

WEB TECHNOLOGIES

LAB RECORD

LAB CODE: 20ITL401



DEPARTMENT OF INFORMATION TECHNOLOGY

Bapatla Engineering College :: Bapatla

(Autonomous)

(Affiliated to Acharya Nagarjuna University)

BAPATLA – 522101, A.P

BAPATLA ENGINEERING COLLEGE

DEPARTMENT OF INFORMATION TECHNOLOGY

WEB-TECHNOLOGY



CERTIFICATE

This is to certify that the experiments recorded in this book is the bonafide work of _____ bearing Regd. No. _____ a student of **2/4 IT- B.Tech** (Information Technology) carried out in the subject **Web Technology** Lab in the Bapatla Engineering College, Bapatla during the year----- of experiments recorded are_____.

Prof **N. Sivaram Prasad**

LECTURER-IN-CHARGE

HEAD OF THE DEPARTMENT

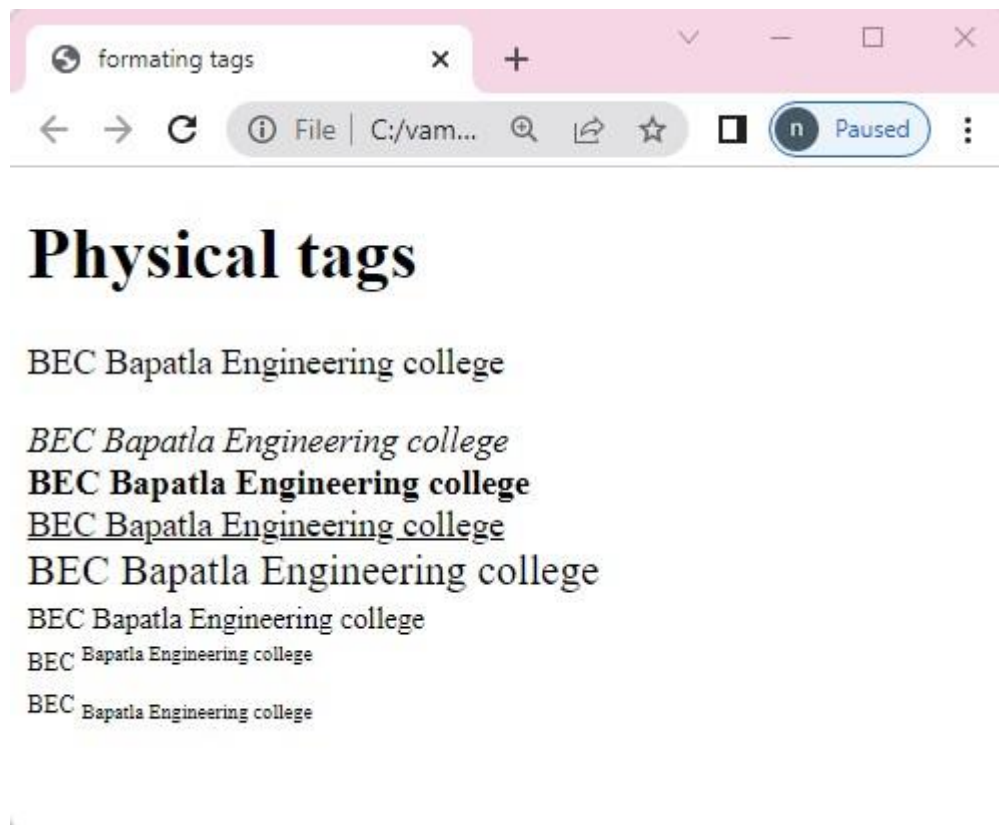
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Experiment: 1 a)**Date:****Aim:** Demonstrate all the basic tags in HTML 5 for Formatting tags**a. Physical tags****Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>formatting tags</title>
  </head>
  <body>
    <h1>Physical tags</h1>
    <p>BEC Bapatla Engineering college</p>
    <i>BEC Bapatla Engineering college</i><br>
    <b>BEC Bapatla Engineering college</b><br>
    <u>BEC Bapatla Engineering college</u><br>
    <big>BEC Bapatla Engineering college</big><br>
    <small>BEC Bapatla Engineering college</small><br>
    BEC <sup> Bapatla Engineering college</sup><br>
    BEC <sub> Bapatla Engineering college</sub><br>
  </body>
</html>
```

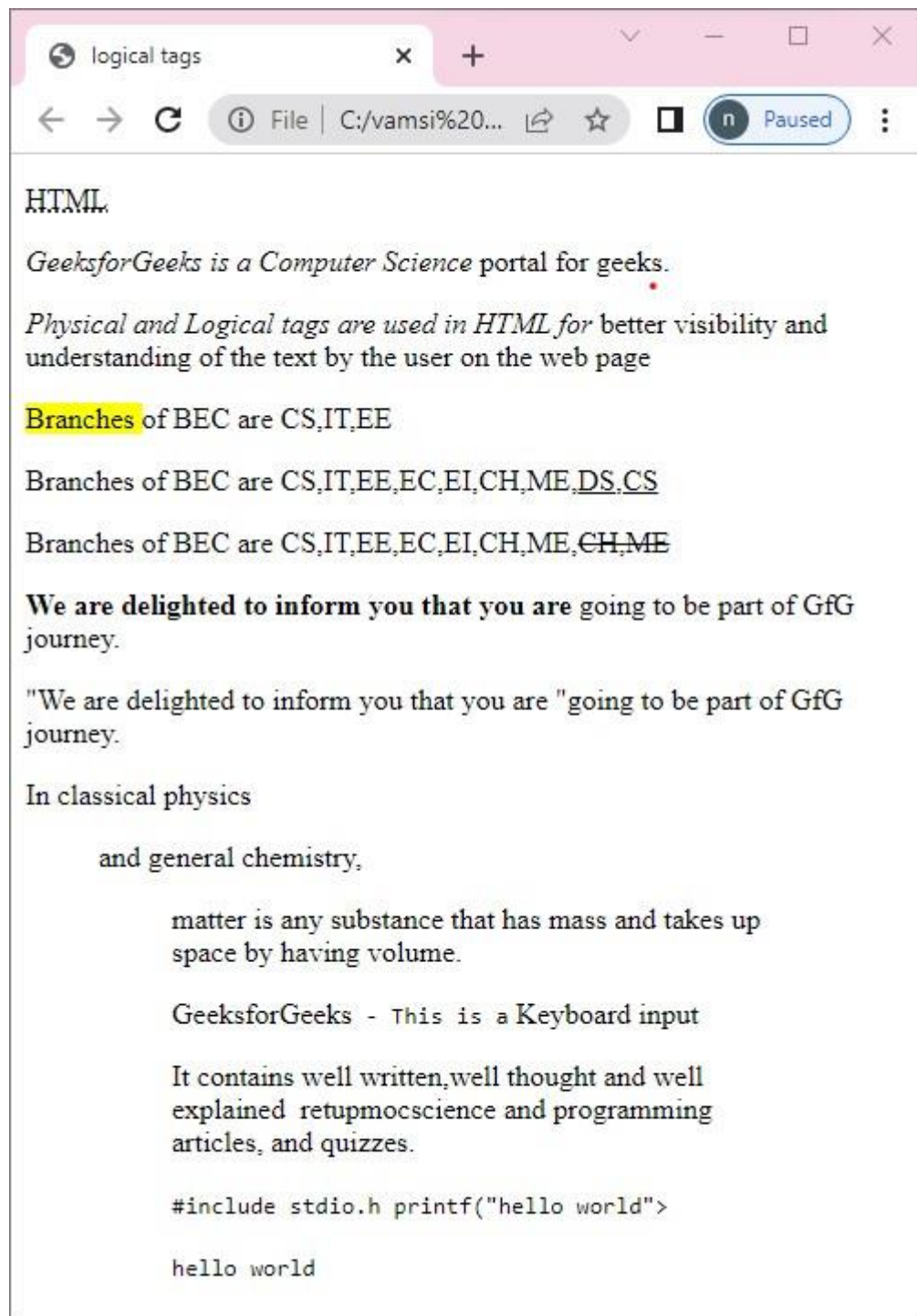
Output:

b. Logical tags**Source code:**

```

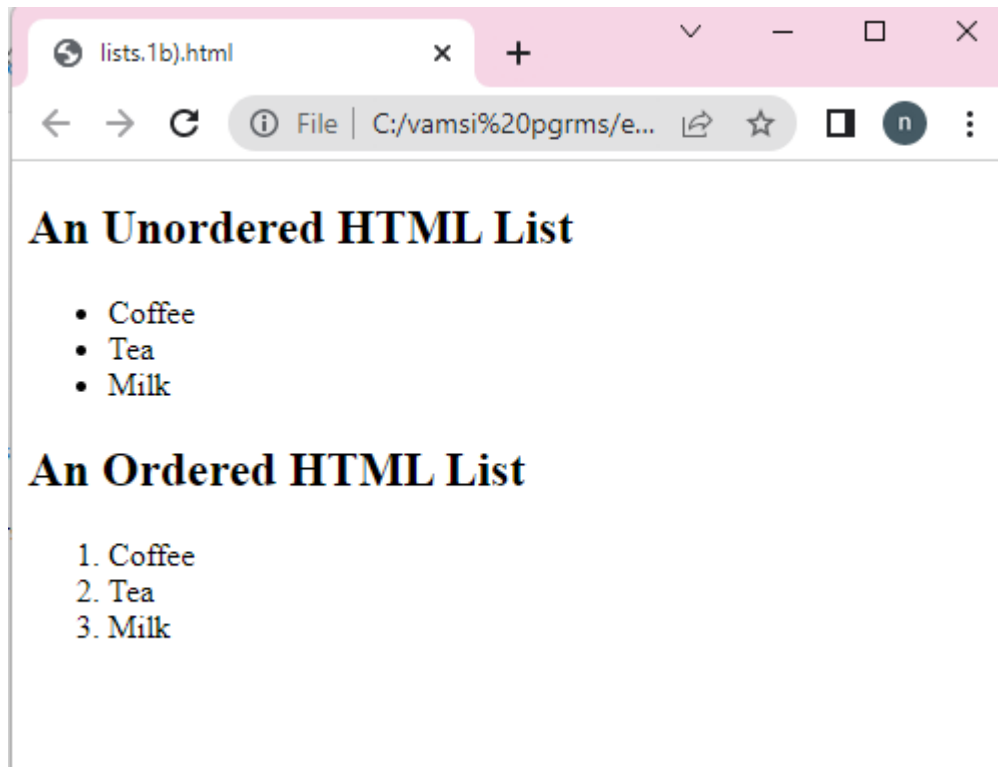
<!DOCTYPE html>
<html>
  <head>
    <title>logical tags</title>
  </head>
  <body>
    <p><abbr title="Hyper Text Markup language">
    HTML</abbr></P>
    <p><dfn title="geeks"> GeeksforGeeks  is a Computer Science
    </dfn>portal for geeks.</P>
    <p><em>Physical and Logical tags are used in HTML for
    </em>better visibility and understanding of the text by
    the user on the web page</p>
    <p><mark>Branches </mark>of BEC are CS,IT,EE</p>
    <p>Branches of BEC are CS,IT,EE,EC,EI,CH,ME,
    <ins>DS,CS</ins></p>
    <p>Branches of BEC are CS,IT,EE,EC,EI,CH,ME,<del>
    CH,ME</del></p>
    <p><strong>We are delighted to inform you that you are
    </strong>going to be part of GfG journey.</p>
    <p><q>We are delighted to inform you that you are </q>going
    to be part of GfG journey.</q></p>
    <p>In classical physics <blockquote>and general chemistry,
    <blockquote> matter is any substance that has mass
    and takes up space by having volume.</p>
    <p> GeeksforGeeks<kbd> -This is a</kbd>Keyboard
    input</p>
    <p> It contains well written,well thought and well explained
    <bdo dir="rtl"> computer </bdo> science and
    programming articles, and quizzes.</p>
    <p><code>#include stdio.h printf("hello world"></code></p>
    <p><samp>hello world</samp></p>
  </body>
</html>

```

Output:

Experiment: 1 b)**Date:****Aim:** Demonstrate Representing type of list in HTML 5**Source code:**

```
<!DOCTYPE html>
<html>
  <body>
    <h1>ordered list</h1>
    <ol>
      <li>apple</li>
      <li>banana</li>
      <li>mango</li>
    </ol>
    <h2>fruits list</h2>
    <ul>
      <li>apple</li>
      <li>banana</li>
      <li>mango</li>
    </ul>
    <dl>
      <dt>BEC</dt>
      <dd>Bapatla Enginnering College</dd>
    </dt>
  </body>
</html>
```

Output:

Experiment: 1 c)**Date:****Aim:** Demonstrate time table creation of list in HTML 5**Source code:**

```

<!DOCTYPE html>
<html>
  <head>
    <title>Time Table</title>
  </head>
  <body>
    <div style="width:2%;float:left" align="right">
      
    </div>
    <div style="width:98%;float:center">
      <p align="center"><b>Bapatla Engineering College </span>
        </b> <br> (Autonomus) <br>
        Department of Information Technology <br>
        <span style="color:brown"> <i>Class Time Table for the
        <span style="background-color:yellow"><u> A.Y2021-
        22,IV Semester </u> </span> </i> </span> </p>
    </div>
    <hr>
    <div style="float:left">
      <table>
        <td colspan="2"><i>w.e.f:</i>28-03-2022</td>
        <td><pre>  </pre></td>
        <td colspan="2"><i>Class:</i>2 II B.Tech,IT</td>
        <td><pre>  </pre></td>
        <td colspan="2"><i>Section:</i>2A</td>
        <td><pre>  </pre></td>
        <td colspan="2"><i>Room No:</i>2RPLH-03</td>
      </table>
      <table border="2">
        <tr style="background-color:orange">
          <th>Time <br>Day</th>
          <th>7:30-<br>8:20</th>
          <th>8:20-<br>9:10</th>
          <th>9:10-<br>10:00</th>
          <th rowspan="7">B<br>R<br>E<br>A<br>K</th>
          <th>10:30-<br>11:20</th>
          <th>11:20-<br>12:10</th>
          <th>12:10-<br>01:00</th>
        </tr>
        <tr align="center">
          <th style="background-color:orange">Mon</th>

```

```

        <td>PHEV</td>
        <td>DAA</td>
        <td><small>PYTHON<br>
        PROGRAMMING</small></td>
        <td>WT</td>
        <td>p&s </td>
        <td>DBMS</td>

</tr>
<tr align="center">
    <th style="background-color:orange">Tues</th>
    <td colspan="3">WT/RDBMS LAB</td>
    <td>DBMS</td>
    <td><small>PYTHON<br>
    PROGRAMMING</small></td>
    <td>WT</td>
</tr>
<tr align="center">
    <th style="background-color:orange">Wed</th>
    <td>p&s</td>
    <td>DAA</td>
    <td>WT</td>
    <td colspan="3">RDBMS/Python Prog.lab </td>
</tr>
<tr align="center">
    <th style="background-color:orange">Thus</th>
    <td>PHEV</td>
    <td><small>PYTHON<br>
    PROGRAMMING</small></td>
    <td>DBMS</td>
    <td>p&s </td>
    <td>WT</td>
    <td>DAA</td>
</tr>
<tr align="center">
    <th style="background-color:orange">Fri</th>
    <td colspan="3">Python Prog./WT Lab</td>
    <td>PHEV</td>
    <td>DAA</td>
    <td>DBMS</td>
</tr>
<tr align="center">
    <th style="background-color:orange">Sat</th>
    <td>DAA</td>
    <td>DBMS</td>
    <td>p&s </td>

```

```

        <td>PHEV</td>
        <td>WT</td>
        <td style="background-color:green">Mentoring</td>
    </tr>
</table>
</div>
<div style="width:80%;float:right">
    <table>
        <th style="background-color:blue;color:white">Section
        Coordinator: Mr.K.Suresh Kumar,Asst.Professor</th>
    </table>
</div>
<div style="float:left">
    <table>
        <tr style="background-color:orange" align="left">
            <th>Sub.Code</th>
            <th>Sub.Name</th>
            <th>Faculty.Name</th>
            <th>Sub.Code</th>
            <th>Sub.Name</th>
            <th>Faculty.Name</th>

        </tr>
        <tr align="left">
            <th>20IT401/MA03</th>
            <td>P&S </td>
            <td>Mr.I.Pothuraju </td>
            <th>20ITL401</th>
            <td>WT Lab</td>
            <td>Mr.Sk.Mabasha</td>

        </tr>
        <tr align="left">
            <th>20IT402</th>
            <td>WT</td>
            <td>Mr.Sk.Mabasha</td>
            <th>20ITL402</th>
            <td>RDBMS Lab</td>
            <td>Mr.P.Ravi Kumar</td>

        </tr>
        <tr align="left">
            <th>20IT403</th>
            <td>DBMS</td>
            <td>Mr.P.Ravi Kumar</td>
            <th>20ITL403 </th>
            <td>Python</td>

```

```

                <td>Mr.K.Suresh Kumar</td>

            </tr>
        <tr align="left">
            <th>20IT404</th>
            <td>DAA</td>
            <td>Prof.N.Sivarama Prasad</td>
            <th>SO02</th>
            <td>Prog.Lab</td>


        </tr>
        <tr align="left">
            <th>MC02</th>
            <td>PEHV</td>
            <td>Dr.K.Srinivasa Rao</td>

        </tr>
    </div>
</table>

<hr>
<div style="width:100;float:left">

</body>
</html>
```

Output:



Bapatla Engineering College

(Autonomus)

Department of Information Technology

Class Time Table for the A.Y2021-22, IV Semester

w.e.f:28-03-2022

Class:2 II B.Tech,IT

Section:2A

Room No:2RPLH-03

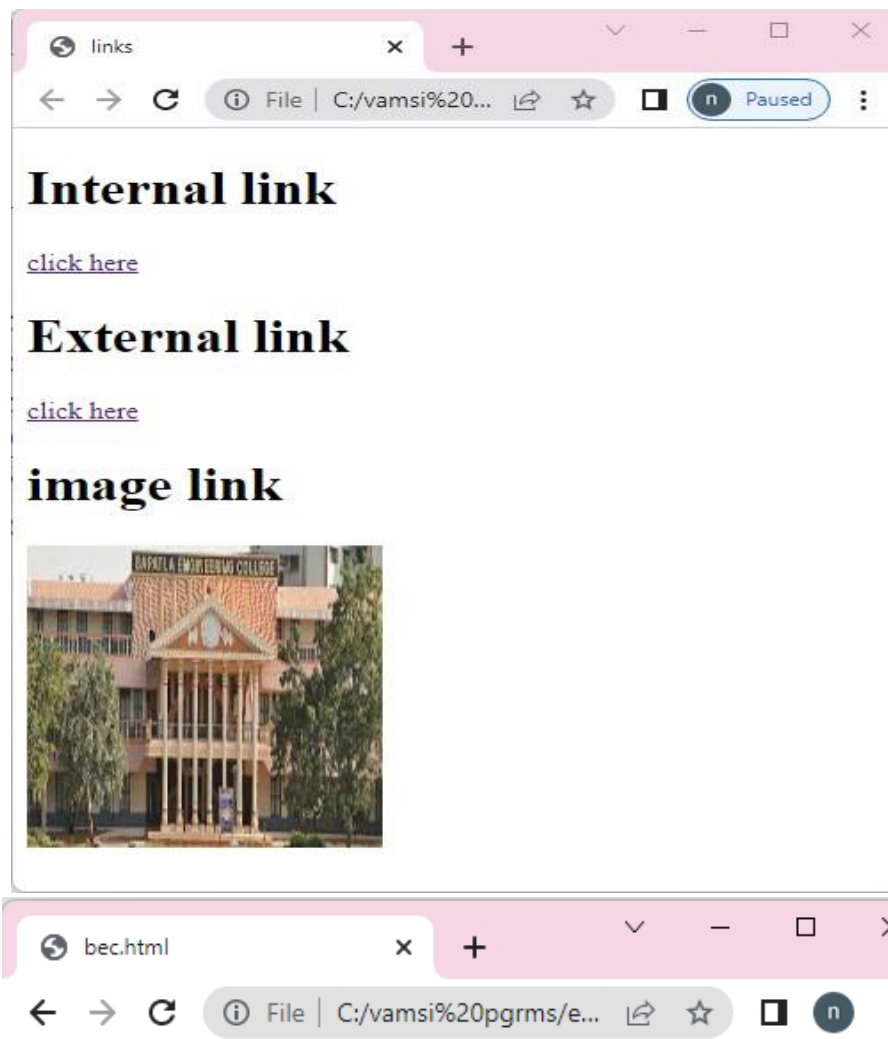
Time Day	7:30-8:20	8:20-9:10	9:10-10:00	BREAK	10:30-11:20	11:20-12:10	12:10-01:00
Mon	PHEV	DAA	PYTHON PROGRAMMING		WT	p&s	DBMS
Tues	WT/RDBMS LAB				DBMS	PYTHON PROGRAMMING	WT
Wed	p&s	DAA	WT		RDBMS/Python Prog.lab		
Thurs	PHEV	PYTHON PROGRAMMING	DBMS		p&s	WT	DAA
Fri	Python Prog./WT Lab				PHEV	DAA	DBMS
Sat	DAA	DBMS	p&s		PHEV	WT	Mentoring

Section Coordinator: Mr.K.Suresh Kumar,Asst.Professor

Sub.Code	Sub.Name	Faculty.Name	Sub.Code	Sub.Name	Faculty.Name
20IT401/MA03	P&S	Mr.I.Pothuraju	20ITL401	WT Lab	Mr.Sk.Mabasha
20IT402	WT	Mr.Sk.Mabasha	20ITL402	RDBMS Lab	Mr.P.Ravi Kumar
20IT403	DBMS	Mr.P.Ravi Kumar	20ITL403	Python /	Mr.K.Suresh Kumar
20IT404	DAA	Prof.N.Sivarama Prasad	SO02	Prog.Lab	
MC02	PEHV	Dr.K.Srinivasa Rao			

Experiment: 2 a)**Date:****Aim:** Demonstrate internal link, external link, image as link type of list in HTML 5**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>links</title>
  </head>
  <body>
    <h1>Internal link</h1>
    <a href="bec.html">click here</a>
    <h1>External link</h1>
    <a href="http://www.becbapatla.ac.in/">click here</a>
    <h1>image link</h1>
    <a href="bec.html"></a>
  </body>
</html>
```


Output:



Experiment: 1 b)**Date:****Aim:** Demonstrate id using frames in HTML 5**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>Gmail</title>
  </head>
  <frameset rows="30%,40%,30%">
    <frame src="header.html" name="header"/>
    <frameset cols="40%,60%">
      <frame src="nav.html" name="aside"/>
      <frame src="" name="section"/>
    </frameset>
    <frame src="footer.html" name="footer"/>
  </frameset>
</html>
```

Header.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>head</title>
  </head>
  <body>
    <h2>GMAIL</h2>
  </body>
</html>
```

Nav.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>NAVIGATION</title>
  </head>
  <body>
    <nav>
      <a href="Inbox.html" target="section">inbox</a><br>
      <a href="sent.html" target="section">sent</a><br>
    </nav>
  </body>
</html>
```

Inbox.html

```
<!DOCTYPE html>
<html>
```

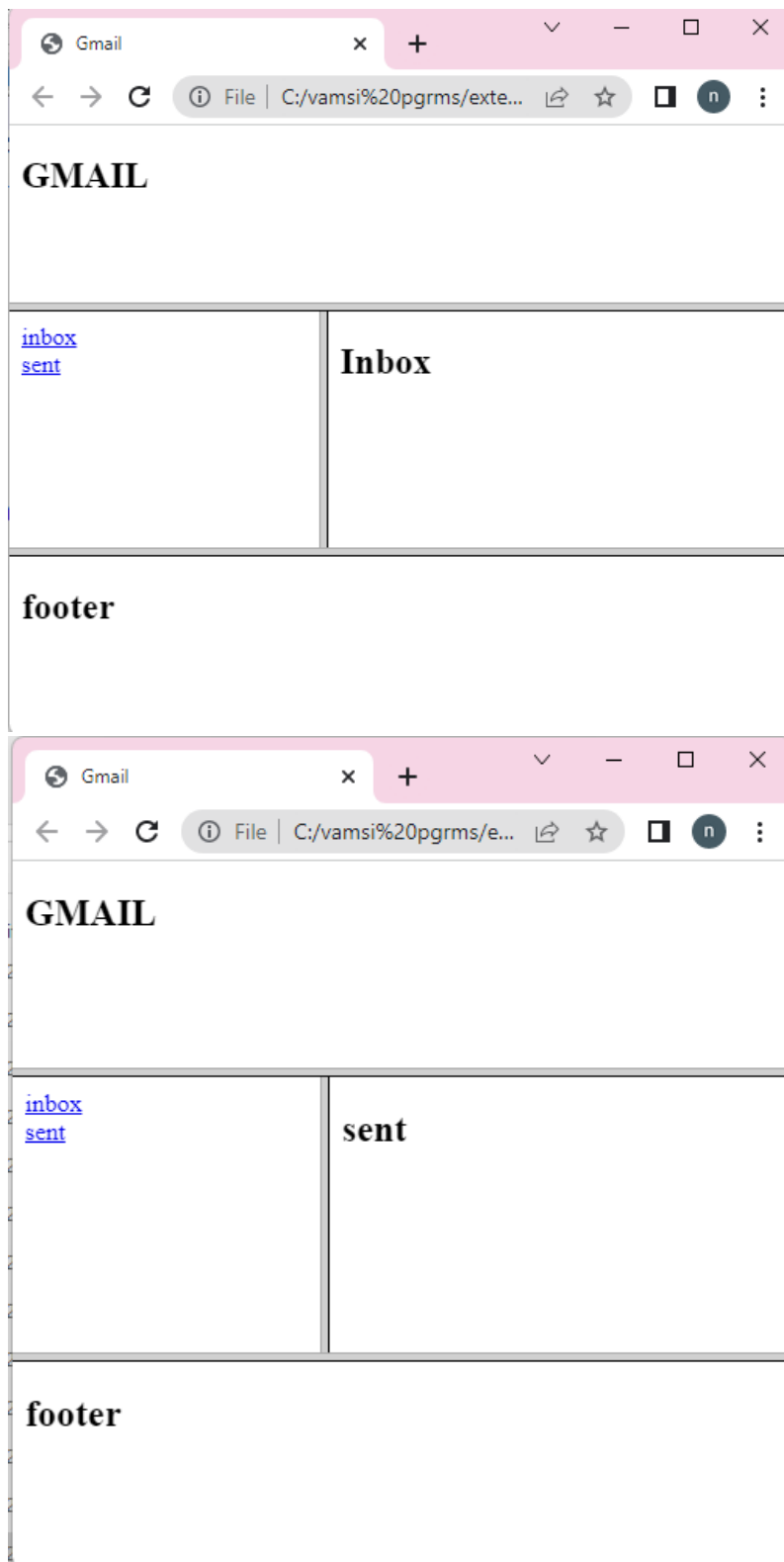
```
<head>
  <title>Inbox</title>
</head>
<body>
  <h2>Inbox</h2>
</body>
</html>
```

Sent.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>sent</title>
  </head>
  <body>
    <h2>sent</h2>
  </body>
</html>
```

Footer.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>footer</title>
  </head>
  <body>
    <h2>footer</h2>
  </body>
</html>
```

Output:

Experiment: 1 c)**Date:****Aim:** Demonstrate image map in HTML 5**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>Image Map</title>
  </head>
  <body>
    
    <map name="india">
      <area shape="circle" coords="200,400,50"
      href="https://ap.nic.in/">
      <area shape="rect" coords="150,440,200,490"
      href="https://www.tnpsc.in/home.html">
    </map>
  </body>
</html>
```

Output:

Experiment: 3 a**Date:****Aim:** a html document to create registration form using all input fields**Source code:**

```

<!DOCTYPE html>
<html>
  <head>
    <title> forms </title>
  </head>
  <body >
    <div style="background-color:aqua">
      <h1 align="center">Register Here</h1>
      <form action="header.html">
        <label>Name:</label>
        <input type="text" name="name"></input></br><br>
        <label>Father Name:</label>
        <input type="text" name="Fame"></input></br><br>
        <label> Mother Name:</label>
        <input type="text" name="Mname"></input></br><br>
        <label>Phone No:</label>
        <input type="text" name="phnno"
        maxlength="10"></input></br><br>
        <label>Dob:</label>
        <input type="date" name="dob"></input></br><br>
        <label>Blood Group:</label>
        <select>
          <option > select</option></br>
          <option > O</option></br>
          <option > O+</option></br>
          <option > A</option></br>
          <option > A+</option></br>
        </select><br><br>
        <label>Gmail</label>
        <input type="email" name="gmail"></input></br><br>
        <label>Gender:</label>
        <input type="radio" name="gen">Male</input>
        <input type="radio" name="gen">female</input>
        <input type="radio"
        name="gen">Others</input><br><br>

        <label>Like of Interest:</label>
        <input type="checkbox" name="course"> C</input>
        <input type="checkbox" name="course"> C++</input>
        <input type="checkbox" name="course"> java</input>
        <input type="checkbox" name="course">

```



```
        Python</input><br><br>
        <input type="submit" value="submit" >
        <input type="reset" value="reset">
    </div>
</form>
</body>
</html>
```

Output:

The image displays two screenshots of a web browser window showing a registration form titled "Register Here".

Top Screenshot (Empty Form):

- Browser tabs: forms
- Address bar: File | C:/vamsi%20...
- Form fields:
 - Name:
 - Father Name:
 - Mother Name:
 - Phone No:
 - Dob:
 - Blood Group:
 - Gmail:
 - Gender: ☐ Male ☐ female ☐ Others
 - Like of Interest: ☐ C ☐ C++ ☐ java ☐ Python
- Buttons: submit, reset

Bottom Screenshot (Filled Form):

- Browser tabs: forms
- Address bar: File | C:/vamsi%20pgrms/ex...
- Form fields:
 - Name:
 - Father Name:
 - Mother Name:
 - Phone No:
 - Dob:
 - Blood Group:
 - Gmail:
 - Gender: ☒ Male ☐ female ☐ Others
 - Like of Interest: ☒ C ☒ C++ ☒ java ☒ Python
- Buttons: submit, reset

Experiment: 3 b**Date:**

Aim: a html document to demonstrate to create a form to demonstrate label, textarea, legend, option group, select

Source code:

```
<!DOCTYPE html>
<html>
  <head>
    <title>FORMs all</title>
  </head>
  <body>
    <form>
      <h1>registration form</h1>
      <label>address</label>
      <input type="text" name="address"></input> <br><br>
      <label>Blood group:</label>
      <select>
        <option>select</option>
        <option>A+</option>
        <option>B+</option>
        <option>AB+</option>
        <option>A-</option>
        <option>B-</option>
        <option>AB-</option>
      </select><br>
      <label>textarea</label>
      <textarea rows="3" cols="100"> </textarea>
      <legend style="background-color:blue;color:white">student details</legend>
      <optgroup label="Engineering colleges">
        <option>BEC</option>
        <option>GEC</option>
        <option>LBRCE</option>
      </optgroup>
    </form>
  </body>
</html>
```

Output:

FORMs all

File | C:/vamsi%20... | Paused

registration form

address

Blood group:

textarea

student details

Engineering colleges

BEC

GEC

LBRCE

forms | FORMs all

File | C:/vamsi%20pgrms/ex... | Paused

registration form

address

Blood group:

textarea

thimmapuram edlapadu (md)

student details

Engineering colleges

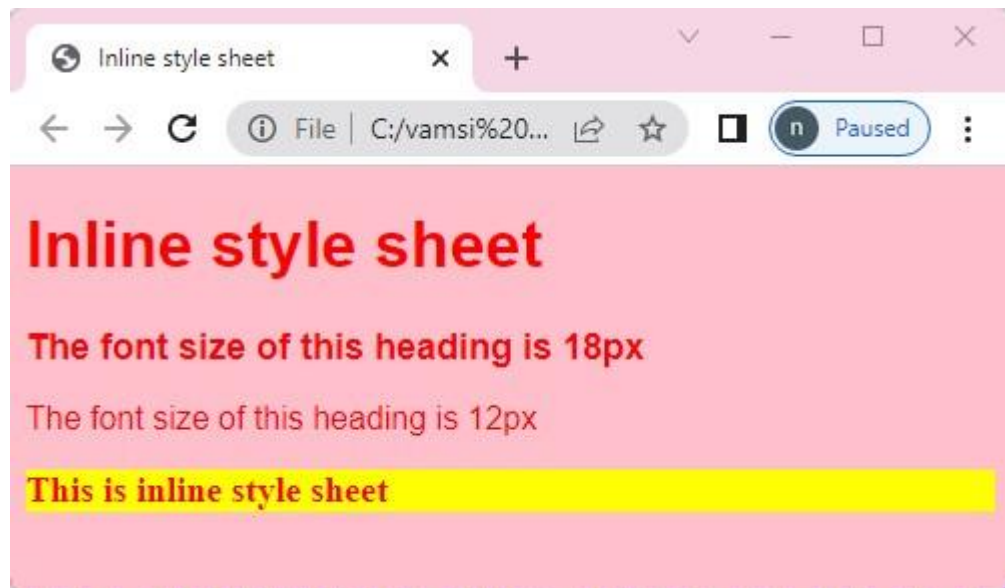
BEC

GEC

LBRCE

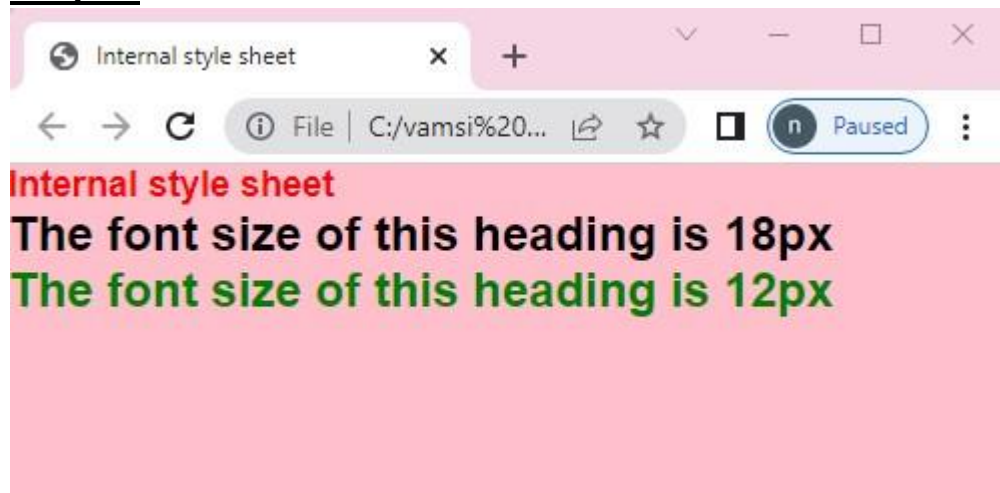
Experiment: 4 a)**Date:****Aim:** Demonstrate inline, internal, external sheets in CSS**a. Inline sheet****Source code:**

```
<!DOCTYPE html>
<html>
<head>
  <title>Inline style sheet</title>
</head>
<body style="color:red;background-color:pink;font-family:sans-serif">
  <h1>Inline style sheet</h1>
  <h1 style="font-size:18px">The font size of this heading is
    18px</h1>
  <p style="font-size=12px">The font size of this heading is
    12px</p>
  <h1 style="color:#ff0000;background-color:#ffff00;font-
    family:Ariel;font-size:18px">
    This is inline style sheet
  </h1>
</body>
</html>
```

Output:

a. Internal style**Source code:**

```
<!DOCTYPE html>
<html>
<head>
  <title>Internal style sheet</title>
  <style>
    *{
      margin:0;
    }
    body{
      background-color:pink;
      font-family:sans-serif;
    }
    h1{
      font-size:18px;
      color:red;
    }
    p{
      font-size=12px;
      color:green;
    }
  </style>
</head>
<body>
  <h1>Internal style sheet</h1>
  <h2>The font size of this heading is 18px</h2>
  <p>The font size of this heading is 12px</p>
</body>
</html>
```

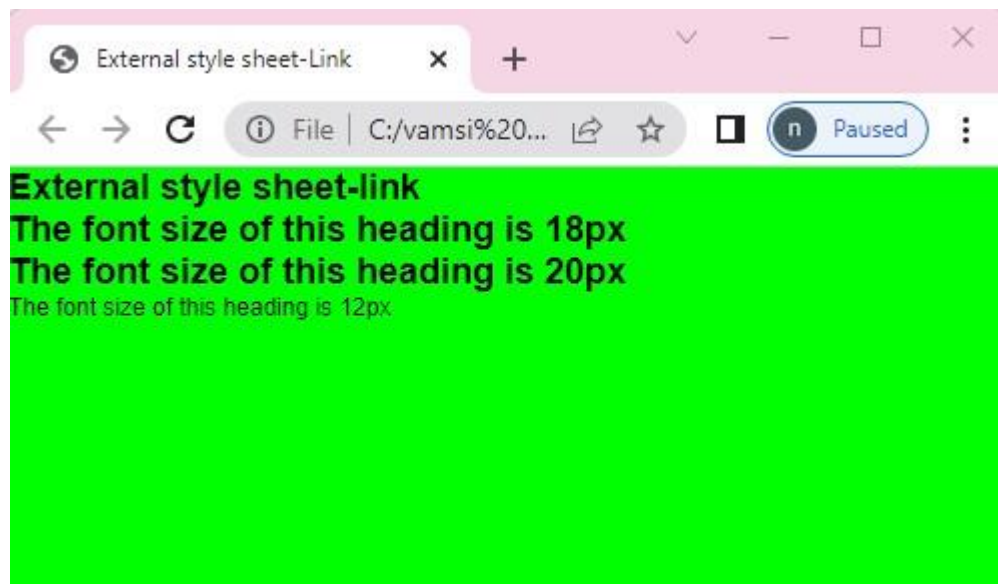
Output:

b. External sheet**Link :****Source code:**

```
<!DOCTYPE html>
<html>
<head>
  <title>External style sheet-import</title>
  <style type="text/css">
    @import url("externalstylesheet.css");
  </style>
</head>
<body>
  <h1>External style sheet-import</h1>
  <h1>The font size of this heading is 18px</h1>
  <p>The font size of this heading is 12px</p>
</body>
</html>
```

externalstylesheet.css

```
*{
  margin:0;
}
body
{
  color:#000000;
  background-color:#00ff00;
  font-family:sans-serif;
}
h1
{
  font-size:18px;
}
p
{
  font-size:12px;
}
```

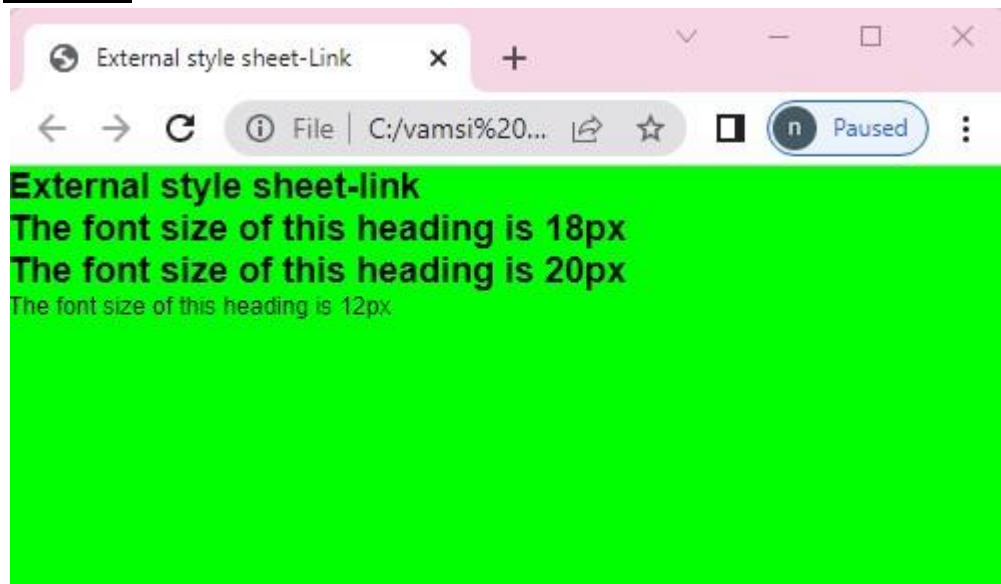
Output:

Import:

```
<!DOCTYPE html>
<html>
<head>
  <title>External style sheet-import</title>
  @import url("externalstylesheetcss.css");
</head>
<body>
  <h1>External style sheet-import</h1>
  <h1>The font size of this heading is 18px</h1>
  <p>The font size of this heading is 12px</p>
</body>
</html>
```

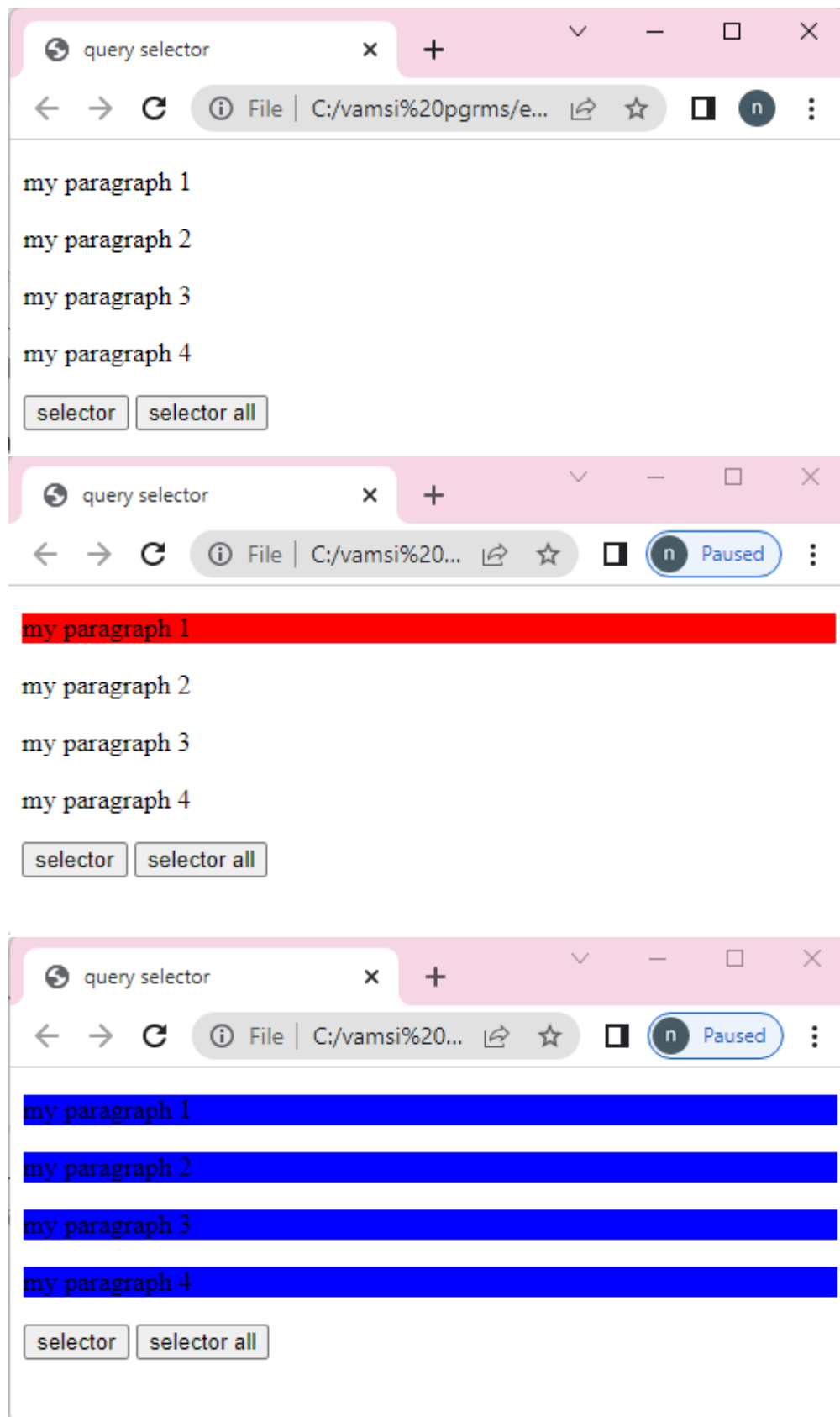
externalstylesheet.css

```
*{
  margin:0;
}
body
{
  color:#000000;
  background-color:#00ff00;
  font-family:sans-serif;
}
h1
{
  font-size:18px;
}
p
{
  font-size:12px;
}
```

Output:

Experiment: 4 b)**Date:****Aim:** Demonstrate Query selector in CSS**Source code:**

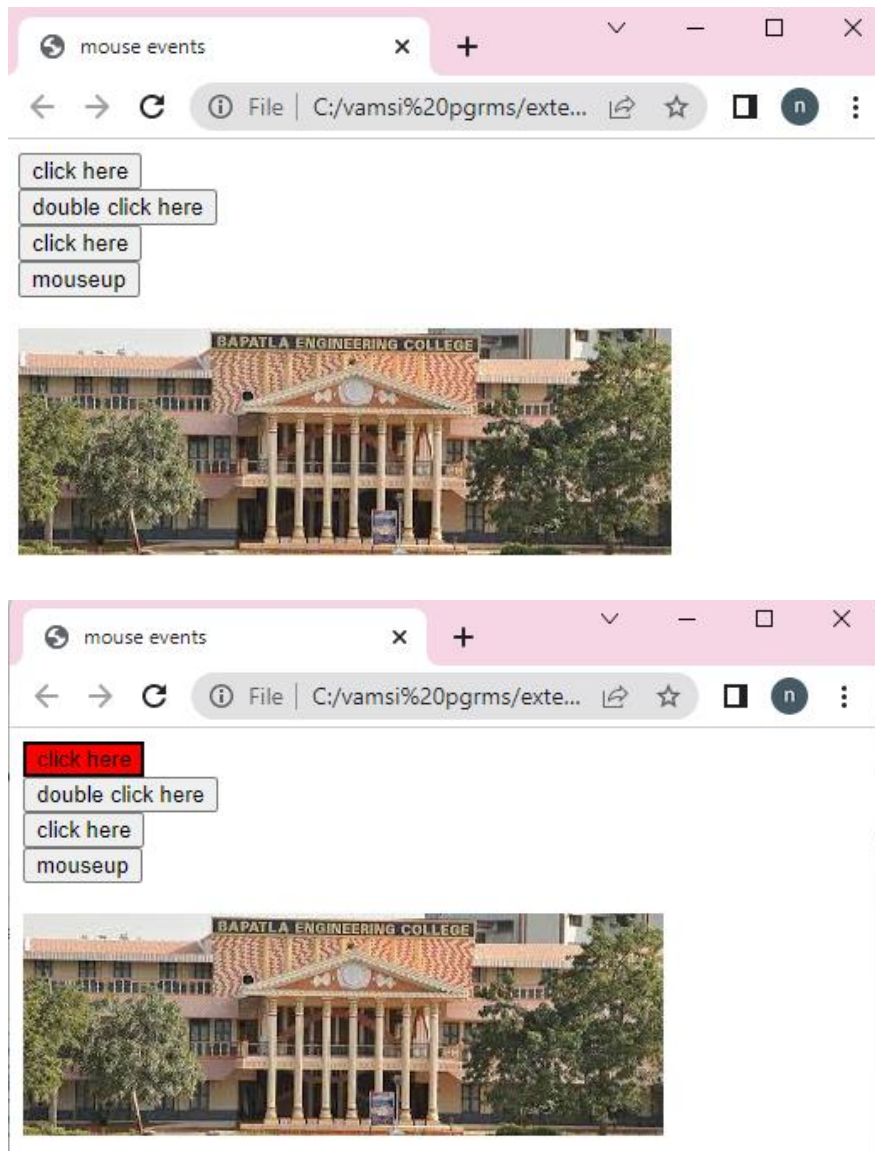
```
<!DOCTYPE html>
<html>
  <head>
    <title>query selector</title>
    <script type="text/javascript">
      function changecss()
      {
        document.querySelector("p").style.background="red";
      }
      function changecssall()
      {
        list=document.querySelectorAll("p");
        for(var i=0;i<list.length;i++)
        {
          list[i].style.background="blue";
        }
      }
    </script>
  </head>
  <body>
    <p>my paragraph 1</p>
    <p>my paragraph 2</p>
    <p>my paragraph 3</p>
    <p>my paragraph 4</p>
    <button onclick="changecss()">selector</button>
    <button onclick="changecssall()">selector all</button>
  </body>
</html>
```

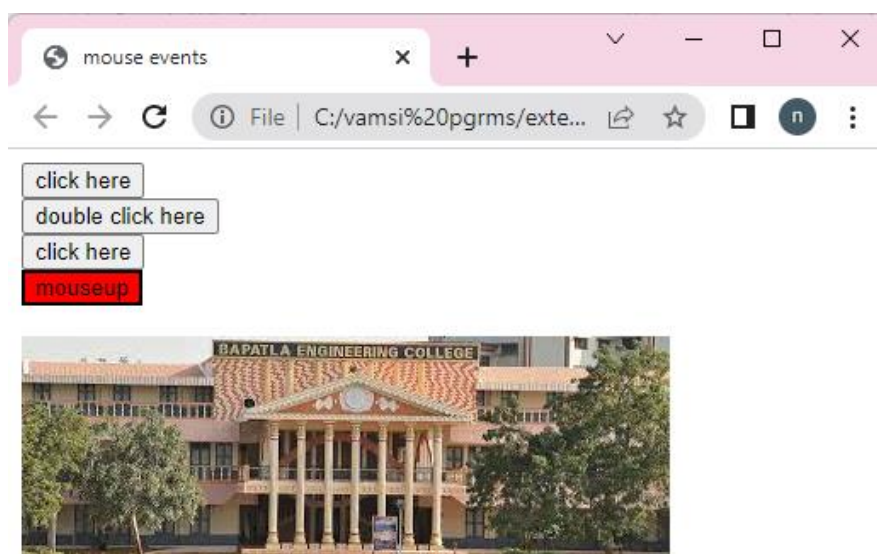
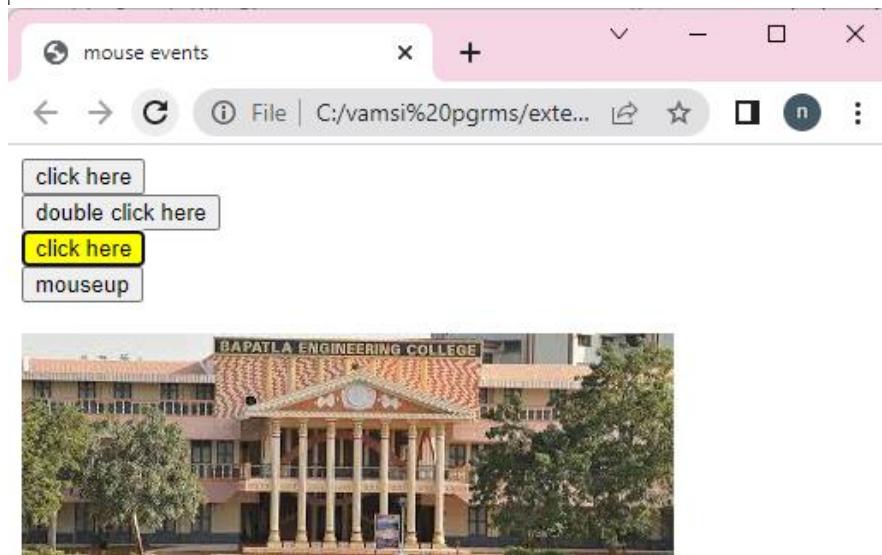
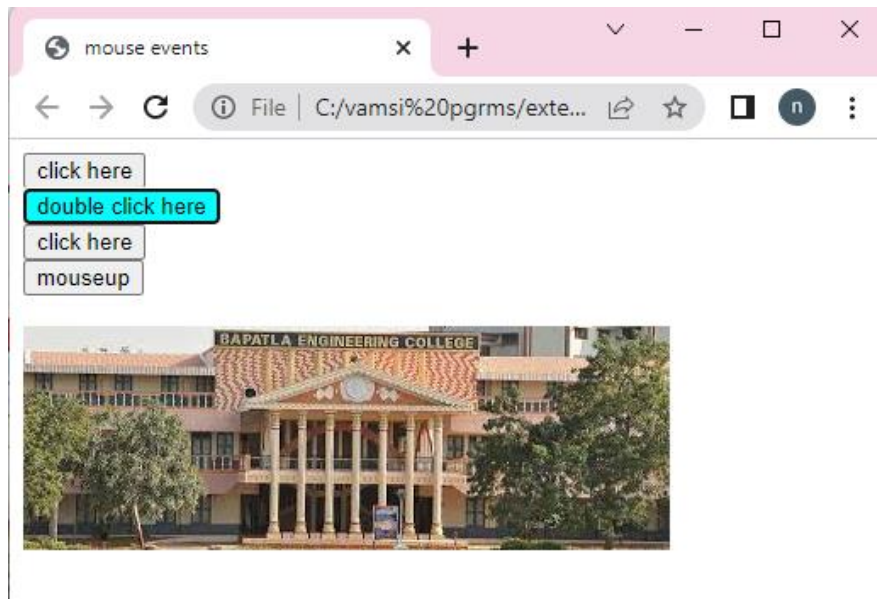
Output:

Experiment: 5 a**Date:****Aim:** a java script to demonstrate mouse event**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>mouse events</title>
    <style>
      div{
        border:2px;
      }
    </style>
    <script>
      function msg()
      {
        document.getElementById("button").style.backgroundColor="red";
      }
      function dbmsg()
      {
        document.getElementById("dbclick").style.backgroundColor="cyan";
      }
      function mousedown()
      {
        document.getElementById("down").style.backgroundColor="yellow";
      }
      function imgover()
      {
        document.getElementById("img").style.height="300px";
        document.getElementById("img").style.width="300px";
      }
      function imgout()
      {
        document.getElementById("img").style.height="100px";
        document.getElementById("img").style.width="100px";
      }
      function imgmove()
      {
        document.getElementById("img").style.height="100px";
        document.getElementById("img").style.width="100px";
        document.getElementById("img").style.backgroundColor="cyan";
      }
      function up()
      {
        document.getElementById("up").style.backgroundColor="red";
```

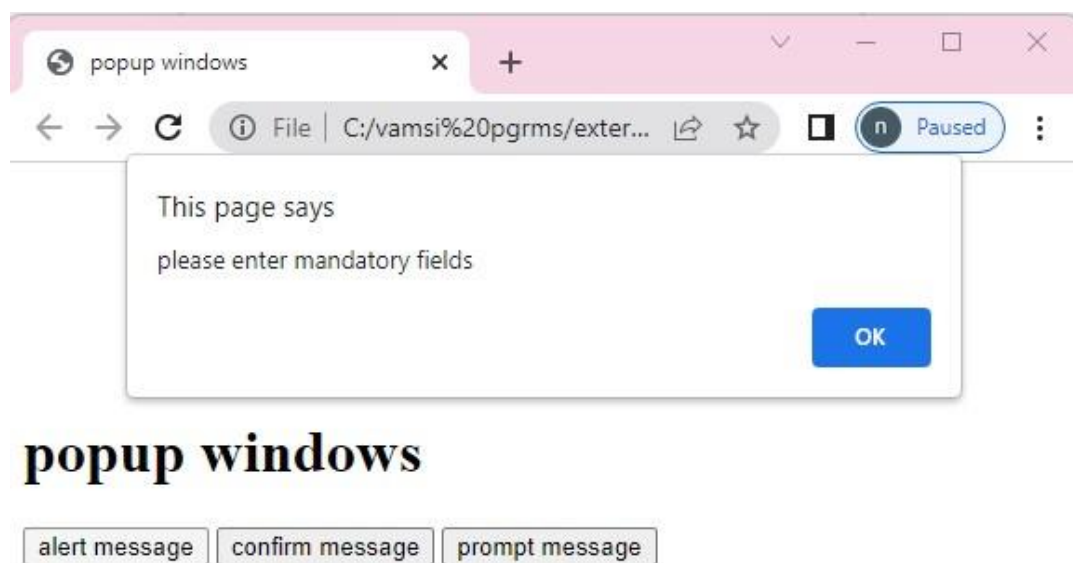
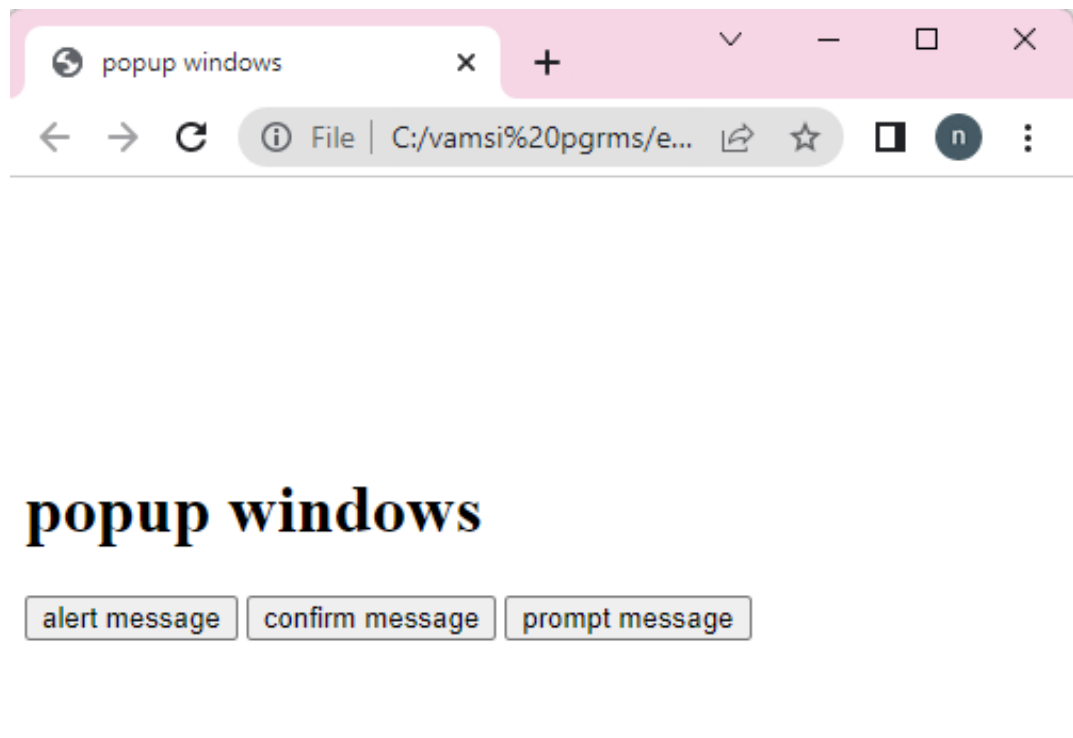
```
        document.getElementById("up").innerHTML="mouseup";
    }
</script>
</head>
<body>
    <button id="button" onclick="msg()">click here</button><br>
    <button id="dbclick" ondblclick="dbmsg()">double click here</button><br>
    <button id="down" onmousedown="mousedown()">click
    here</button><br>
    <button id="up" onmouseup="up()">mouseup</button><br><br>
    
</body>
</html>
```

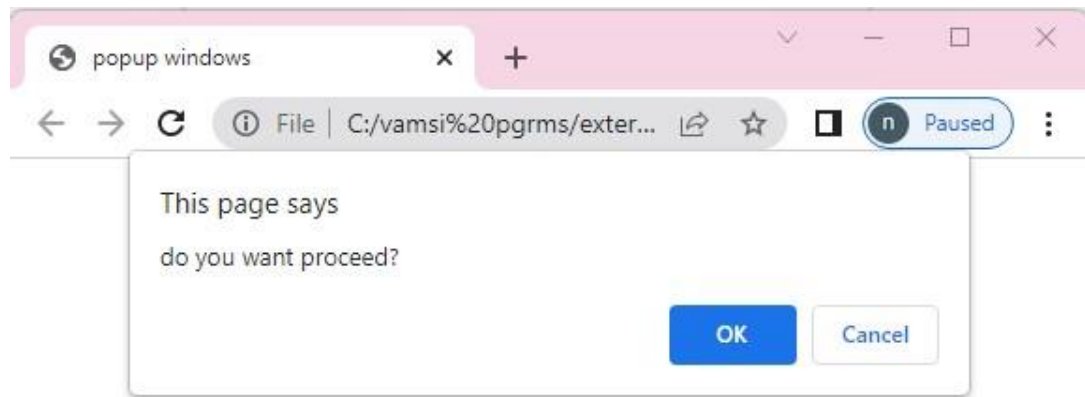

Output:



Experiment: 5 b)**Date:****Aim:** a java script to demonstrate popup boxes**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>popup windows</title>
    <script type="text/javascript">
      var v;
      function alertmsg()
      {
        alert("please enter mandatory fields");
      }
      function confirmmsg()
      {
        v=confirm("do you want proceed? ");
      }
      function promptmsg()
      {
        v=prompt("enter your otp:");
        document.write("your otp: "+v);
      }
    </script>
  </head>
  <body>
    <br><br><br><br><br><br>
    <h1>popup windows</h1>
    <input type="submit" value="alert message" onclick="alertmsg()">
    <input type="submit" value="confirm message"
    onclick="confirmmsg()">
    <input type="submit" value="prompt message"
    onclick="promptmsg()">
  </body>
</html>
```

Output:

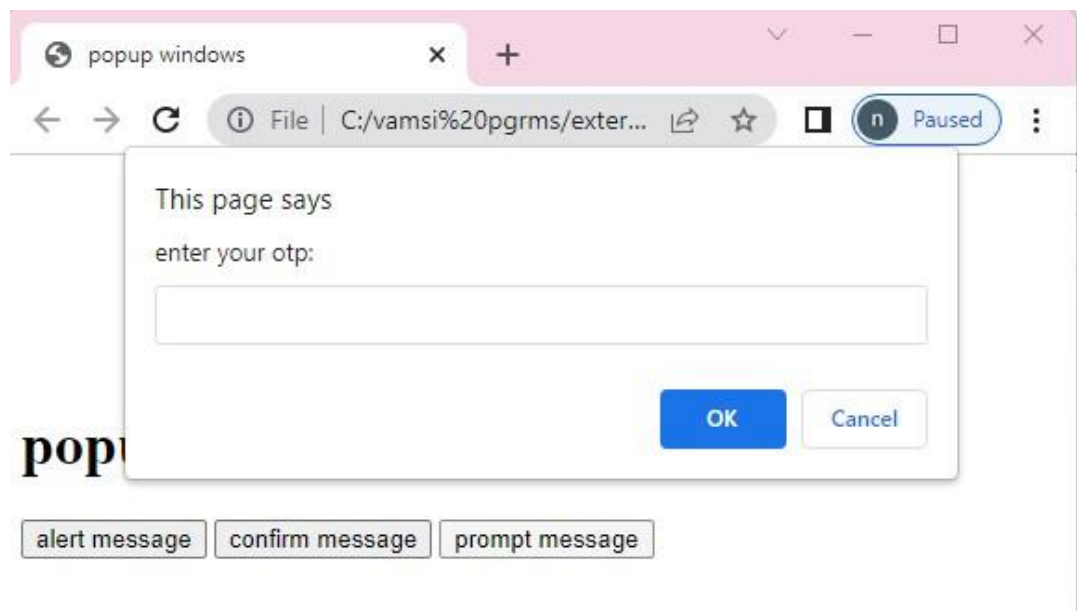


popup windows

alert message

confirm message

prompt message



popu

alert message

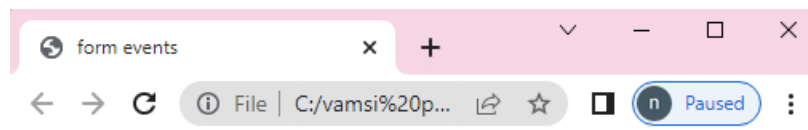
confirm message

prompt message

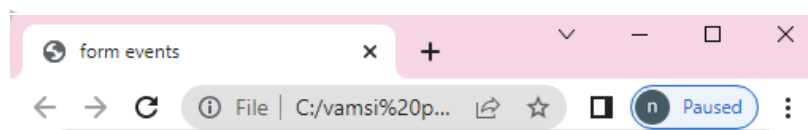
Experiment: 5 c)**Date:****Aim:** a java script to demonstrate form event**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>form events</title>
    <script type="text/javascript">
      function inpfocus()
      {
        document.getElementById("uname").style.background="gray";
      }
      function inpblur()
      {
        document.getElementById("uname").style.background="skyblue";
      }
      function inpselect()
      {
        alert("you are selecting the text");
      }
      function inpsearch()
      {
        prompt("you are searching for something");
      }
      function inpchange()
      {
        alert("do you want to change the text?");
      }
      function inpinvalid()
      {
        document.getElementById("msg").innerHTML="you can't submit
          the form";
      }
      function inpsubmit()
      {
        alert("you are submitting the form");
      }
      function inpreset()
      {
        confirm("you are resetting the content");
      }
    </script>
  </head>
  <body>
```

```
<h1>form Events</h1>
<form onsubmit="inpsubmit()" onreset="inpreset()">
  enter your name:
  <input id="uname" type="text" onfocus="inpfocus()"
onblur="inpblur()" oninvalid=" inpinvalid()" required
onselect="inpselect()" onchange="inpchange()"><br>
  <p id="msg"></p>
  <input type="submit" value="submit">
  <input type="reset" value="reset">
</form>
</body>
</html>
```

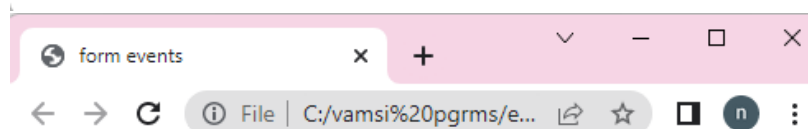
Output:**form Events**

enter your name:



fo

ente

**form Events**

enter your name:

you can't submit  Please fill out this field.

Experiment: 6 a)**Date:****Aim:** a java script to demonstrate string object**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title> String Object</title>
  </head>
  <body>
    <script type="text/javascript">
      document.write("<h2> methods in String Objects </h2>");
      var str = "welcome to html5";
      var str1 = "welcome to js";
      document.write("Length of str:" + str.length);
      document.write("<br>Character at 5 position:" + str.charAt(5));
      document.write("<br>Concat str & str1:" + str.concat(str1));
      document.write("<br>Index of 'm' in str:" + str.indexOf('m'));
      document.write("<br> last Index of 'm' in str:" +
        str.lastIndexOf('m'));
      document.write("<br>Replace html5 to HTML5 in str:" +
        str.replace("html5", "HTML5"));
      document.write("<br>slice the test from 0-7 in str:" +
        str.slice(0, 7));
      document.write("<br>split the str based on space:" +
        str.split(""));
      document.write("<br>Upper case of str text:" +
        str.toUpperCase());
      document.write("<br>lower case of str text:" +
        str.toLowerCase());
      document.write("<h2> Wrapper methods in String Objects
        </h2>");
      document.write("small text:" + str.small());
      document.write("<br>Big text:" + str.big());
      document.write("<br>Bold text:" + str.bold());
      document.write("<br>Font color:" + str.fontcolor("blue"));
      document.write("<br>Font size:" + str.fontSize("15px"));
      document.write("<br>Italic text:" + str.italics());
      document.write("<br>strike-out text:" + str.strike());
      document.write("<br>subscript:" + str.sub());
      document.write("<br>supscript:" + str.sup());
      document.write("<br>Text Blink:" + str.blink());
    </script>
  </body>
</html>
```

Output:**methods in String Objects**

Length of str:16
Character at 5 position:m
Concat str & str1:welcome to html5welcome to js
Index of 'm' in str:5
last Index of 'm' in str:13
Replace Munawar to Madhu in str:welcome to HTML5
slice the test from 0-7 in str:welcome
split the str based on space:welcome,to,html5
Upper case of str text:WELCOME TO HTML5
lower case of str text:welcome to html5

Wrapper methods in String Objects

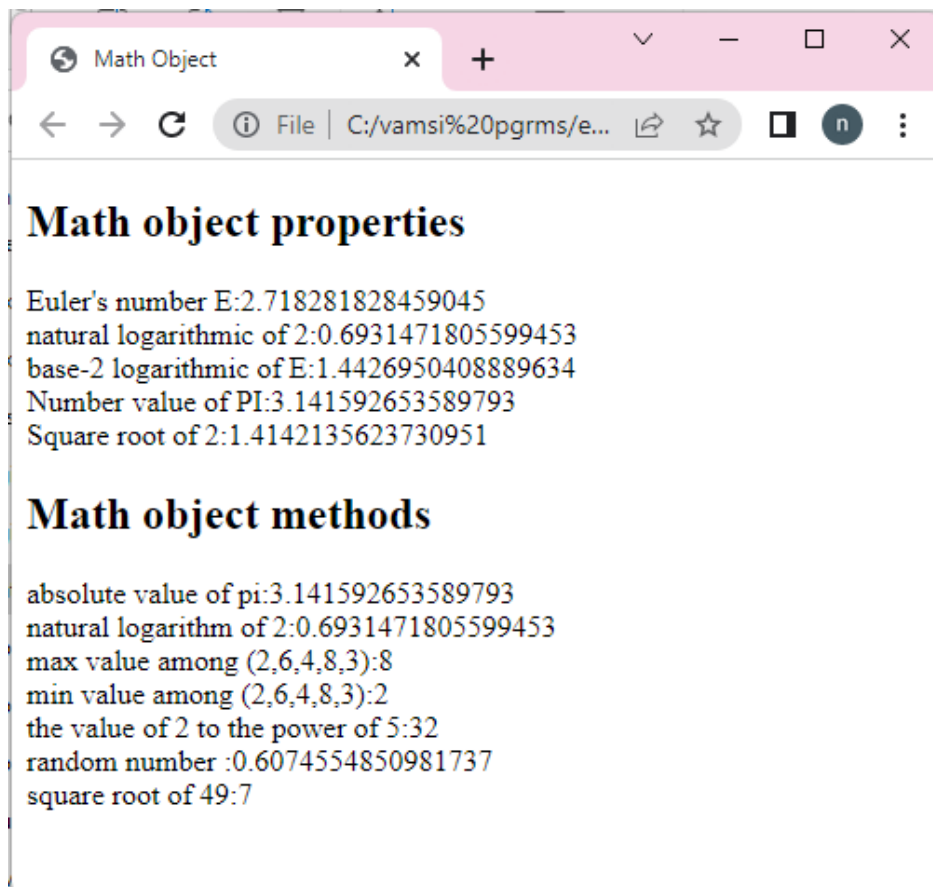
small text:welcome to html5
Big text:welcome to html5
Bold text:welcome to html5
Font color:welcome to html5

Font size: **welcome to html5**

Italic text:welcome to html5
Link:welcome to html5
strike-out text:welcome to html5
subscript:welcome to html5
supscript:welcome to html5
Text Blink:welcome to html5

Experiment: 6 b)**Date:****Aim:** a java script to demonstrate math event**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title> Math Object</title>
  </head>
  <body>
    <script type="text/javascript">
      document.write("<h2>Math object properties</h2>");
      document.write("Euler's number E:" + Math.E);
      document.write("<br>natural logarithmic of 2:" + Math.LN2);
      document.write("<br>base-2 logarithmic of E:" +
        Math.LOG2E);
      document.write("<br>Number value of PI:" + Math.PI);
      document.write("<br> Square root of 2:" + Math.SQRT2);
      document.write("<h2>Math object methods</h2>");
      document.write("absolute value of pi:" + Math.abs(Math.PI));
      document.write("<br>natural logarithm of 2:" + Math.log(2));
      document.write("<br>max value among (2,6,4,8,3):" +
        Math.max(2,6,4,8,3));
      document.write("<br>min value among (2,6,4,8,3):" +
        Math.min(2,6,4,8,3));
      document.write("<br>the value of 2 to the power of 5:" +
        Math.pow(2, 5));
      document.write("<br>random number :" + Math.random());
      document.write("<br>square root of 49:" + Math.sqrt(49));
    </script>
  </body>
</html>
```

Output:

Experiment: 6 c)**Date:****Aim:** a java script to demonstrate date event**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title> Date objects</title>
  </head>
  <body>
    <script type="text/javascript">
      var d1= new Date();
      var d2=new Date(20000000);
      var d3=new Date("july 08,2022");
      var d4=new Date(2022,00,01);
      var d5=new Date(2022,00,01,10,45,30);
      document.write("<h2>Date object creation</h2>");
      document.write("Empty Date object creation:"+d1);
      document.write("<br>Date object with milliseconds:"+d2);
      document.write("<br>Date object with string:"+d3);
      document.write("<br>Date object with specified date:"+d4);
      document.write(" br> Date object with specified date & time:"+d5);
      document.write("<h2>Date object methods</h2>");
      document.write("Current Date:"+Date(d1.valueOf()));
      document.write("<br>Day:"+d1.getDay());
      document.write("<br>Date:"+d1.getDate());
      document.write("<br>Month."+d1.getMonth());
      document.write("<br>Year:"+d1.getFullYear());
      document.write("<br>Hourse:"+d1.getHours());
      document.write("<br>Minutes:"+d1.getMinutes());
      document.write("<br>Seconds:"+d1.getSeconds());
      document.write("<br>Milliseconds:"+d1.getMilliseconds());
      document.write("<br>Time:"+Date(d1.getTime()));
      document.write("<br>difference between UTC time and
        local time, in minutes:"+d1.getTimezoneOffset());
      document.write("<br>Setting the Date:"+d1.setDate(10));
      document.write("<br>getting the Date:"+d1.getDate());
    </script>
  </body>
</html>
```

Output:**Date object creation**

**Empty Date object creation:Thu Aug 04 2022 21:18:09
GMT+0530 (India Standard Time)**

**Date object with milliseconds:Thu Jan 01 1970 06:03:20
GMT+0530 (India Standard Time)**

**Date object with string:Fri Jul 08 2022 00:00:00 GMT+0530
(India Standard Time)**

**Date object with specified date:Sat Jan 01 2022 00:00:00
GMT+0530 (India Standard Time) br> Date object with
specified date & time:Sat Jan 01 2022 10:45:30 GMT+0530
(India Standard Time)**

Date object methods

Current Date:Thu Aug 04 2022 21:18:09 GMT+0530 (India Standard Time)
Day:4
Date:4
Month:7
Year:2022
Hourse:21
Minutes:18
Seconds:9
Milliseconds:720
Time:Thu Aug 04 2022 21:18:09 GMT+0530 (India Standard Time)
difference between UTC time and local time, in minutes:-330
Setting the Date:1660146489720
getting the Date:10

Experiment: 7 a)**Date:****Aim:** a java script to demonstrate window object**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>Window object</title>
  </head>
  <body>
    <h2>Frames</h2>
    <iframe src="stringobject.html" width="200" height="200"></iframe>
    <iframe src="mouse.html" width="200" height="200"></iframe>
    <iframe src="gmail.html" width="200" height="200"></iframe>
    <h2>window object methods</h2>
    <button id="but1" onclick="win=window.open()">Open
    Window</button>
    <button id="but1" onclick="win.close()">close Window</button>
    <button id="but1" onclick="window.alert('Alert Message')">
    Alert</button>
    <button id="but1" onclick="window.prompt('prompt Message')">
    Prompt</button>
    <button id="but1" onclick="window.confirm('confirm message')">
    confirm</button>
    <button id="but1" onclick="win.moveBy(100,100)">Move by
    Window 100,100 pixel</button>
    <h2>window object properties</h2>
    <script type="text/javascript">
      document.write("Number of Frames:" + window.length);
      document.write("<br>height of the windows content
      area(viewport)including scrollbars:" + window.innerHeight);
      document.write("<br>width of the windows content
      area(viewport)including scrollbars:" + window.innerWidth);
      document.write("<br>height of the browser window,including
      toolbars/scrollbars:" + window.outerHeight);
      document.write("<br>width of the browser window,including
      toolbars/scrollbars:" + window.outerWidtht);
    </script>
  </body>
</html>
```

Output:

The screenshot shows a web browser window titled "Window object" with a single tab. The address bar displays the file path "C:/vamsi%20pgrms/external/windowpopup.html". The main content area is divided into three frames:

- methods in String Objects**: Displays the following text:
Length of str:16
Character at 5 position:m
Concat str &
str1:welcome to
html5welcome to js
- mouse event**: Contains a button labeled "click me".
- GMAIL**: Contains a table with two rows and two columns. The first row has the text "inbox" and "sent" in the first and second columns respectively. The second row is empty. Below the table is a section labeled "footer".

Below the frames, there are two sections:

- window object methods**: Contains a row of buttons: "Open Window", "close Window", "Alert", "Prompt", "confirm", and "Move by Window 100,100 pixel".
- window object properties**: Displays the following text:
Number of Frames:3
height of the windows content area(viewport)including scrollbars:395
width of the windows content area(viewport)including scrollbars:500
height of the browser window,including toolbars/scrollbars:483
width of the browser window,including toolbars/scrollbars:undefined

Experiment: 7 b)**Date:****Aim:** a java script to demonstrate document object**Source code:**

```
<!DOCTYPE HTML>
<html>
  <head>
    <title>Document Object</title>
  </head>
  <body>
    <h2>Images</h2>
    Image 1:
    Image 2:
    <h2>Links</h2>
    <a id="link1" href="mouseevent.html">Page1</a>
    <a id="link2" href="formevents.html">Page2</a>
    <h2>Docuemnt object methods</h2>
    <button onclick="open_doc()">Open Docuemnt</button>
    <script type="text/javascript">
      document.write("<h2>Document object collection</h2>");
      document.write("Number of images:" +
      document.images.length );
      document.write("<br>Number of links:" +
      document.links.length);
      document.write("<h2>Document object properties</h2>");
      document.write("Title of docuemnt:" + document.title);
      document.write("<br>URL of docuemnt:" + document.URL);
      document.write("<br> state of docuemnt:" +
      document.readyState);
      document.write("<br>last modified of docuemnt:" +
      document.lastModified);



      function open_doc() {
        var mywindow = window.open();
        mywindow.document.open();
        mywindow.document.write("<h1>Welcome to
        document </h1>");
        mywindow.document.close();
      }
    </script>
  </body>
</html>
```

Output:

Document Object x +

File | C:/vamsi%20pgrms/external/documentobj.html

Images

Image 1:  Image 2: 

Links

[Page1](#) [Page2](#)

Docuemnt object methods

Document object collection

Number of images:2
Number of links:2

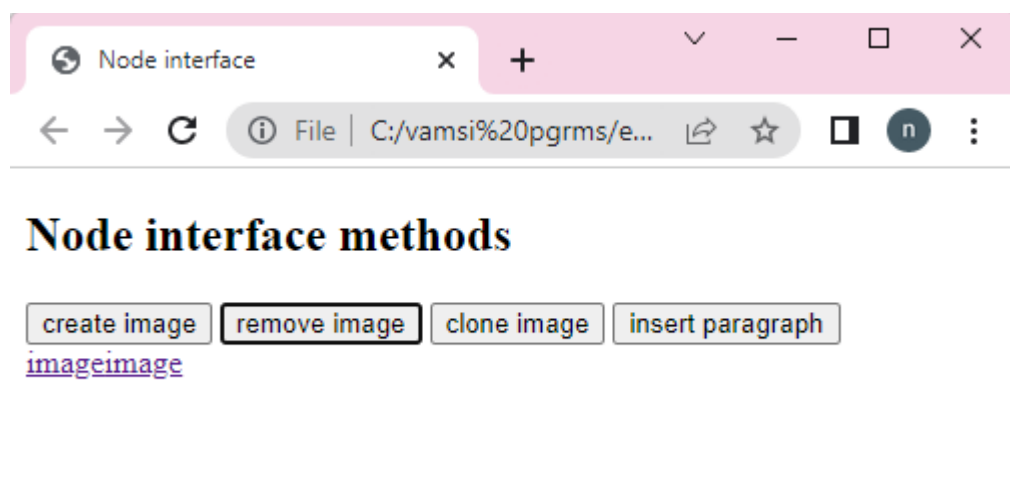
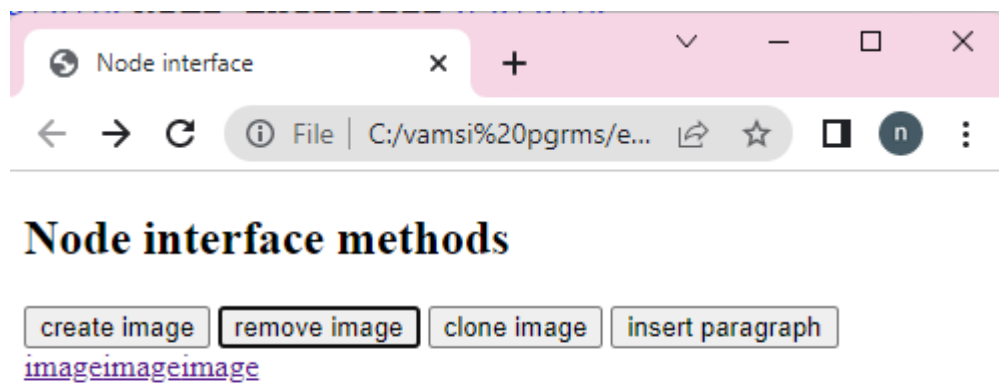
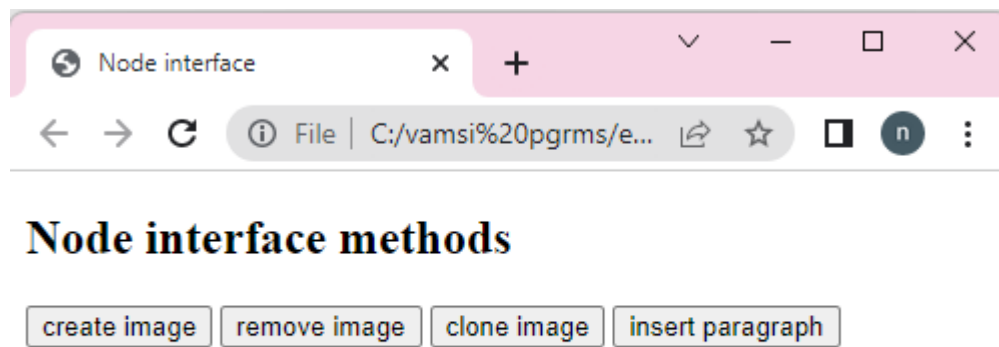
Document object properties

Title of docuemnt:Document Object
URL of docuemnt:file:///C:/vamsi%20pgrms/external/documentobj.html
state of docuemnt:loading
last modified of docuemnt:08/06/2022 05:04:41

Experiment: 8 a)**Date:****Aim:** a java script to to create, delete, duplicate and insert a node using dom interface**Source code:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>Node interface</title>
    <script type="text/javascript">
      function create_node() {
        var img = document.createElement("a");
        img.setAttribute("id", "li");
        img.setAttribute("href", "bec.jpg");
        img.setAttribute("width", "100");
        img.setAttribute("height", "100");
        text = document.createTextNode("image");
        img.appendChild(text);
        document.body.appendChild(img);
      }
      function delete_node() {
        child = document.getElementById("li");
        document.body.removeChild(child);
      }
      function clone_node() {
        img = document.getElementById("li");
        c = img.cloneNode(true);
        document.body.appendChild(c);
      }
      function insert_node() {
        img = document.getElementById("li");
        para = document.createElement("p");
        para.setAttribute("id", "p1");
        text = document.createTextNode("my paragraph");
        para.appendChild(text);
        document.body.insertBefore(para, img);
      }
    </script>
  </head>
  <body>
    <div id="d">
      <h2>Node interface methods</h2>
      <button onclick="create_node()">create image</button>
      <button onclick="delete_node()">remove image</button>
      <button onclick="clone_node()">clone image</button>
      <button onclick="insert_node()">insert paragraph</button>
    </div>
  </body>
</html>
```

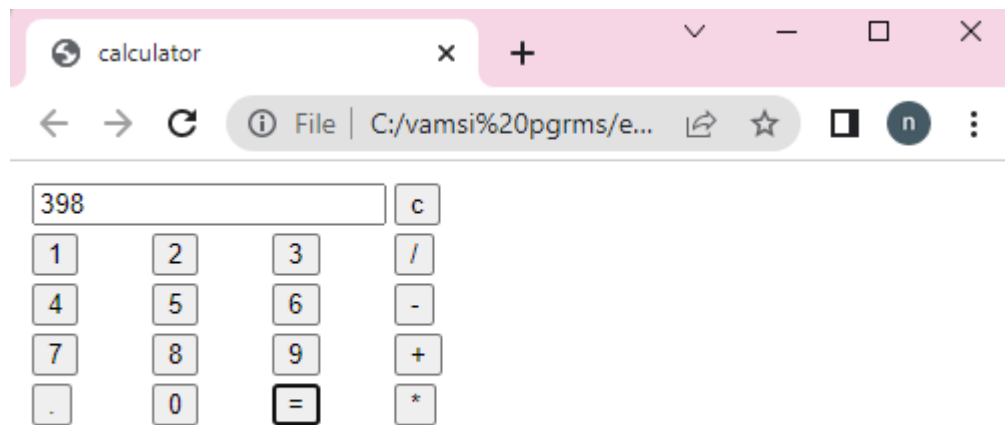
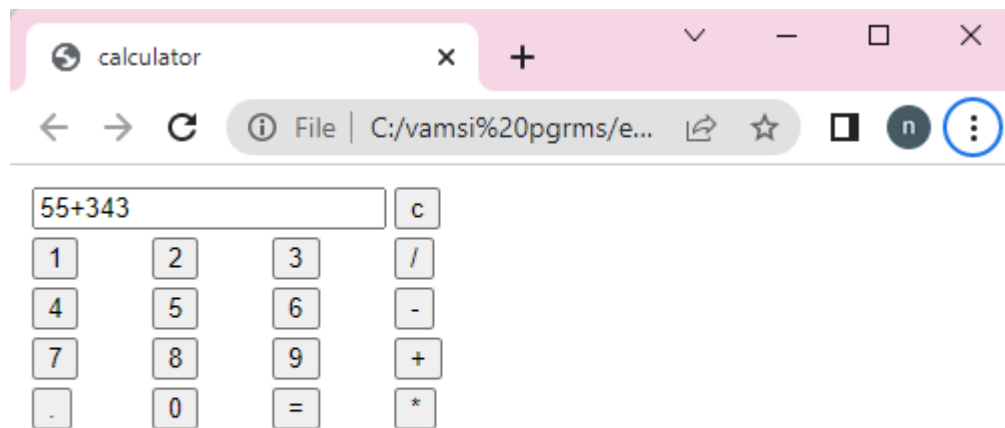
```
        </div>  
    </body>  
</html>
```

Output:

Experiment: 8 b)**Date:****Aim:** a java script to demonstrate calculator program**Source code:**

```
<!DOCTYPE HTML>
<html>
<head>
  <title>calculator</title>
  <script type="text/javascript">
    function dis(val) {
      document.getElementById("result").value += val
    }
    function solve() {
      var x = document.getElementById("result").value
      var y = eval(x)
      document.getElementById("result").value = y
    }
    function clr() {
      document.getElementById("result").value = ""
    }
  </script>
</head>
<body>
  <table>
    <tr>
      <td colspan="3"><input type="text" id="result"></td>
      <td><input type="button" value="c" onclick="clr()" /> </td>
    </tr>
    <tr>
      <td><input type="button" value="1" onclick="dis('1')" /> </td>
      <td><input type="button" value="2" onclick="dis('2')" /> </td>
      <td><input type="button" value="3" onclick="dis('3')" /> </td>
      <td><input type="button" value="/" onclick="dis('/')" /> </td>
    </tr>
    <tr>
      <td><input type="button" value="4" onclick="dis('4')" /> </td>
      <td><input type="button" value="5" onclick="dis('5')" /> </td>
      <td><input type="button" value="6" onclick="dis('6')" /> </td>
      <td><input type="button" value="-" onclick="dis('-)" /> </td>
    </tr>
    <tr>
      <td><input type="button" value="7" onclick="dis('7)" /> </td>
      <td><input type="button" value="8" onclick="dis('8)" /> </td>
      <td><input type="button" value="9" onclick="dis('9)" /> </td>
      <td><input type="button" value="+" onclick="dis('+" /> </td>
```

```
</tr>
<tr>
  <td><input type="button" value="." onclick="dis('.')" /> </td>
  <td><input type="button" value="0" onclick="dis('0')"/> </td>
  <td><input type="button" value="=" onclick="solve()" /> </td>
  <td><input type="button" value="*" onclick="dis('*')"/> </td>
</tr>
</table>
</body>
</html>
```

Output:

Experiment: 9)**Date:****Aim:** Write a EXPERIMENT to demonstrate Internal DTD**Source code:**

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE student[
  <!ELEMENT student (name,regd,address)>
  <!ELEMENT name (#PCDATA)>
  <!ELEMENT regd EMPTY>
  <!ATTLIST regd id CDATA "401">
  <!ELEMENT address (dno,street,city)>
  <!ELEMENT dno (#PCDATA)>
  <!ELEMENT street (#PCDATA)>
  <!ELEMENT city (#PCDATA)>
]>
<student>
  <name>Chaitanya</name>
  <regd id="401"/>
  <address>
    <dno>10-214</dno>
    <street>old bus stop</street>
    <city>Guntur</city>
  </address>
</student>
```

Output:

XML Editor ▼

```
5 <!ELEMENT regd EMPTY>
6 <!--ATTLIST regd id CDATA "401">
7 <!--ELEMENT address (dno,street,city)>
8 <!--ELEMENT dno (#PCDATA)>
9 <!--ELEMENT street (#PCDATA)>
10 <!--ELEMENT city (#PCDATA)>
11 ]>
12 <student>
13   <name>Chaitanya</name>
14   <regd id="401"/>
15   <address>
16     <dno>10-214</dno>
17     <street>old bus stop</street>
18     <city>Guntur</city>
19   </address>
20 </student>
21
```

▼ Validation result

Syntax wellformed

PASSED

DTD validation

PASSED

XSD validation

OMITTED

No schema reference provided using either xsi:schemaLocation or xsi:noNamespaceSchemaLocation attribute.

Cover format, integrity and conditional restrictions as well? Check [video tutorials](#) on how to create test profiles and share your test reports ([examples](#)) with ease.

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BEAUTIFY | MINIFY

VALIDATE XML

EXPERIMENT-9 b)**DATE:****Aim:** Design a webpage to demonstrate the external DTD.**Source code:****XML file:**

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE student SYSTEM "stu.dtd">
<student>
  <name>Chaitanya</name>
  <regd id="401"/>
  <address>
    <dno>10-214</dno>
    <street>old bus stop</street>
    <city>Guntur</city>
  </address>
</student>
```

DTD file:

```
<!ELEMENT student (name,regd,address)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT regd EMPTY>
<!ATTLIST regd id CDATA "420">
<!ELEMENT address (dno,street,city)>
<!ELEMENT dno (#PCDATA)>
<!ELEMENT street (#PCDATA)>
<!ELEMENT city (#PCDATA)>
```

Output:

The image shows a web-based XML validation interface. It consists of a text area for pasting XML code, a 'Validate' button, and a green status bar at the bottom.

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!DOCTYPE student SYSTEM "stu.dtd">
3 <student>
4   <name>Chaitanya</name>
5   <regd id="401"/>
6   <address>
7     <dno>10-214</dno>
8     <street>old bus stop</street>
9     <city>Guntur</city>
10  </address>
11 </student>
```

Validate

Document Valid

Experiment: 10)**Date:****Aim:** :Develop a XML file to store the student dataand validate using XSD**Source code:**

```
<Employee>
  <name> chaitanya</name>
  <salary> 70000 </salary>
  <disignation> Manager </disignation>
  <address>
    <dno> 5-554 </dno>
    <street> old bus stand</street>
    <city> vijayawada</city>
  </address>
</Employee>
```

Xsd code:

```
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="Employee">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="name" type="xs:string" />
        <xs:element name="salary" type="xs:integer" />
        <xs:element name="disignation" type="xs:string" />
        <xs:element name="address">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="dno" type="xs:string" />
              <xs:element name="street" type="xs:string" />
              <xs:element name="city" type="xs:string" />
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

Output:

XML	XSD Schema
<pre><Employee> <name> munawar</name> <salary> 70000 </salary> <disignation> Manager </disignation> <address> <dno> 5-10 </dno> <street> old bus stand</street> <city> vijayawada</city> </address> </Employee></pre>	<pre><xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"> <xs:element name="Employee"> <xs:complexType> <xs:sequence> <xs:element name="name" type="xs:string" /> <xs:element name="salary" type="xs:integer" /> <xs:element name="disignation" type="xs:string" /> <xs:element name="address"> <xs:complexType> <xs:sequence> <xs:element name="dno" type="xs:string" /> <xs:element name="street" type="xs:string" /> <xs:element name="city" type="xs:string" /> </xs:sequence> </xs:complexType> </xs:element> </xs:sequence> </xs:complexType> </xs:element> </xs:schema></pre>
<button>Check XML Well Formed</button>	<button>Check XSD Validity</button>
<button>Validate XML against XSD</button>	
<p>Result</p> <div>XML is valid against the given schema</div>	