<u>LIST OF PRACTICALS OF CLASS XII-STATE (INFORMATION TECHNOLOGY)</u>

<u>SN.</u>	Program Description	Date	Sign.
1.	Create a website based on the theme of "Save the Earth's Environment" using HTML.		
2.	Creation of a Website with Frames and CSS		
3.	Hyperlinks on a Web Page using Client Side Image Mapping		
4.	Use of Audio and Animation on web pages		
5.	Use of Video on Web Pages.		
6.	Cross Browser Testing and Differences in Rendering		
7.	Use of an Embedded Indian Font on a Web Page.		
8.	JavaScript code for the use of event driven client side JavaScript.		
9.	Use of JavaScript for Validation of Pin code and Amount		
10.	Use of JavaScript for Validation of Telephone Number and Amount		
11.	JavaScript code for validation of Username and Password.		
12.	Use of JavaScript for Validation of Date		
13.	Use of JavaScript for Validation of E-mail Address.		
14.	JavaScript code to display the given no is odd or even		
15.	Create ASP.NET web application using Visual Basic.NET to display a report of Client IP address, Browser etc.		
16.	Create ASP.NET web application using Visual Basic.NET to display Server Side time along with client side script to display Client Side time.		
17.	Create ASP.NET web application using Visual Basic.NET to calculate the number of days a person has lived on basis of the date of Birth.		
18.	Create ASP.NET web application using Visual Basic.NET to create to display contents from a text file.		
19.	Create ASP.NET web application using Visual Basic.NET to create to display Hit Counter.		
20.	Create ASP.NET web application using Visual Basic.NET to create Login Screen form and verifies username and password from database		
21.	Create ASP.NET web application using Visual Basic.NET to create web application to accept following information store at server database if visitor press button Save.		
22.	Use of database and ASP.NET code that allows a user to view as well as edit information		
23.	Create ASP.NET web application to display Multiplication Table		
24.	Create ASP.NET web application to convert decimal number into binary number		

Practical 1:

Creation of a Website

Create a website based on the theme of "Save the Earth's Environment" using HTML.

Write code for 3 separate pages having different filenames based on this theme. All pages must have different background colors and different Titles.

The **first page** must contain a hyperlink to the other two pages in such a way that when a hyperlink on the same is clicked, the corresponding page must open in a new window without changing the content of the source web page.

Name the **first page as "Index.htm"**. This page must contain general information about the theme chosen and must have a heading in the largest possible size. This page must also display at least one image which must have alternate text as well as must act as a hyperlink to another page. This page should also contain any 3 physical style tags.

The **second page** must enlist factors responsible for environmental damage, types of pollution etc in an Ordered List nested within an Unordered List with at least five points.

The page must also have a marquee with Background color scrolling from left to right carrying the theme name.

The **last page** should be a **Member Registration** Form having a Text Area form control With any other three different types of Form controls from the following; Textbox, Radio, Drop Down List and Button.

FILE 1: Index.html

```
<html>
<head>
      <title> Earth's Environment </title>
</head>
<body bgcolor="pink">
      <font face= "Arial" color="GREEN">
             <Marquee> <h1> save the earth's environment <h1> </marquee>
      </font>
      <center> <img dynsrc="globe.avi" height="300" width="300>
      <font face= "Arial" color="RED">
      The earth is a beautiful place where we all live. Earth provides us with useful natural
      resources which we uses everyday
      </font> 
       but we do not care for these factors what earth gives us.
       because of irresponsible behavior of the man the environment of earth is getting
      spoiled 
      <UL type="disc">
      <a href ="factors.html">FACTORS </a> 
      <li><a href ="form.html"> FORM </a> </li>
      </[]]>
      </center>
</body>
</html>
```

FILE 2: factors.html

```
<html>
<head>
     <title> Factors Responsible </title>
</head>
<body bgcolor="pink">
     <font face="Arial" size="6"color="red">
     <marquee bgcolor="pink">
     FACTORS RESPONSIBLE FOR CAUSING DAMAGE TO EARTH'S
     ENVIRONMENT</marquee>
     <hr color="black">
     </font>
     <font color="blue">
     <center>
     < h>
     <UL type="square">
     Natural factors
      <Ol type="1">
     Earthquakes
     Forest Fires
     Anthropogenic factors
       <Ol type="1">
     Deforestation
     industrial pollution
     <UL type="disc">
     Water pollution
     Soil pollution
     Domestic pollution
     <UL type="circle">
     Air pollution
     Vehicular pollution
     </b>
     </center>
     </font>
     <br/>br><br/>><
     <a href="Index.html">HOME PAGE</a><br>
     <a href="Form.html">Register now</a>
     </body>
</html>
                 FILE 3: MEMBER REGISTRATION FORM
<HTML>
<HEAD>
<BODY>
     <FORM ACTION="register. asp" method="post">
     <H1> MEMBER REGISTRATION FORM</H1>
```

Enter your Name:

```
<input type="text" name="checkbox" size="10">
      <br/>br> <br/>
      select your password:
      <input type="password" name="pass" size="5">
      <br >> <br >
      ADDRESS:
      <input type="text" name="address" size="20">
      <br/>br> <br/>
      PIN CODE:
      <input type="text" name="pin code" size="5">
      <hr> <hr>
      PHONE NUMBER:
      <input type="text" name="phone number" size="10">
      <br/>br> <br/>
      Gender:
      <input type="radio" name="gender" value="male" checked notab>Male
      <input type="radio" name="gender" value="female">Female
      <br>><br>><
      Your Hobbies:
      <input type="checkbox" name="checkbox" value=value"1">READING
      <input type="checkbox" name:=checkbox" value=value"2">SINGING
      <input type="checkbox" name=checkbox" value=value"3">DANCING
      <input type="checkbox" name:=checkbox" value=value"4">PAINTING
      <input type="checkbox" name=checkbox" value=value"5">MUSIC
      <br>><br>>
      Select your age group:
      <select name="age">
      <option value="Less than 18">Less than 18
      <option value="18to60">18to60
      <option value="60above">60 Above
      </select><br> <br>>
      Select your city: <br
      <Select list="MY SELECT LIST" multiple size="1">
      <option value="1">MUMBAI
      <option value="2">PUNE
      <option value="3">RATNAGIRI
      <option value="4">NASHIK
      <option value="5">NAGPUR
      <option value="6">AURANGABAD
      <option value="7">PANDARPUR
      <option value="8">JALGAON
      <option value="9">SHIRDI
      <option value="10>WAI
      </Select list> <br>>
      <input type="submit" value="submit">
      <input type="reset" value="reset">
      </form>
</BODY>
</HTML>
```

Practical 2:

Creation of a Website with Frames and CSS

<html>

Create a web page in HTML containing 4 frames approximately having a layout as shown in the adjoining figure. Name this file as "Index.htm". When the "Index.htm" page is called through a web browser, the page should be displayed with frames. The frames should display contents of 4 different HTML pages. The top and bottom frames should always display the contents of two web pages "Top.htm" and "Bottom.htm" respectively. The left pane should always display the contents of a web page named

"Left.htm" and right pane by default, should display contents of a web page named "Right.htm".

The Left.htm page must contain 2 hyperlinks; the first hyperlink must be to the Right1.htm page, the second one to a page called as Right2.htm. Note that when these hyperlinks from the "Left.htm" are used or clicked from the "Index.htm" page, only the contents of the Right Frame must change to display the appropriate Web page. The contents of no other page must change.

All six pages must have a different title and all the pages excluding "Index.htm" must have a different background color.

Create 2 different **external** CSS Code Files one for "Left.html" and other for "Right1.htm", "Right2.htm" having at least **three different selectors with minimum three properties** for each selector with respect to use of various fonts, colors, sizes and text highlighting.

FILE 1:INDEX.HTML

```
<head>
      <title>frame page </title>
<head>
<frameset rows="30%,40%,30%">
<frame src="top.html">
<frameset cols= "30%,70%" >
<frame src="left.html">
<frame src="right.html" name="right">
</frameset>
<frame src="Bottom.html">
</frameset>
<body>
      <no frames>
             OPPS!!FRAMES ARE NOT SUPPORTED
      </no frames>
</body></html>
                                FILE2: TOP.HTML
<html>
<head>
      <title>top page</title>
</head>
<body bgcolor="apricot">
      <h1><marquee scroll amount="600">Top page</marquee></h1>
</body></html>
```

FILE3: BOTTOM.HTML

```
<html>
<head>
      <title>bottom page</title>
</head>
<body bgcolor="magenta">
      <h2><marquee behavior="alternate">Bottom page</marquee></h2>
</body></html>
                                FILE4: LEFT.HTML
<html>
<head>
       <title>left page</title>
</head>
      <style>
      body{font-family: "VinetaBT" ;style:"italic";color:"red"}
      </style>
<body bgcolor="gold">
      <hr3> Left page</hr3><br>
      <a href="right.html" target="right">Right page</a><br>
      <a href="right1.html" target="right">Right1</a><br>
      <a href="right2.html" target="right">Right2</a><br>
      <a href="right3.html" target="right">Right3</a><br>
</body>
</html>
                               FILE 5: RIGHT.HTML
<html>
<head>
      <title>Right page</title>
</head>
<style>
      body{font-family:"Vineta BT"; style:"italic" ;color:"red"}
</style>
<body bgcolor="pink">
      <br/>hr><br/>br>
      <center>
             <h1>Right page</h1>
      </center>
</body>
</html>
                              FILE 6: RIGHT1.HTML
<html>
<body bgcolor="aquamarine">
<h1>Right</h1>
<h1>Right1</h1>
</body></html>
```

FILE 7: RIGHT2.HTML

```
<html>
<body bgcolor="orange red">
<h1>Right</h1>
<h1>Right2</h1>
</body>
</html>
```

FILE 8: RIGHT3.HTML

<html>
<body bgcolor="aqua red">
<h1>Right</h1>
<h1>Right3</h1>
</body>
</html>

Experiment 3:

Hyperlinks on a Web Page using Client Side Image Mapping

Create a web page, which uses a JPEG or GIF image on the same. Students should use the available image present in the computer. Create at least 3 three different shapes such as rectangle, circle and polygon which should not overlap. Make use of client-side internal mapping where the **hotspots coordinates** should be **noted** using the Ms-Windows imaging application **Paint**. All hyperlinks used in the map code however should be to different URLs, and should be functional on the World Wide Web. **Do not create URLs to local Web Pages and do not create target web pages**.

```
<html>
<head>
      <title>Client Side Image Map</title>
</head>
<body bgcolor="silver">
<center>
      <h1> CLIENT SIDE IMAGE MAP</h1>
<img src="planet.jpg" width="50%" height="75%" alt="Planets" usemap="#planetmap">
<map name="planetmap">
 <area shape="rect" coords="0,0,82,126" href="sun.htm" alt="Sun">
 <area shape="circle" coords="269, 93,394,171" href="mercur.htm" alt="Mercury">
 <area shape="polygon" coords="199,224,115,261,167,302,241,291,268,246"</pre>
href="venus.htm" alt="Venus">
</map>
</center>
</body>
</html>
```

Use of Audio and Animation on Web Pages

</html>

Create a web page that continuously plays a background sound _____ number of times without controls. This page must also contain an animated GIF Image where the display dimensions are 100 x 75 pixels irrespective of the original Image dimensions. Alternate text must also be used.

Create another web page that continuously plays a sound <u>forever</u> with controls. This page must also contain another animated GIF image along with alternate text where the display dimensions are 100×75 pixels irrespective of the original image dimensions.

The audio file/s must play directly from the web-page itself without the use of any hyperlink. These files be provided by the examiner and need not be encoded or created by students. Any Wave, MP3, MIDI or AU sound file may be used.

FILE 1: Sounds without controls

```
<html>
<head>
      <title>Playing Sounds without controls</title>
</head>
<body bgcolor="green">
      <center>
             <h1> SOUND WITHOUT CONTROL</h1>
             <bgsound src="ding.wav" autostart="true" loop="3" >
             <bgsound src="sound1.mid">
             <img src="clock.gif" alt="clock" width="100" height="75">
      <center>
</body>
</html>
                            FILE 2: Sounds with controls
<html>
<head>
      <title>Playing Sounds with controls </title>
</head>
<body bgcolor="green">
      <center>
             <h1> SOUND WITH CONTROL</h1>
             <img src="globe.gif" alt="globe" width="20%" height="30%">
             <embed src="ding.wav" controls="console" loop="-1">
      </center>
</body>
```

Use of Video on Web Pages Create a web page that plays a video forever with controls where the display dimensions are x pixels irrespective of the original video dimensions. The video must begin playing automatically when the page is opened in a browser. Create another web page that plays a video file without controls where the display dimensions are ____ x ____ pixels irrespective of the original video dimensions. The video must be looped times with a delay of ____ milliseconds between each session. The border size must The video must begin playing when the mouse is placed over the video area. The video file/s must play directly from the web-page itself without the use of any hyperlink. These video files be provided by the examiner and need not be encoded or created by students, Any AVI, MOV or MPEG file may be used. **HTML CODE: FILE 1: Video with controls** <html> <head> <title>Playing of Video with controls</title> </head> <body bgcolor="pink"> <center> <h1>Sound and Video Html Page</h1> <embed src="UGACHAKA.mp4" controls="console" loop="-1" width="350" height="400"</pre> auto start="true"> </center> </body> </html> **FILE 2: Video without controls** <html> <head> <title>Playing of Video without controls</title> </head> <body>
body bgcolor="yellow"></br> <center>

<img dynsrc="FOOTBALL.mp4" border="2" width="350" height="350"</pre>

<h1>Video without controls</h1>

loop="2" delay="4000" start="mouse over">

</center>

</body>

Cross Browser Testing and Differences in Rendering

Create a web page using HTML code that contains at least four major differences related to Marquee attributes, Light and Dark Border Colors of Tables, display of broken images* with its attributes and display of a blink text. The differences must be clearly distinguishable between the two Browsers Microsoft Internet Explorer 6 or higher and Mozilla 2 or higher.

* Images that do not exist, missing or not available are called as broken images.

HTML CODE:

```
<html>
<head>
<title>Cross Browser Testing</title>
</head>
<body bgcolor="skyblue">
<marquee bgcolor="teal" behavior="slide">Cross Browser Testing </marquee>
This Experiment Demonstrates the Cross Browser Testing and Difference in Rendering
<table border="2" border color="blue" border color light="red" border color dark="green"
width="50%" height="50 %">
>
<th>>Dno</th>
Dname
Location
>
 10 
mktg
dadar
>
 20 
sales
mahim
<br/>
<br/>
link>Information Technology</blink>
<img src="IT.jpg" alt="Info Tech" width="25%" height="25%">
</body>
</html>
```

	No	Internet Explorer	Mozilla Fire Fox 2.0
--	----	-------------------	----------------------

1	Blinking Effect is not seen i.e. <bli>blink>Tag is not supported by Internet Explorer</bli>	Blinking Effect is seen i.e. <bli><bli> </bli></bli>
2	<pre><marquee behavior="slide"> attribute is supported by Internet Explorer</marquee></pre>	<pre><marquee behavior="slide"> attributes is not supported by Mozilla Fire Fox, instead of which the text continuous to scroll</marquee></pre>
3	Internet Explorer recognizes Bordercolorlight and bordercolordark attributes of tag and therefore we can see red color on top and left side of outside border and right and bottom in the inside cells border and green color on the right and bottom side of outside border and left and top in the inside cells	Mozilla Fire Fox doesn't recognizes Bordercolorlight and bordercolordark attributes of tag and therefore we can see blue color specified in the border color attributes
4	Broken images appears as a Cross mark with alternate text being displayed	Broken images appears as a Paper tore mark without alternate text being displayed

Use of an Embedded Indian Font on a Web Page

Create a Web Page that contains the name of your College/ Institution followed by the full Postal address in an Indian Language using an Indian Font, without using an alphabets from the English Language. Use iLeap, IndiaPage or any other suitable Indian Language word processors to create the same.

Most Indian Language Word Processors allow users to export or Save Files as HTML. If this feature is not available, then the file may be exported or saved in Rich Text Format (RTF) and then converted into HTML using a Word Processor such as Microsoft Word.

However, do not use any general purpose Word Processor such as Word with Indian Fonts installed for basic creation.

HTML CODE:

```
<html>
<head>
<title>fganh osclkbV & dkWyst dh tkudkjh</title>
</head>
<center>
<body bgcolor="skyblue">
<marquee bgcolor="teal" behavior="slide"> <h1>dkWyst dh
tkudkih</h1></marquee>
>
<b>
dkWyst dk uke % izksxzsflo lkbZUl twfu;j
dkWyst( xkSre uxj( xksafn;k</b>
<birk % xkSre uxj( xksafn;k </b>
<img src="1.jpg" alt="Info Tech" width="25%" height="25%">
</center>
</body>
</html>
```

JavaScript code for the use of event driven client side JavaScript.

Create a web page in HTML having a white background. Write code using JavaScript such that when the mouse is clicked over the different links the color of the background of the page should change. When the second button object is clicked the color of the background of the page should changes to white.

Write code using JavaScript to display different mouse event functions.

Create another web page using JavaScript where the background color changes automatically after every seconds. This event must be triggered automatically after the page gets loaded in the browser. There should at least be 7 different and visibly distinct background colors. When the page is unloaded, the appropriate alert message should be displayed.

```
<html>
<body>
<center>
     <h1>JavaScript Code to display Event Driven Program</h1>
     <h3> 1. Background Color Chnage - onclick event</h3>
     <script language="JavaScript">
                function red()
                     document.bgColor="red"
                function blue()
                     document.bgColor="blue"
                function fuchsia()
                     document.bgColor="fuchsia"
                function yellow()
                     document.bgColor="yellow"
                function white()
                     document.bgColor="white"
          </script>
          <a href="#" onclick="red()">red</a>
     <a href="#" onclick="blue()">blue</a>
   >
     <a href="#" onclick="fuchsia()">fuchsia</a>
     <a href="#" onclick="yellow()">yellow</a>
```

```
<form>
           <input type="button" value="Back to white background" name="B1"</p>
onclick="white()">
   </form>
     <h3> 2. Mouse Up Event</h3>
     <script>
                 function lighton() {
                       document.getElementById('myimage').src = "bulbon.gif";
                 function lightoff() {
                       document.getElementById('myimage').src = "bulboff.gif";
     </script>
                             onmousedown="lighton()"
     <img
             id="myimage"
                                                     onmouseup="lightoff()"
src="bulboff.gif" width="100" height="180" />
     Click mouse and hold down!
     <h3> 3. Mouse over Event</h3>
     <script>
           function mOver(obj) {
                 obj.innerHTML = "Thank You"
           function mOut(obj) {
                 obj.innerHTML = "Mouse Over Me"
     </script>
     <div onmouseover="mOver(this)" onmouseout="mOut(this)" style="background-</pre>
color:#D94A38;width:120px;height:20px;padding:40px;">
           Mouse Over Me
     <h4 onmouseover="style.color='red" onmouseout="style.color='black"">
           Mouse over this text
     </h4>
</body>
</html>
```

Use of JavaScript for Validation of Amount and Pin code

Create a page in HTML that contains two text boxes. One textbox should be used by users, say employees of a certain company to enter their Postal address Pin code and the other textbox should be used to enter their salary. Do not use Dropdown boxes. Use JavaScript to validate the entered Pin code and salary.

A valid Pin code will contain no characters other than digits. The number of digits used in the pin code should be at least ___ number of digits and should not exceed ___ number of digits. If the pin code entered is not acceptable, then a Message box carrying an appropriate message must indicate the same. In this case after the message, the invalid pin code should get deleted and focus should be back on the pin code text box to re-enter the same.

The salary entered can be any non-negative number. If decimal point is used in salary, then the number of digits after the same should not exceed two. No other symbols will be allowed. If the salary entered is invalid in any way, a message box showing the message "Invalid value! Please Re-Enter" should appear, the entered salary should get deleted and focus should be back on the text box to re-enter the same.

If both, Pin code as well as salary are valid and acceptable, then a Message Box showing the message "Acceptable" should be flashed. A single validation button should be used to validate both.

```
<html>
<head>
<title>India Postcode Validation with JavaScript</title>
<body style="background:#CCCCFF;text-align: center;margin-top:150px;">
<script language="JavaScript">
function postcode validate(zipcode)
      var x=document.myForm;
      var txt=x.postcode.value;
  obj = document.getElementById("status");
  if(txt.length!=6)
                  if(isNaN(txt)==true)
                  alert("Pin Code should be number");
                  return;
            if(txt<0)
                  alert("Pincode not be negative");
                  return;
            obj.innerHTML = "Postcode is not yet valid.";
```

```
else
    obj.innerHTML = "Your India Postal Index Number is valid!";
</script>
<h1><font color=Red>Pin Code Validation</font></h1>
<div>
<form name="myForm">
<span style="color: #000099;font: 8pt verdana;font-weight:bold;" id="status">Please enter a
valid postcode.</span><br>
<input type="text" name="postcode" onkeyup="postcode validate(this.value);">
</form>
</div>
<script>
function check(amt)
{
      var a,n,ch,t,i,g,count;
      a=amt.value;
      g=a.length;
      count=0;
      if(isNaN(a)==true)
            alert("Amount should be number");
            return;
      if(a<0)
            alert("Amount should not be negative");
            return;
      t=a.indexOf(".");
  if(t==-1||g<=t+3)
    alert("Amount is OK");
  }
      else
            alert("Amount After decimal pt. should not greater than 2 digits");
</script>
<h1><font color=Red>Amount Validation</font></h1>
<form name="form3" id="form3">
Amount: INR<input type="text" name="amt">
<input type="submit" name="b2" value="check" onClick="check(amt)"><br>
</form><br>>
</body>
</html>
```

Use of JavaScript for Validation of Amount and Telephone number

Create a page in HTML that contains two text boxes. One textbox should be used to enter their Telephone Number and the other textbox should be used to enter their Income. Do not use Dropdown boxes. Use JavaScript to validate the entered Phone number and Income. A valid Phone number code will contain no characters other than digits. The number of digits used in the Phone Number should be at least ___ and should not exceed ___. If the Phone Number entered is not acceptable then a Message box carrying an appropriate message must indicate the same. In this case, after the message the invalid Phone Number should get deleted and focus should be back on the Phone Number text box to re-enter the same.

The Income entered can be any non-negative number. If decimal point is used, then the number of digits after the same should not exceed two. No other symbol will be allowed. If the Income value entered is invalid in any way, a message box showing the message "Invalid value! Please Re-Enter" should appear, the entered Income value should get deleted and focus should be back on the text box to re-enter the same. If both, Phone Number as well as Income are valid and acceptable, then a Message Box showing the message "Acceptable" should be flashed. A single validation button should be used to validate both.

```
<html>
<head>
<title>India Postcode Validation with JavaScript</title>
<body style="background:#CCCCFF;text-align: center;margin-top:150px;">
<script>
function check1(phone no)
      var p,n,count;
      p=phone no.value;
      n=p.length;
      count=0;
      if(isNaN(p)==true)
            alert("Phone No should be number");
            return;
      if(p<0)
            alert("Phone should not be negative");
            return;
      submitFlag = true;
  if(document.form2.phone no.value.length!=10){
    submitFlag=false:
    alert("invalid length - 10 characters needed!");
```

```
else
            alert("Phone no is OK");
</script>
<h1><font color=Red>Phone No Validation</font></h1>
<form name="form2" id="form2">
Phone No: <input type="text" name="phone no">
<input type="submit" name="b1" value="Submit" onClick="check1(phone no)"><br>
</form><br>>
<script>
function check(amt)
{
      var a,n,ch,t,i,g,count;
      a=amt.value;
      g=a.length;
      count=0;
      if(isNaN(a)==true)
            alert("Amount should be number");
            return;
      if(a < 0)
            alert("Amount should not be negative");
            return;
      t=a.indexOf(".");
  if(t==-1||g<=t+3)
    alert("Amount is OK");
      else
            alert("Amount After decimal pt. should not greater than 2 digits");
</script>
<h1><font color=Red>Amount Validation</font></h1>
<form name="form3" id="form3">
Amount: INR<input type="text" name="amt">
<input type="submit" name="b2" value="check" onClick="check(amt)"><br>
</form><br>>
</body>
</html>
```

AIM: JavaScript code for validation of Username and Password.

Create a Page in HTML that allows a user to enter a username and password. Use JavaScript to validate the entries:

- The username must consist of at least _____number of characters and must not exceed _____ number of characters/numeric. The password must consist of at least 6 characters and at most number of characters/numeric.
- The username characters can consist only of alphabets and digits. No other symbols are allowed including blank spaces.
- The password field should not display the password as it is typed in. Each character should be represented by the '*' character.

```
<html lang="en">
<head>
<title>JavaScript Username & Password Validation</title>
<style>
h2 {
       background-color: #FEFFED; padding: 30px 35px;
       margin: -10px -50px; text-align:center; border-radius: 10px 10px 0 0;
hr{
       margin: 10px -50px; border: 0; border-top: 1px solid #ccc; margin-bottom: 40px;
div.container{
       width: 900px; height: 610px; margin:35px auto; font-family: 'Raleway', sans-serif;
div.main {
       width: 80%; padding: 10px 50px 25px; border: 2px solid gray;
       border-radius: 10px; font-family: raleway; float:left; margin-top:50px;
input[type=text],input[type=password]{
       width: 50%; height: 40px; padding: 5px; margin-bottom: 25px; margin-top: 5px;
       border: 2px solid #ccc; color: #4f4f4f; font-size: 16px; border-radius: 5px;
label{
       color: #464646; text-shadow: 0 1px 0 #fff; font-size: 14px; font-weight: bold;
}
.note {
       color:red;
.valid{
       color:green;
.back{
```

```
text-decoration: none;
       border: 1px solid rgb(0, 143, 255);
       background-color: rgb(0, 214, 255);
       padding: 3px 20px;
       border-radius: 2px;
       color: black;
input[type=submit]{
       border: 1px solid #e5a900;
       color: #4E4D4B;
       font-weight: bold;
       width: 60%;
       border-radius: 5px;
       padding: 10px 0;
input[type=submit]:hover{
       background: linear-gradient(#ffdd7f 5%, #ffbc00 100%);
</style>
<script>
function formValidation()
       var uid = document.registration.userid;
       var passid = document.registration.passid;
       if(userid validation(uid,5,12))
               if(passid validation(passid,7,12))
       return false;
function userid validation(uid,mx,my)
       var uid len = uid.value.length;
       if (uid len == 0 \parallel uid len >= my \parallel uid len < mx)
           alert("User Id should not be empty / length be between "+mx+" to "+my);
              uid.focus();
              return false;
       // Username must have alphabet characters only
       var letters = /^[A-Za-z]+$/;
       if(uid.value.match(letters))
       return true;
       else
               alert('Username must have alphabet characters only');
              uid.focus();
              return false;
```

```
return true;
function passid validation(passid,mx,my)
       var passid len = passid.value.length;
       if (passid len == 0 || passid len >= my || passid len < mx)
        alert("Password should not be empty / length be between "+mx+" to "+my);
              passid.focus();
              return false;
       else
              alert('Form Succesfully Submitted');
              window.location.reload()
              return true;
</script>
</head>
<body onload="document.registration.userid.focus();">
<center>
<div class="container">
<div class="main">
<h1>Javascript Username & Password Validation</h1>
Use tab keys to move from one input field to the next.
<form name='registration' onSubmit="return formValidation();">
<label for="userid">Username:</label>
<input type="text" name="userid" size="12" /><br/>
<label for="passid">Password:</label>
<input type="password" name="passid" size="12" />
<input type="submit" name="submit" value="Submit" />
</form>
</div>
</div>
</center>
</body>
</html>
```

JavaScript code to validate a date field to ensure it's in the format mm/dd/yyyy.

Create a page in HTML that contains a text box and a button object. The textboxes should be used by users to enter their date of birth in the format **mm/dd/yyyy**. Do not make use of any dropdown boxes. Use JavaScript to validate the date entered when the button object is clicked.

If the date entered is not acceptable, then a Message box carrying an appropriate message must indicate the same. In this case, after the message box, the wrong date should get deleted and focus should be back on the date text box to re-enter the same.

The message displayed in case of invalid dates must be different for each case. Three cases are to be considered as listed below:

- 1. Invalid Date, such a date can never occur (e.g. 32/41/1929)
- 2. Valid date, but ahead of the system date.

```
<html>
       <head>
       <title>Date Validation</title>
       <script>
       function checkdate(input)
               //Basic check for format validity
               var validformat=/^d{2}\sqrt{d}{2}\sqrt{d}{4}$/
               var returnval=false
               if(!validformat.test(input.value))
                       alert("Invalid Date Format. Please correct and submit again.")
               else
                      //Detailed check for valid date ranges
                       var monthfield=input.value.split("/")[0]
                       var dayfield=input.value.split("/")[1]
                       var yearfield=input.value.split("/")[2]
                       var dayobj=new Date(yearfield,monthfield-1,dayfield)
                       if((dayobj.getMonth()+1!=monthfield)||(dayobj.getDate()!=dayfield)||
(dayobj.getFullYear()!=yearfield))
                              alert("Invalid Day, Month, or Year range detected. Please
correct and submit again.")
                       else
                              returnval=true
```

```
if(returnval==false)
                     input.select()
                     return returnval
      </script>
      </head>
      <body>
       <center>
      <h1>Program to Validate a date field in the format "mm/dd/yyyy"</h1>
      <form onSubmit="return checkdate(this.mydate)">
      <input type="text" name="mydate" />
      <input type="submit" value="submit"/><br/>
      <b>Valid date format:</b>mm/dd/yyyy<br/>
      </form>
       </center>
      </body>
</html>
```

Use of JavaScript for Validation of E-mail Address.

Create a page in HTML that contains a text box and a button object. The textbox should be used by users to enter their e-mail address. Use JavaScript to validate the e-mail address entered. The following five points have to be noted.

Regarding the '@' character.

- The E-mail address must contain the character '@' and it should appear only once in the address.
- '@' cannot appear in the beginning or end of the address.

Regarding the . (Dot) characters.

- The E-mail address must contain at least one . (Dot) character in the part of the address after the '@' character.
- The . (Dot) character cannot come immediately before or after the '@' character.
- The . (Dot) character cannot appear in the beginning or end of the address.

```
<html>
       <head>
       <title>Email Validation</title>
       <script language="JavaScript">
       function checkEmail() {
         var email = document.getElementById('txtEmail');
         var filter = /^([a-zA-Z0-9 \.])+([a-zA-Z0-9]\{2,4\})+;
         if (!filter.test(email.value)) {
       alert('Please provide a valid email address');
       email.focus;
       return false;
       }
       else
              alert("Email address is ok");
       </script>
       </head>
       <body>
       <h2>E-mail Address Validation Program</h2>
       <hr>>
       <form>
       Enter E-mail Address:
       <input type='text' id='txtEmail'/>
       <input type='submit' name='submit' onclick='Javascript:checkEmail();'/>
       <input type="reset" name="res" value="Reset">
       </form>
       </body>
</html>
```

JavaScript code to display the given no is odd or even.

Create ASP.NET web application using Visual Basic.NET to display a report of Client IP address, Browser etc.

PROCEDURE:

- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Then the Default.aspx page will be open and select the Design tab.
- Then insert the code in the Source tab for appropriate event.
- Run the website application using F5 key.

```
<%@ Page Language="VB"%>
<html>
<head runat="server">
  <title>Client Side IP Address</title>
</head>
<body>
<h1> Client Side IP Address </h1>
    <b>IP address is:::</b>
    <br/><b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("remote addr"))
<mark>%></b> </mark>
     <b>The server's port:::</b>
    <br/><b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("server port"))
     <b>The server's software:::</b>
    <b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("server soft"))
<mark>%></b></mark>
           <b>The Remote Address is:::</b>
    <br/><b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("REMOTE ADDR"))
<mark>%></b></mark>
    <b>The Local Address is:::</b>
    <br/>
<b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("LOCAL ADDR"))
<mark>%></b></mark>
    <b>Path Information:::</b>
    <br/><b style="color: #CC6600"> <% Response. Write(Request. Server Variables ("PATH_INFO"))
    <b>The DNS lookup of the IP address is:::</b>
    <br/><b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("remote host"))
<mark>%></b> </mark>
    <b>The method used to call the page:::</b>
    <br/><b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("request_method"))
<mark>%></mark></b> 
    <b>The server's domain name:::</b>
    <br/><b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("server_name"))
<mark>%></b></mark>
     <b>Browser is:::</b>
    <br/><b style="color: #CC6600"> <%Response.Write(Request.ServerVariables("http_user_agent"))
<mark>%></b> </mark>
</body>
</html>
```

Create ASP.NET web application using Visual Basic.NET to display Server Side time along with client side script to display Client Side time.

PROCEDURE:

- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Then the Default.aspx page will be open and select the Design tab.
- Then insert the code in the Source tab for appropriate event.
- Run the website application using F5 key.

```
<%@ Page Language="VB"%>
<html>
<head runat="server">
  <title> Report of server side time and client side time </title></head>
<body>
        <center><h1>Server/Client Side Date and Time:</h1></center>
    <%Response.Write("<font color=blue size=5><b>Server Side Information:-</b></font><br/>br>
Current Date is: - " & Today() & "<br/>br> Current time is: - " & TimeOfDay() & "<br/>br> Month Name
is : -" & MonthName(Month(Today())) &
                                                       "<br/>br>Weekday Name is: - "
WeekdayName(Weekday(Today)) & "<br/>
'sr> <font color=blue size= 5><b>Client Side Information:
-</b></font><br/>')%>
  <script language=javascript>
  var d = new Date()
  var time = d.getHours()
  var mn = d.getMonth()
  var monthNames = ["January", "February", "March", "April", "May", "June",
  "July", "August", "September", "October", "November", "December"];
  var dayNames = ["Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday",
  "Saturday"];
  var objDate = new Date(),
  locale = "en us",
  month = objDate.toLocaleString(locale, { month: "long" });
  var currentDate = new Date()
  var day = currentDate.getDate()
  var month = currentDate.getMonth() + 1
  var year = currentDate.getFullYear()
  document.write("<b>Current date is: -" + day + "/" + month + "/" + year + "</b>")
  var currentTime = new Date()
  var hr = currentTime.getHours()
  var min = currentTime.getMinutes()
  var sec = currentTime.getSeconds()
  document.write("<br/>br>Current Time is: -" + hr + ":" + min + ":" + sec);
  document.write("<br/>br>The current month is:- " + monthNames[d.getMonth()]);
  document.write("<br/>br>The current weekday is:- " + dayNames[d.getDay()]);
</script>
```

Create ASP.NET web application using Visual Basic.NET to calculate the number of days a person has lived on basis of the date of Birth.

PROCEDURE:

- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Then the Default.aspx page will be open and select the Design tab.
- Construct form with Text box, DropDownList, Button and Label.
- Then insert the code in the Source tab for appropriate click event.
- Run the website application using F5 key.

HTML CODE:

```
<html>
<head runat="server">
  <title>Age Calculator</title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
       <center><h1>Age Calculator</h1><h3>(To calculate the Number of Days a Person
Lived)</h3></center><br /><hr />
    Enter Your Birth Date: <asp:DropDownList ID="cbomonth" runat="server">
      <asp:ListItem>January</asp:ListItem>
      <asp:ListItem>February</asp:ListItem>
      <asp:ListItem>March</asp:ListItem>
      <asp:ListItem>April</asp:ListItem>
      <asp:ListItem>May</asp:ListItem>
      <asp:ListItem>June</asp:ListItem>
      <asp:ListItem>July</asp:ListItem>
      <asp:ListItem>August</asp:ListItem>
      <asp:ListItem>September</asp:ListItem>
      <asp:ListItem>October</asp:ListItem>
      <asp:ListItem>November</asp:ListItem>
      <asp:ListItem>December</asp:ListItem>
    </asp:DropDownList>
    <asp:DropDownList ID="cboday" runat="server">
       <asp:ListItem>01</asp:ListItem>
      <asp:ListItem>02</asp:ListItem>
      <asp:ListItem>03</asp:ListItem>
      <asp:ListItem>04</asp:ListItem>
      <asp:ListItem>05</asp:ListItem>
      <asp:ListItem>06</asp:ListItem>
      <asp:ListItem>07</asp:ListItem>
       <asp:ListItem>08</asp:ListItem>
      <asp:ListItem>09</asp:ListItem>
      <asp:ListItem>10</asp:ListItem>
      <asp:ListItem>11</asp:ListItem>
```

```
<asp:ListItem>13</asp:ListItem>
      <asp:ListItem>14</asp:ListItem>
      <asp:ListItem Value="15"></asp:ListItem>
      <asp:ListItem Value="16"></asp:ListItem>
      <asp:ListItem Value="17"></asp:ListItem>
      <asp:ListItem Value="18"></asp:ListItem>
      <asp:ListItem Value="19"></asp:ListItem>
      <asp:ListItem Value="20"></asp:ListItem>
      <asp:ListItem Value="21"></asp:ListItem>
      <asp:ListItem Value="22"></asp:ListItem>
      <asp:ListItem Value="23"></asp:ListItem>
      <asp:ListItem Value="24"></asp:ListItem>
      <asp:ListItem Value="25"></asp:ListItem>
      <asp:ListItem Value="26"></asp:ListItem>
      <asp:ListItem Value="27"></asp:ListItem>
      <asp:ListItem Value="28"></asp:ListItem>
      <asp:ListItem Value="29"></asp:ListItem>
      <asp:ListItem Value="30"></asp:ListItem>
      <asp:ListItem Value="31"></asp:ListItem>
    </asp:DropDownList>
    <asp:TextBox ID="txtyear" runat="server"></asp:TextBox>
    <asp:Button ID="Button1" runat="server" Text="Calculate" /> <br/>
    <br >
    <asp:Label ID="Label5" runat="server" Font-Size="Large">Today&#39;s Date
is:</asp:Label>
     <asp:Label ID="Label1" runat="server" Font-Bold="True" Font-Size="Large"
      ForeColor="#996600"></asp:Label>
    <br >
    <asp:Label ID="Label6" runat="server" Font-Size="Large">Date of Birth
is:</asp:Label>
     <asp:Label ID="Label2" runat="server" Font-Bold="True" Font-Size="Large"
      ForeColor="#996600"></asp:Label>
    <br >
    <asp:Label ID="Label7" runat="server" Font-Size="Large">Your Age is: </asp:Label>
     <asp:Label ID="Label3" runat="server" Font-Bold="True" Font-Size="Large"
      ForeColor="#996600"></asp:Label>
    <asp:Label ID="Label8" runat="server" Font-Size="Large">Person Lived Days are:
</asp:Label>
     <asp:Label ID="Label4" runat="server" Font-Bold="True" Font-Size="Large"
      ForeColor="#996600"></asp:Label>
    <br/>br />
  </div>
  </form>
</body>
</html>
```

<asp:ListItem>12</asp:ListItem>

VB.NET CODE:

```
Public Class 3
  Inherits System. Web. UI. Page
  Protected Sub Button1 Click(ByVal sender As Object, ByVal e As EventArgs) Handles
Button1.Click
    Dim format As String = "MMMM-dd-yyyy"
    Dim curTime As DateTime = DateTime.Now
    Dim dt As Date
    Dim BOD As String
    BOD = cbomonth.text + "-" + cboday.text + "-" + txtyear.text
    If Date.TryParseExact(BOD, "MMMM-dd-yyyy", Nothing,
Globalization.DateTimeStyles.None, dt) Then
      Dim Age As New Date(Now.Subtract(dt).Ticks)
      Label1.Text = curTime.ToString(format)
      Label2.Text = BOD
      Dim year As String = Age. Year - 1
      Dim month As String = Age.Month - 1
      Dim day As String = Age.Day - 1
      Label3.Text = year + "Years," + month + "Months and " + day + "Days"
      'MsgBox(String.Format("Your age is: {0} Years and {1} Months", Age. Year - 1,
Age.Month - 1))
      Dim d As String = Int((year * 365.25) + (month * 30.4375) + (day))
      Label4.Text = d + "days"
    Else
      MsgBox("Birth Date is in wrong format")
  End Sub
End Class
```

Create ASP.NET web application using Visual Basic.NET to create to display contents from a text file.

PROCEDURE:

- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Then the Default.aspx page will be open and select the Design tab.
- Construct form with Multiline Text box, Listbox and Label.
- Then insert the code in the Source tab for appropriate event.
- Run the website application using F5 key.

HTML CODE:

```
<% Page Language="vb" >
<html>
<head runat="server">
  <title> ASP.NET code to display contents from a Text File </title></head>
<body>
  <form id="form1" runat="server">
  < div>
  <h1>ASP.NET code to display contents from a Text File</h1>
  <h3>Multiline Textbox:</h3>
  <asp:TextBox ID="TextBox1" runat="server" Height="268px" TextMode="MultiLine"
  Width="867px"></asp:TextBox> <br/>
  <h3>Listbox:</h3>
  <asp:ListBox ID="ListBox1" runat="server" Height="268px" Width="867px">
</asp:ListBox>
  </div>
  </form>
</body></html>
```

VB.NET CODE:

```
Imports System.Text
Imports System.Collections
Public Class txt_file
Inherits System.Web.UI.Page
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs)
Handles Me.Load
Dim filePath As String = Server.MapPath("TextFile.txt")
Dim reader1 As New StreamReader(filePath)
Dim reader4 As New StreamReader(filePath)
'ReadToEnd() method
Dim text1 As String = reader1.ReadToEnd()
TextBox1.Text = text1
'ReadLine() method
```

Dim list As New ArrayList()
While Not reader4.EndOfStream
Dim text3 As String = reader4.ReadLine()
list.Add(text3)
End While
ListBox1.DataSource = list
ListBox1.DataBind()
reader1.Close()
reader4.Close()
End Sub
End Class

Create ASP.NET web application using Visual Basic.NET to create to display Hit Counter.

PROCEDURE:

- Create an XML file using Notepad or other editor and save the file as counter.xml.
- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Then the Default.aspx page will be open and select the Design tab.
- Then insert the code in the Source tab for appropriate click event.
- Run the website application using F5 key.

VB.NET CODE:

```
Public Class counter
  Inherits System.Web.UI.Page
  Protected Sub Page Load(ByVal sender As Object, ByVal e As System.EventArgs)
Handles Me.Load
    Me.countMe()
    Dim tmpDs As New DataSet()
    tmpDs.ReadXml(Server.MapPath("~/counter.xml"))
    lblCounter.Text = tmpDs.Tables(0).Rows(0)("hits").ToString()
  End Sub
  Private Sub countMe()
    Dim tmpDs As New DataSet()
    tmpDs.ReadXml(Server.MapPath("~/counter.xml"))
        Dim hits As Integer = Int32.Parse(tmpDs.Tables(0).Rows(0)("hits").ToString())
    hits += 1
    tmpDs.Tables(0).Rows(0)("hits") = hits.ToString()
    tmpDs.WriteXml(Server.MapPath("~/counter.xml"))
  End Sub
End Class
```

COUNTER.XML:

```
<?xml version="1.0" standalone="yes"?>
<counter>
    <count>
        <hits>11</hits>
        </count>
        </counter>
```

Create ASP.NET web application using Visual Basic.NET to create Login Screen form and verifies username and password from database.

Create a database using Microsoft Access containing 2 Fields username and password.

Create at least 5 records. Use OLEDB or Use and configure ODBC Data Source Administrator to link to this database. Write code using ASP.NET that would display a login page, which accepts username and password. The code should then check whether the username and password entered by the user is registered in the database.

If the username with the corresponding password exists, only then the user should be directed to some other Web Page. Else the message "Invalid User" must be displayed in a Message.

PROCEDURE:

- Click Start→ Programs→ Microsoft Office Access 2007.
- Create a new database.
- Create a table and insert the values into the table.
- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Select View → Server Explorer.
- In Server Explorer select Data Connections and expand it.
- Right click the Stored Procedure in the Data Connections tab and click Add New Stored Procedure.
- Type the query in the code editor window and run the code by select Project \rightarrow Run.
- Then type the code in the Source tab.
- Run the website application using F5 key.

Database (Table Name-Login):

Column Name	Data Type
ID	Autonumber(primary key)
Username	varchar(50)
Password	varchar(50)

Login.Aspx page:

```
< div>
<div style="font-family: Arial, Helvetica, sans-serif; font-size: x-large; font-style: normal;</pre>
font-weight: bold; text-transform: none; color: #FFFFFF; background-color: #008080">Log
In</div><br/>
Username:
<asp:TextBox ID="txtUserName" runat="server"/>
<asp:RequiredFieldValidator ID="rfvUser" ErrorMessage="Please enter Username"
ControlToValidate="txtUserName" runat="server" />
>
Password:
<asp:TextBox ID="txtPWD" runat="server" TextMode="Password"/>
<asp:RequiredFieldValidator ID="rfvPWD" runat="server" ControlToValidate="txtPWD"</pre>
ErrorMessage="Please enter Password"/>
<asp:Button ID="btnSubmit" runat="server" Text="Submit" onclick="btnSubmit Click" />
 <br/> <br/>/>
  <asp:Label ID="Literal1" runat="server" Font-Bold="True" Font-Italic="True"</pre>
    Font-Size="XX-Large" ForeColor="#996600"></asp:Label>
</div>
</form></center>
</body></html>
VB.NET Code
Imports System.Data.OleDb
Public Class login
  Inherits System.Web.UI.Page
  Protected Sub Page Load(ByVal sender As Object, ByVal e As System.EventArgs)
Handles Me.Load
  End Sub
  Protected Sub btnSubmit Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnSubmit.Click
    Dim connect As String = "Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=C:\Users\PROGRESSIVE\Documents\login.accdb"
    Dim query As String
    query = "Select Count(*) From login Where username = ? And password = ?"
    Dim result As Integer = 0
    Using conn As New OleDbConnection(connect)
```

```
Using cmd As New OleDbCommand(query, conn)
cmd.Parameters.AddWithValue("", txtUserName.Text)
cmd.Parameters.AddWithValue("", txtPWD.Text)
conn.Open()
Session("User") = txtUserName.Text
result = DirectCast(cmd.ExecuteScalar(), Integer)
End Using
End Using
If result > 0 Then
Response.Redirect("LoggedIn.aspx")
Else
Literal1.Text = "Your login attempt was not successful.Please try again."
End If
End Sub
End Class
```

Create ASP.NET web application using Visual Basic.NET to create web application to accept following information store at server database if visitor press button Save.

PROCEDURE:

- Click Start→ Programs→ Microsoft Office Access 2007.
- Create a new database.
- Create a table and insert the values into the table.
- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Select View → Server Explorer.
- In Server Explorer select Data Connections and expand it.
- Right click the Stored Procedure in the Data Connections tab and click Add New Stored Procedure.
- Type the query in the code editor window and run the code by select Project \rightarrow Run.
- Then type the code in the Source tab.
- Run the website application using F5 key.

CODE:

```
<% Page Language="vb" %>
<html>
<head runat="server">
 <title></title>
</head>
<body>
 <center>
 <form id="form1" runat="server">
 < div>
 <h1>Student Entry Form</h1>
 Roll No.
     <asp:TextBox ID="txtRn" runat="server" Width="243px"></asp:TextBox>
   <asp:Button ID="Button6" runat="server" Text="Find" />
 >
   Name of Student:
     <asp:TextBox ID="txtName" runat="server" Width="239px"></asp:TextBox>
```

```
Birth Date:
    <asp:TextBox ID="txtbdate" runat="server" Width="234px"></asp:TextBox>
    Fees:
      <asp:TextBox ID="txtFees" runat="server" Width="241px"></asp:TextBox>
    Gender:
      <asp:DropDownList ID="ddGender" runat="server" Height="22px" Width="242px">
        <asp:ListItem>Male</asp:ListItem>
        <asp:ListItem>Female</asp:ListItem>
      </asp:DropDownList>
    <br />
    <asp:Button ID="btnAdd" runat="server" Text="Add Student" />
    <asp:Button ID="btnModify" runat="server" Text="Modify" />
    <asp:Button ID="btnDelete" runat="server" Text="Delete" />
    <asp:Button ID="btnSave" runat="server" Text="Save" />
    <asp:Button ID="btnCancel" runat="server" Text="Cancel" />
  </div>
  </form>
  </center>
</body>
</html>
VB.NET CODE:
Imports System.Data
Imports System.Data.OleDb
Public Class Student
  Inherits System. Web. UI. Page
  Dim connect As String = "Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=C:\Users\PROGRESSIVE\Documents\Master.accdb"
  Dim connection As New OleDb.OleDbConnection
  Dim mydb As String
  Protected Sub Page Load(ByVal sender As Object, ByVal e As System. EventArgs)
Handles Me.Load
    txtFees.Enabled = False
```

```
txtFees.Enabled = False
    ddGender.Enabled = False
    btnSave.Enabled = False
    btnModify.Enabled = False
    btnDelete.Enabled = False
    connection = New OleDb.OleDbConnection(connect)
    connection.Open()
  End Sub
  Protected Sub btnAdd Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnAdd.Click
    txtFees.Enabled = True
    txtFees.Enabled = True
    ddGender.Enabled = True
    txtbdate.Enabled = True
    btnSave.Enabled = True
    btnCancel.Enabled = True
    btnModify.Enabled = False
    btnDelete.Enabled = False
  End Sub
  Protected Sub btnCancel Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnCancel.Click
    txtFees.Enabled = False
    txtRn.Text = ""
    txtName.Text = ""
    txtFees.Text = ""
    txtFees.Enabled = False
    txtFees.Text = ""
    ddGender.Enabled = False
    txtbdate.Enabled = False
    btnSave.Enabled = False
    btnModify.Enabled = False
    btnDelete.Enabled = False
  End Sub
  Protected Sub btnSave Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnSave.Click
    mydb = "INSERT INTO Student(rno,sname,bdate,fees,gender) " &
                " VALUES (" & txtRn.Text & "," & txtName.Text & "'," & txtbdate.Text &
"','" & txtFees.Text & "'," & ddGender.Text & "')"
    Dim run = New OleDb.OleDbCommand
    run = New OleDbCommand(mydb, connection)
    run.ExecuteNonQuery()
    MsgBox("Record inserted successfully.", MsgBoxStyle.Information, "Status")
    txtRn.Text = ""
    txtbdate.Text = ""
    txtName.Text = ""
    txtFees.Text = ""
```

```
End Sub
  Protected Sub Button6 Click(ByVal sender As Object, ByVal e As EventArgs) Handles
Button6.Click
    Dim sql1 As String = "SELECT * FROM Student"
    Dim cmdbld1 As OleDbCommandBuilder
    Dim dt1 As DataTable
    Dim adap1 As OleDbDataAdapter
    Dim r As DataRow
    If txtRn.Text = "" Then
      MsgBox("Please enter Roll No.", MsgBoxStyle.Information, "Status")
      Exit Sub
    End If
    adap1 = New OleDbDataAdapter(sql1, connect)
    cmdbld1 = New OleDbCommandBuilder(adap1)
    dt1 = New DataTable()
    dt1.Clear()
    adap1.Fill(dt1)
    Dim row() As DataRow
    row = dt1.Select("rno=" & txtRn.Text)
    If row.Length > 0 Then
      txtRn.Text = row(0)("rno")
      txtName.Text = row(0)("sname")
      txtbdate.Text = row(0)("bdate")
      txtFees.Text = row(0)("fees")
      ddGender.Text = row(0)("gender")
      r = row(0)
    Else
      MsgBox("Roll No." & txtRn.Text & " not found. Try again.", MsgBoxStyle.Information,
"Status")
    End If
    btnModify.Enabled = True
    btnDelete.Enabled = True
    txtFees.Enabled = True
    ddGender.Enabled = True
  End Sub
  Protected Sub btnDelete Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnDelete.Click
    If txtRn.Text = "" Then
      MsgBox("Please enter Roll No.", MsgBoxStyle.Information, "Status")
      Exit Sub
    End If
    Dim sql2 As String = "Delete * from Student where rno="" & txtRn.Text & """
    Dim r3 = New OleDb.OleDbCommand
    r3 = New OleDbCommand(sql2, connection)
    r3.ExecuteNonQuery()
    MsgBox("Record deleted successfully.", MsgBoxStyle.Information, "Status")
    txtRn.Text = ""
    txtName.Text = ""
    txtbdate.Text = ""
    txtFees.Text = ""
  End Sub
```

```
Protected Sub btnModify Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnModify.Click
    If txtRn.Text = "" Then
       MsgBox("Please enter Roll No.", MsgBoxStyle.Information, "Status")
    End If
    Dim sql3 As String = "update [Student] set [sname] = " & txtName.Text & ", [bdate] =
"" & txtbdate.Text & "", [fees] = "" & txtFees.Text & "", [gender] = "" & ddGender.Text & ""
Where [rno] = " & txtRn.Text & ""
    Dim r4 = New OleDb.OleDbCommand
    r4 = New OleDbCommand(sql3, connection)
    Try
       r4.ExecuteNonQuery()
       r4.Dispose()
       'connection.Close()
    Catch ex As Exception
       MsgBox(ex.Message)
    End Try
    txtRn.Text = ""
    txtName.Text = ""
    txtbdate.Text = ""
    txtFees.Text = ""
  End Sub
End Class
```

Use of database and ASP.NET code that allows a user to view as well as edit information.

You are given a pre-created and functional Access Database on the server containing two fields and four records. This database stores the employee number and their corresponding salaries as their fields. Write ASP.NET code which will display a web page that shows the employee number and corresponding salaries in a tabular form. The page must also display two text boxes one for the employee number and the other for its incremented salary and a button object having value "change salary". When this button is clicked the action should update the database to the changed price as well as display the updated information in the same format as earlier.

PROCEDURE:

- Click Start→ Programs→ Microsoft Office Access 2007.
- Create a new database.
- Create a table and insert the values into the table.
- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Select View → Server Explorer.
- In Server Explorer select Data Connections and expand it.
- Right click the Stored Procedure in the Data Connections tab and click Add New Stored Procedure.
- Type the query in the code editor window and run the code by select Project \rightarrow Run.
- Then type the code in the Source tab.
- Run the website application using F5 key.

CODE:

```
GridLines="None" BackColor="White" AllowPaging="true" AllowSorting="true"
BorderColor="White" BorderStyle="Ridge"
    BorderWidth="2px" CellSpacing="1">
    <Columns>
      <asp:BoundField DataField="emp_no" HeaderText="Employee Number"
ReadOnly="True"
        SortExpression="emp_no" />
      <asp:BoundField DataField="salary" HeaderText="salary"
        SortExpression="salary" />
    </Columns>
    <FooterStyle BackColor="#C6C3C6" ForeColor="Black" />
    <HeaderStyle BackColor="#4A3C8C" Font-Bold="True" ForeColor="#E7E7FF" />
    <PagerStyle BackColor="#C6C3C6" ForeColor="Black" HorizontalAlign="Right" />
    <RowStyle BackColor="#DEDFDE" ForeColor="Black" />
    <SelectedRowStyle BackColor="#9471DE" Font-Bold="True" ForeColor="White" />
    <SortedAscendingCellStyle BackColor="#F1F1F1" />
    <SortedAscendingHeaderStyle BackColor="#594B9C" />
    <SortedDescendingCellStyle BackColor="#CAC9C9" />
    <SortedDescendingHeaderStyle BackColor="#33276A" />
  </asp:GridView>
  <asp:AccessDataSource ID="AccessDataSource1" runat="server"
    DataFile="~/Employee.accdb" SelectCommand="SELECT * FROM [emp]">
  </asp:AccessDataSource>
  <br >
  <h3>Please enter the new salary to be changed</h3>
  <br >
  Employee Number:
  <asp:TextBox ID="txtEmpNo" runat="server"></asp:TextBox>
  New Salary:
  <asp:TextBox ID="txtNewSal" runat="server"></asp:TextBox>
  >
  <asp:Button ID="btnChange" runat="server" Text="Change Salary" />
    <asp:Button ID="btnClr" runat="server" Text="Clear" />
  </form>
  </center>
  </body>
</html>
```

VB.NET CODE:

Imports System.Data.OleDb Imports System.Data.Common

```
Public Class Edit info
  Inherits System.Web.UI.Page
  Dim connect As String = "Provider=Microsoft.ACE.OLEDB.12.0:Data
Source=C:\Users\RAHUL\Documents\Visual Studio 2010\Projects\XII\XII\Employee.accdb"
  Dim connection As New OleDb.OleDbConnection
  Dim mydb As String
  Protected Sub Page Load(ByVal sender As Object, ByVal e As System.EventArgs)
Handles Me.Load
    connection = New OleDb.OleDbConnection(connect)
    connection.Open()
    GridView1.DataBind()
  End Sub
  Protected Sub btnChange click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnChange.Click
    If txtEmpNo.Text = "" Then
      MsgBox("Please enter Employee Number.", MsgBoxStyle.Information, "Status")
      Exit Sub
    End If
    Dim sql3 As String = "update [emp] set [emp_no] = " & txtEmpNo.Text & ", [salary] =
"" & txtNewSal.Text & "" Where [emp no] = "" & txtEmpNo.Text & """
    Dim r4 = New OleDb.OleDbCommand
    r4 = New OleDbCommand(sql3, connection)
    Try
      r4.ExecuteNonQuery()
      GridView1.DataBind()
      r4.Dispose()
      'connection.Close()
    Catch ex As Exception
      MsgBox(ex.Message)
    End Try
    txtEmpNo.Text = ""
    txtNewSal.Text = ""
  End Sub
  Protected Sub btnClr Click(ByVal sender As Object, ByVal e As EventArgs) Handles
btnClr.Click
    txtEmpNo.Text = ""
    txtNewSal.Text = ""
    txtEmpNo.Focus()
  End Sub
End Class
```

Create ASP.NET web application using Visual Basic.NET to display Multiplication Table for the numbers from 1 to 20.

PROCEDURE:

- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Then the Default.aspx page will be open and select the Design tab.
- Then insert the code in the Source tab for appropriate event.
- Run the website application using F5 key.

CODE:

```
<% Page Language="vb"%>
<html>
<head runat="server">
  <title> Multiplication table </title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
  <%
    Dim i,j
    Response. Write ("<h1>Multiplication table for the numbers from 1 to 20" &
"</h1><hr>")
    Response.Write("")
    For i = 1 To 10
      Response.Write("")
      For j = 1 To 20
        Response.Write("" & i * j & "          "&"")
      Next
      Response.Write("")
    Response.Write("")
    Response.Write("<hr><br/>")
  </div>
  </form>
</body>
</html>
```

Create ASP.NET web application using Visual Basic.NET to convert decimal number into binary number.

PROCEDURE:

- Click Start→ Programs→ Microsoft Visual Studio 2010 → Microsoft Visual Studio 2010
- Select File \rightarrow New \rightarrow Web site \rightarrow ASP.NET Web Site.
- Then the Default.aspx page will be open and select the Design tab.
- Then insert the code in the Source tab for appropriate event.
- Run the website application using F5 key.

If output Is Nothing Then

Label1.Text = output

'Return "0"

Else

HTMLCODE:

```
<% Page Language="vb" >
<html>
<head runat="server"> <title></title></head>
<body>
  <form id="form1" runat="server">
  < div>
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <asp:Button ID="Button1" runat="server" Text="Convert" /><br />
    <asp:Label ID="Label1" runat="server" Text=""></asp:Label>
  </div>
  </form></body></html>
VB.NET CODE:
Public Class decimal to binary
  Inherits System. Web. UI. Page
  Protected Sub Button1 Click(ByVal sender As Object, ByVal e As EventArgs) Handles
Button1.Click
    Dim dec As Integer
    Dim bin As Integer
    Dim output As String
    dec = TextBox1.Text
    While dec \Leftrightarrow 0
       If dec Mod 2 = 0 Then
         bin = 0
       Else
         bin = 1
       End If
       dec = dec \setminus 2
       output = Convert. ToString(bin) & output
    End While
```

