

```
<html>
<head>
   <title>My Site</title>
   <script src="https://code.jquery.com/jquery-3.7.1.min.js" type="text/javascript"></script>
   <script src="attributeselec.js" type="text/javascript"></script>
   <style type="text/css">
      .needs-alt {
         border: 5px solid #F00;
      }
      .not-alt {
         border: 10px solid #A04;
      }
   </style>
</head>
<body>
   <p><img src="one.jpg" width="100" /></p>
   <p><img src="two.jpg" width="100" alt="cool" /></p>
   <p><img src="three.jpg" width="100" alt="cool" /></p>
   <p><img src="four.jpg" width="100" alt="cool beans" /></p>
</body>
</html>
```

attributeselec.js:

```
$(document).ready(function () {
   // Make sure jQuery is loaded before this script
   $("img[alt='cool']").addClass("needs-alt");
   $("img:not([alt])").addClass("not-alt");
});
```



19. Write a JQuery code to demonstrate First, Last, and Element at Index Selectors

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <title>My Site</title>
    <style type="text/css">
        ul {
            list-style-type: disc;
        }

        .item1 {
            list-style-type: square;
        }

        .item2 {
            list-style-type: circle;
        }

        .item3 {
            list-style-type: none;
        }
    </style>
    <script src="https://code.jquery.com/jquery-3.7.1.min.js" type="text/javascript"></script>
    <script src="firstlastnthselector.js" type="text/javascript"></script>
</head>

<body>
    <ul class="supplies">
        <li>Pencils</li>
        <li>Paper</li>
        <li>Books
            <ul>
                <li>Science Book</li>
                <li>History Book</li>
```

```
            <li>Maths Book</li>
          </ul>
        </li>
      </ul>
    </body>
    </html>
```

firstlastnthselector.js:

```
$(document).ready(function () {
  $(".supplies li:first").addClass("item1");
  $(".supplies li:last").addClass("item2");
  $(".supplies li:eq(1)").addClass("item3");
});
```

- Pencils
  Paper
- Books
  - Science Book
  - History Book
  - Maths Book

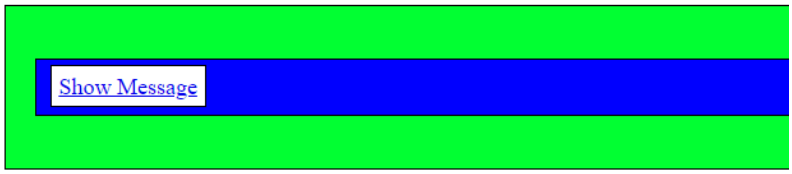
20. Write a JQuery code to demonstrate Event Capturing and Bubbling mouse leave event

```
<!DOCTYPE HTML>
<html>
<head>
   <title>Example</title>
   <style>
      #outer {
         border: 1px solid #000;
         background-color: #00FF33;
         padding: 20px;
      }

      #middle {
         border: 1px solid #000;
         background-color: #0000FF;
         padding: 10px;
      }

      #inner {
         border: 1px solid #000;
         background-color: #FFFFFF;
         padding: 5px;
```

```
    }
  </style>
  <script src="https://code.jquery.com/jquery-3.7.1.min.js" type="text/javascript"></script>
  <script src="bubble1.js" type="text/javascript"></script>

<body>
  <div id="outer">
    <p id="middle">
      <a id="inner" href="page.html">Show Message</a>
    </p>
  </div>
  <div id="text"></div>
</body>
</html>
```

bubble1.js:

```
$(document).ready(function () {
  $("#outer").mouseleave(function () {
    $("#text").append("Mouseout!<br>");
  });
});
```



Mouseout!
Mouseout!
Mouseout!
Mouseout!
Mouseout!
Mouseout!
Mouseout!
Mouseout!
Mouseout!

PHP

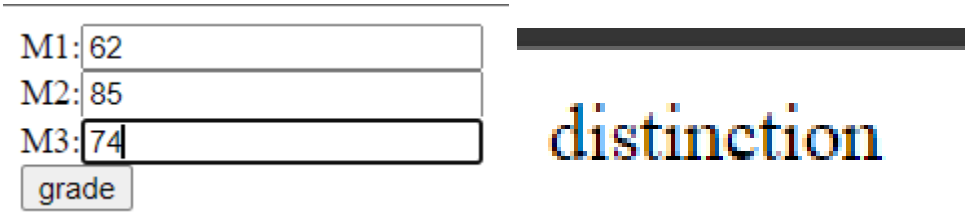
21. Write a PHP code to find the grade of the student by taking marks that are entered in the form by the user.

```
<html>
    <body>
        <form action="grade.php" method="post" >
        M1:<input type="text" name="i1"/><br/>
        M2:<input type="text" name="i2"/><br/>
        M3:<input type="text" name="i3"/><br/>
```

```
                <input type="submit" value="grade" />
                </form>
        </body>
</html>
```

grade.php:

```
<?php
        $m1=$_REQUEST['i1'];
        $m2=$_REQUEST['i2'];
        $m3=$_REQUEST['i3'];
        settype($m1,"integer");
        settype($m2,"integer");
        settype($m3,"integer");
        if($m1 >=40 && $m2>=40 && $m3>=40)
        {
                $p=(($m1+$m2+$m3)/300)*100;
                if($p >= 70)
                        echo "distinction";
                else if($p>=60)
                        echo "First division";
                else if($p >= 50)
                        echo "second division";
                else
                        echo "Third division";
        }
        else
                echo "Fail";
?>
```



22. Write a PHP code to find out whether the given number is prime or not using a separate function.

```
<html>
        <body>
                <form action="prime1.php" method="post" >
                Number:<input type="text" name="i1"/><br/>
                <input type="submit" value="check" />
```

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

prime1.php:

```
<?php
        $n=$_REQUEST['i1'];
        settype($n,"integer");
        function prm($n)
        {
                 $c=0;;
                for ($i=1; $i<=$n;$i++)
                {
                        if(($n%$i)==0)
                                $c++;
                }
                if($c == 2)
                        echo $n."is a prime number";
                else
                        echo $n."is not a prime number";
        }
        prm($n);
?>
```

23. Write a PHP code to demonstrate the array functions explode(), implode(),array_search(), and array_unshift()

```
<html>
        <body>
                <?php
                        $s="May is too hot";
                        $w=explode(" ",$s);
                        echo "orginal string : ".$s;
                        echo "<br/>apply explode function on the string :  ";
                        print_r($w);
                        echo "<br/>apply implode function on the splited string :  ";
                        $str=implode(" ",$w);
                        echo $str."<br/>";
                        $a=array(2,7,9,4,55);
                        $x=array_search(9,$a);
                        if($x >=0)
```

```
                    echo "search element found in the array.";
                else
                    echo "search element not found in the array.";
                echo "<br/>array elements are :  ";
                print_r($a);
                array_unshift($a,100);
                echo "<br/>Adding an element at staring position of the array : ";
                print_r($a);
            ?>
        </body>
    </html>
```

```
orginal string : May is too hot
apply explode function on the string : Array ( [0] => May [1] => is [2] => too [3] => hot )
apply implode function on the splited string : May is too hot
search element found in the array.
array elements are : Array ( [0] => 2 [1] => 7 [2] => 9 [3] => 4 [4] => 55 )
Adding an element at staring position of the array : Array ( [0] => 100 [1] => 2 [2] => 7 [3] => 9 [4] => 4 [5] => 55 )
```

24. Write a PHP code to count the frequency occurrence of words in the given string

```
<html>
    <body>
        <?php
            function count1($s)
            {
                $f=array();
                $w=preg_split("/[.,!?' ']/",$s);
                //print_r($w);
                foreach($w as $x)
                {
                    $k=array_keys($f);
                    //print_r($k);
                    //echo "<br/>";
                    if(in_array($x,$k))
                        $f[$x]++;
                    else
                        $f[$x]=1;
                }

                return $f;
            }
            $a=count1("apple,banana is a good.apple and banana also useful");
            $keys=array_keys($a);
```

```
                    foreach($keys as $y)
                        echo $y,":    ",$a[$y],"<br/>";
                ?>
        </body>
</html>
```

apple: 2
banana: 2
is: 1
a: 1
good: 1
and: 1
also: 1
useful: 1

25. Write a PHP code to create a std1 table with the fields sno, name, and gender in the student database of MySQL

TO EXECUTE (LATEST VERSION OF XAMPP):

```
<?php
$servername = "localhost";
$username = "root";
$password = "";
$conn = new mysqli($servername, $username, $password);
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
$createDbQuery = "CREATE DATABASE IF NOT EXISTS student";

if ($conn->query($createDbQuery) === TRUE) {
    echo "Database 'student' created successfully<br>";

    $conn->select_db("student");

    $createQuery = "CREATE TABLE std1 (
        sno INT(5) PRIMARY KEY,
        name VARCHAR(20) NOT NULL,
        gender VARCHAR(10) NOT NULL
    )";

    if ($conn->query($createQuery) === TRUE) {
        echo "Table 'std1' created successfully";
    } else {
        echo "Error creating table: " . $conn->error;
    }
} else {
```

```
    echo "Error creating database: " . $conn->error;
}
$conn->close();
?>
```

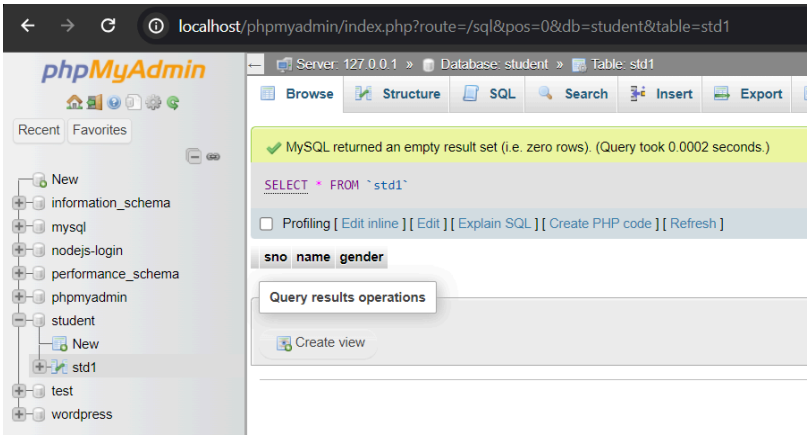
TO EXECUTE (OLDEST VERSION OF XAMPP):

```
<html>
        <body>
                <?php
                        mysql_connect("localhost","root","") or die("not connected");
                        $q="create database student";
                        mysql_query($q) or die("not executed");
                        echo "student database created";
                ?>
        </body>
</html>
```

TO WRITE:

```
<html>
        <body>
                <?php
                        mysql_connect("localhost","root","") or die("not connected");
                        mysql_select_db("student") or die("not opened");
                        $q="create table std1(sno int(5) primary key,name varchar(20) not
null,gender varchar(10) not null)";
                        mysql_query($q)or die("not executed");
                        echo "std1 table created";
                ?>
        </body>
</html>
```

Database 'student' created successfully
Table 'std1' created successfully

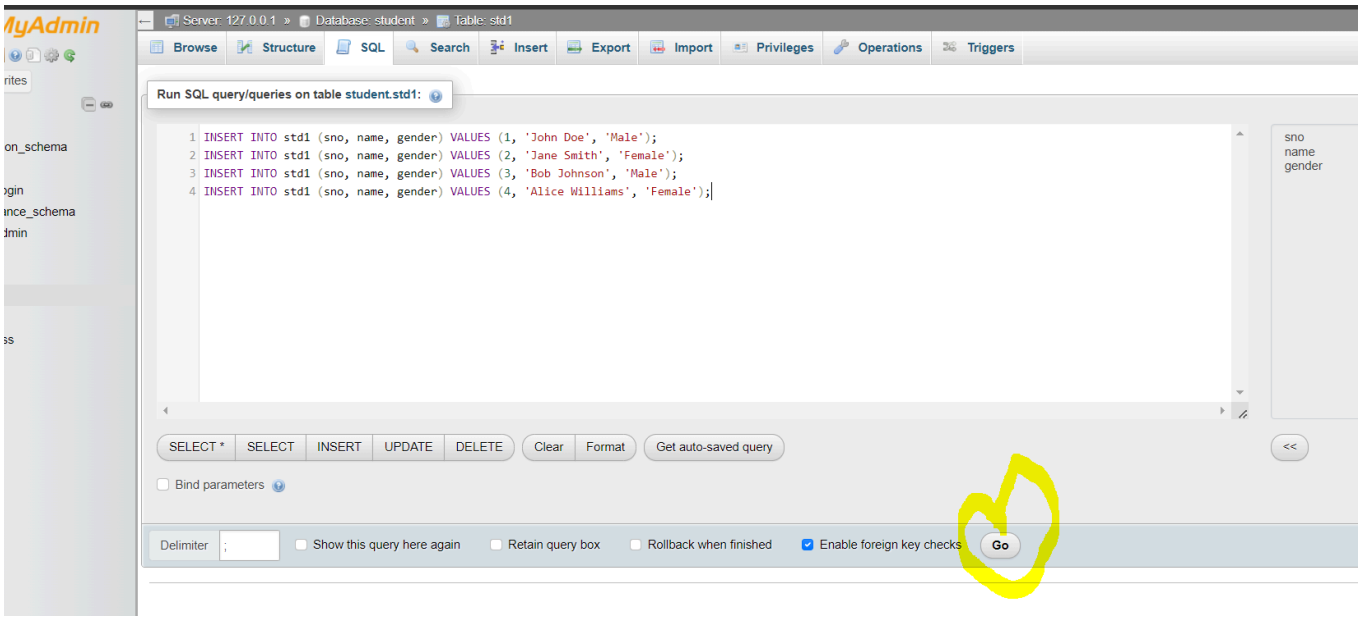


26. Write a PHP code to retrieve records from the std1 table and display the records in the tabular form as follows.

Student information

Sno	Name	Gender

INSERT ROWS IN THE TABLE:



TO EXECUTE (LATEST VERSION OF XAMPP):

```
<?php
// Create a connection
$conn = new mysqli("localhost", "root", "", "student");

// Check connection
if ($conn->connect_error) {
    die("Unable to connect to the database: " . $conn->connect_error);
}

$query = "SELECT * FROM std1";
$result = $conn->query($query);

if ($result) {
    $rowCount = $result->num_rows;
```

```
    if ($rowCount > 0) {
        echo "<table border='1' width='30%' height='30%' style='font-size:20pt;'>";
        echo "<tr><th>SNo</th><th>Name</th><th>Gender</th></tr>";

        while ($row = $result->fetch_assoc()) {
            echo "<tr><td>" . $row['sno'] . "</td><td>" . $row['name'] . "</td><td>" . $row['gender'] .
"</td></tr>";
        }

        echo "</table>";
    } else {
        echo "Records not found in the table";
    }

    $result->free(); // Free result set
} else {
    die("Unable to execute query: " . $conn->error);
}

// Close connection
$conn->close();
?>
```

TO WRITE:

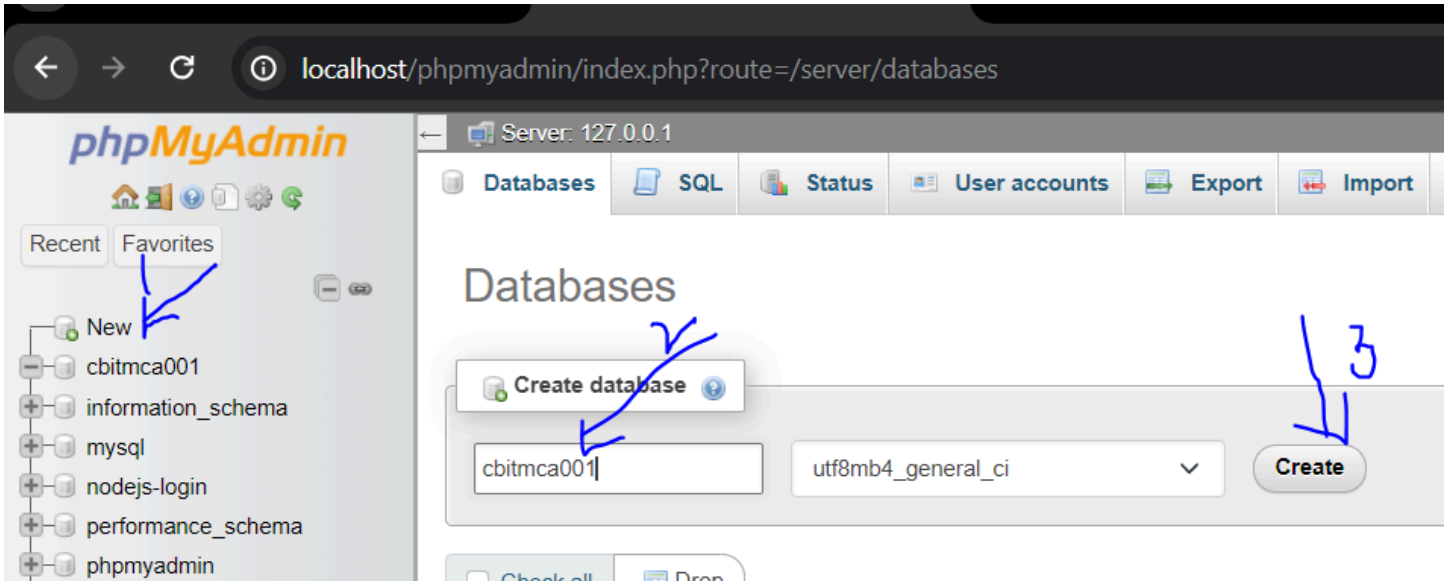
```
<?php
        mysql_connect("localhost","root","") or die("unable to Connect to database");
        mysql_select_db("student") or die("unable to open database");
        $q="select * from std1";
        $res=mysql_query($q) or die("unable to excute");
        $n=mysql_num_rows($res);
        if($n > 0)
        {
                echo "<table border='1' width='30%' height='30%' style='font-size:20pt;'>";
                echo "<tr><th>SNo</th><th>Name</th><th>gender</th></tr>";
                for($r=1;$r <=$n;$r++)
                {
                        $row=mysql_fetch_array($res);
                        echo
        "<tr><td>".$row[0]."</td><td>".$row[1]."</td><td>".$row[2]."</td></tr>";
                }
                echo "</table>";
        }
        else
```

```
            echo "records not found in the table";
        mysql_close();
?>
```

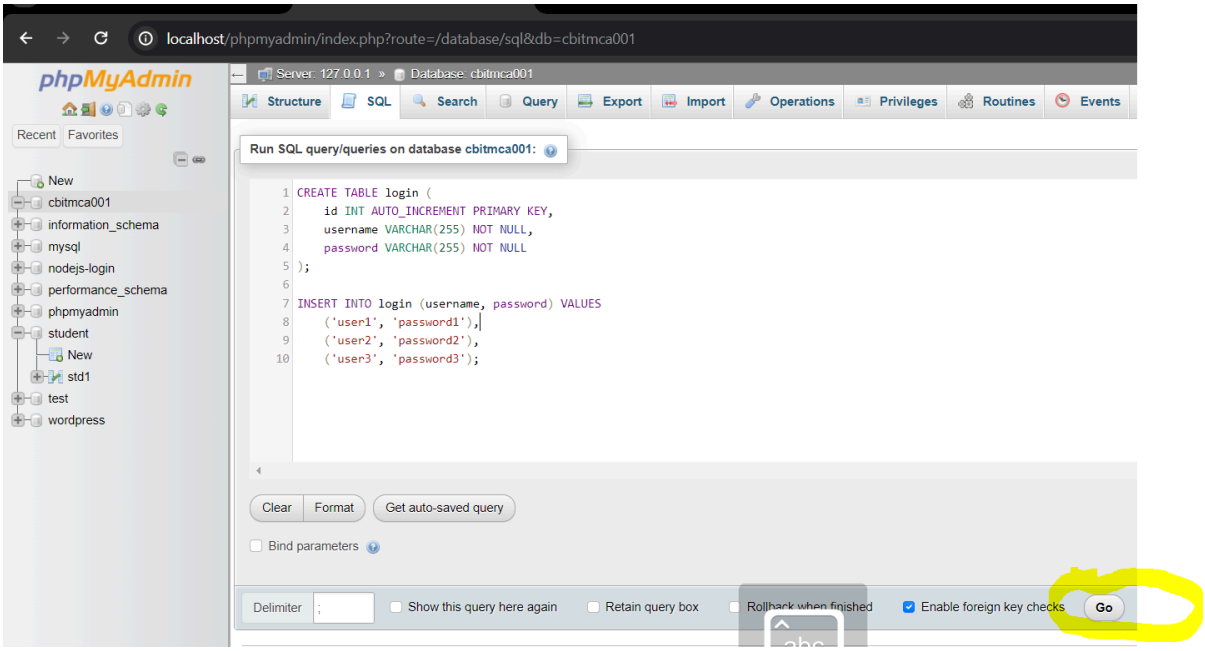
SNo	Name	Gender
1	John Doe	Male
2	Jane Smith	Female
3	Bob Johnson	Male
4	Alice Williams	Female

27. Write a PHP code to validate the user name and password which are entered in the form

TO EXECUTE (LATEST VERSION OF XAMPP):




```
CREATE TABLE login (
    id INT AUTO_INCREMENT PRIMARY KEY,
    username VARCHAR(255) NOT NULL,
    passcode VARCHAR(255) NOT NULL
);

INSERT INTO login (username, passcode) VALUES
    ('user1', 'password1'),
    ('user2', 'password2'),
    ('user3', 'password3');
```



TO WRITE:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>User Validation Verification</title>
</head>
<body>
    <form action="Validate1.php" method="post">
        Username: <input type="text" name="u" required>
        Password: <input type="password" name="p" required><br><br>
        <input type="submit" value="Validate">
        <input type="reset" value="Reset">
    </form>
</body>
</html>
```

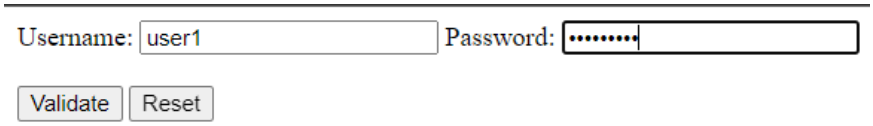
Validate1.php(SIR):

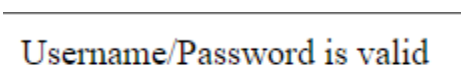
```
<?php
$user=$_REQUEST['u'];
$password=$_REQUEST['p'];
mysql_connect("localhost","root","") or die("unable to Connect");
mysql_select_db("cbitmca001") or die("database not exist");
$q = "SELECT * FROM login where Username='$user' and Passcode='$password'";
$result=mysql_query($q) or die("Error in connection");
if(mysql_num_rows($result)>0)
```

```
    echo "Username/Password is valid";
else
    echo "Invalid Username/Password";
mysql_close();
?>
```

Validate1.php(OURS):

```
<?php
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "cbitmca001";

$conn = new mysqli($servername, $username, $password, $dbname);

if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}

$user = $_POST['u'];
$password = $_POST['p'];

$stmt = $conn->prepare("SELECT * FROM login WHERE Username=? AND Passcode=?");
$stmt->bind_param("ss", $user, $password);
$stmt->execute();
$stmt->store_result();

if ($stmt->num_rows > 0) {
    echo "Username/Password is valid";
} else {
    echo "Invalid Username/Password";
}

$stmt->close();
$conn->close();
?>
```

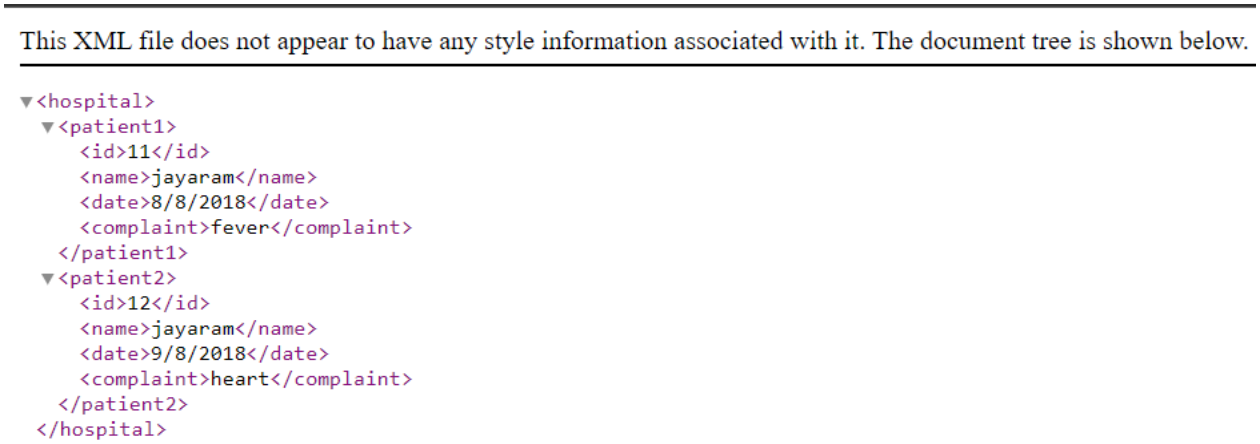




XML

28. Write an XML document to store the patient's information about the hospital

```
<?xml version="1.0" encoding="utf-8" ?>
<hospital>
        <patient1>
                <id>11</id>
                <name>jayaram</name>
                <date>8/8/2018</date>
                <complaint>fever</complaint>
        </patient1>
        <patient2>
                <id>12</id>
                <name>jayaram</name>
                <date>9/8/2018</date>
                <complaint>heart</complaint>
        </patient2>
</hospital>
```



This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<hospital>
  ▼<patient1>
     <id>11</id>
     <name>jayaram</name>
     <date>8/8/2018</date>
     <complaint>fever</complaint>
   </patient1>
  ▼<patient2>
     <id>12</id>
     <name>jayaram</name>
     <date>9/8/2018</date>
     <complaint>heart</complaint>
   </patient2>
 </hospital>
```

29. Write an XML document using an XSL style sheet to display the student's records and faculty records in a tabular form as follows.

Student Details

Sid	Sname

Staff Details

Fid	Fname

```
<?xml version="1.0" encoding="utf-8"?>
<?xml-stylesheet type="text/xsl" href="college.xsl"?>
<college>
   <student>
      <id>11</id>
      <name>jayaram</name>
   </student>
   <student>
      <id>12</id>
      <name>ram</name>
   </student>
   <staff>
      <id>33</id>
      <name>srinivas</name>
   </staff>
   <staff>
      <id>34</id>
      <name>srinu</name>
   </staff>
</college>
```

college.xsl:

```
<?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>
            <h1>Student Details</h1>
```

```
            <table border="1" width="20%" height="20%">
               <tr>
                  <th>Sid</th>
                  <th>Sname</th>
               </tr>
               <xsl:for-each select="college/student">
                  <tr>
                     <td>
                        <xsl:value-of select="id" />
                     </td>
                     <td>
                        <xsl:value-of select="name" />
                     </td>
                  </tr>
               </xsl:for-each>
            </table>

            <h1>Staff Details </h1>
            <table border="1" width="20%" height="20%">
               <tr>
                  <th>Fid</th>
                  <th>Fname</th>
               </tr>
               <xsl:for-each select="college/staff">
                  <tr>
                     <td>
                        <xsl:value-of select="id" />
                     </td>
                     <td>
                        <xsl:value-of select="name" />
                     </td>
                  </tr>
               </xsl:for-each>
            </table>
         </body>
      </html>
   </xsl:template>
</xsl:stylesheet>
```

Student Details

Sid	Sname
11	jayaram
12	ram

Staff Details

Fid	Fname
33	srinivas
34	srinu

30. Create a DTD for a catalog of cars, where each car has the child elements make, model, year, color, engine, number_of_doors, transmission_type, and accessories. The engine element has the child elements number_of_cylinders and fuel_system (carbureted or fuel-injected). The accessories element has the attributes radio, air_conditioning, power_windows, power_steering, and power_brakes, each of which is required and has the possible values yes and no. Entities must be declared for the names of popular car makes

```
<?xml version="1.0" encoding="UTF-16"?>
<!DOCTYPE cars [
   <!ELEMENT cars (catalog+)>
   <!ELEMENT catalog (make, model, year,color,engine, number_of_doors, transmission_type,
accessories)>
   <!ELEMENT make (#PCDATA)>
   <!ELEMENT model (#PCDATA)>
   <!ELEMENT color (#PCDATA)>
   <!ELEMENT engine (number_of_cylinders, fuel_system )>
   <!ELEMENT number_of_cylinders (#PCDATA)>
   <!ELEMENT fuel_system (#PCDATA)>
   <!ELEMENT number_of_doors (#PCDATA)>
   <!ELEMENT transmission_type (#PCDATA)>
   <!ELEMENT accessories (#PCDATA)>
   <!ATTLIST accessories radio CDATA #REQUIRED>
   <!ATTLIST accessories air_conditioning CDATA #REQUIRED>
   <!ATTLIST accessories power_windows CDATA #REQUIRED>
   <!ATTLIST accessories power_steering CDATA #REQUIRED>
   <!ATTLIST accessories power_steering CDATA #REQUIRED>
   <!ATTLIST accessories power_brakes CDATA #REQUIRED>
```

```
  <!ENTITY J "Jaguar">
  <!ENTITY L "Land Rover">
  <!ENTITY M "Mercedes">
]>
<cars_catalog>
  <catalog>
    <make>&J; </make>
    <model> 2009 </model>
    <color>blue hase</color>
    <engine>
      <number_of_cylinders>2</number_of_cylinders>
      <fuel_system>carbureted</fuel_system>
    </engine>
    <number_of_doors>4</number_of_doors>
    <transmission_type>automatic</transmission_type>
    <accessories radio="yes" air_conditioning="yes"
      power_windows="yes" power_steering="yes"
      power_brakes="yes"></accessories>
  </catalog>
  <catalog>
    <make>&L; </make>
    <model> 2021 </model>
    <color>Redolent Red</color>
    <engine>
      <number_of_cylinders>3</number_of_cylinders>
      <fuel_system>carbureted</fuel_system>
    </engine>
    <number_of_doors>4</number_of_doors>
    <transmission_type>CVT</transmission_type>
    <accessories radio="yes" air_conditioning="yes"
      power_windows="yes" power_steering="yes"
      power_brakes="yes"></accessories>
  </catalog>
  <catalog>
    <make>&M; </make>
    <model> 2020 </model>
    <color>Dark Seltzer</color>
    <engine>
      <number_of_cylinders>2</number_of_cylinders>
      <fuel_system>fuel injector</fuel_system>
    </engine>
    <number_of_doors>4</number_of_doors>
```

```
        <transmission_type>manual</transmission_type>
        <accessories radio="yes" air_conditioning="yes"
            power_windows="yes" power_steering="yes"
            power_brakes="yes"></accessories>
    </catalog>

</cars_catalog>
```

This XML file does not appear to have any style information associated with it. The document tree is shown below.


```
▼<cars_catalog>
  ▼<catalog>
    <make>Jaguar </make>
    <model> 2009 </model>
    <color>blue hase</color>
  ▼<engine>
      <number_of_cylinders>2</number_of_cylinders>
      <fuel_system>carbureted</fuel_system>
    </engine>
    <number_of_doors>4</number_of_doors>
    <transmission_type>automatic</transmission_type>
    <accessories radio="yes" air_conditioning="yes" power_windows="yes" power_steering="yes" power_brakes="yes"/>
  </catalog>
  ▼<catalog>
    <make>Land Rover </make>
    <model> 2021 </model>
    <color>Redolent Red</color>
  ▼<engine>
      <number_of_cylinders>3</number_of_cylinders>
      <fuel_system>carbureted</fuel_system>
    </engine>
    <number_of_doors>4</number_of_doors>
    <transmission_type>CVT</transmission_type>
    <accessories radio="yes" air_conditioning="yes" power_windows="yes" power_steering="yes" power_brakes="yes"/>
  </catalog>
  ▼<catalog>
    <make>Mercedes </make>
    <model> 2020 </model>
    <color>Dark Seltzer</color>
  ▼<engine>
      <number_of_cylinders>2</number_of_cylinders>
      <fuel_system>fuel injector</fuel_system>
    </engine>
    <number_of_doors>4</number_of_doors>
    <transmission_type>manual</transmission_type>
    <accessories radio="yes" air_conditioning="yes" power_windows="yes" power_steering="yes" power_brakes="yes"/>
  </catalog>
</cars_catalog>
```