Maharashtra State Board of Secondary and Higher Secondary Education, Pune-411005

Practical Slips for Std. XII

Subject: Information Technology (97/98/99)

Group A

Science/Arts/Commerce Slips

Experiment No. 1

Creation of a Website.

Create a Website of 3 pages in which each web page is interlinked.
Select appropriate theme (like Hotel Profile, Company Profile, etc.) and create pages as follows.

The first page of the website has a background image related to the theme

- An introduction to the theme has highest level heading and 4 physical tags
- It has to hyperlinks. The color of the hyperlink should be other than default color.

The second page has

- An order list with 5 items with descriptions.
- A link to an e-mail address.
- The second page should be connected to first page through an image icon (image hyperlink) and to the third page through text link

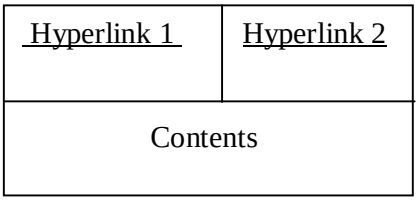
The third page has a form generated with controls like text, radio button, textarea and submit button. It connects to the homepage through an image icon. The second page is connected through a text link.

Get the handwritten code checked and corrected from the examiner. (4)
Type and save the program with appropriate file name. (3)
Execute the program and show it to the examiner.
Obtain the hardcopy of HTML code (2)

Experiment No. 2

Creation of a Website using Frames

Create a website using frames with given layout.
Select appropriate theme like (College Profile, Company Profile, and Environment etc.) and create pages as follows.



The webpage is divided into 3 different frames left, right and bottom.
The left and right section have hyperlinks. Each hyperlink on clicking displays data in bottom frame of the webpage. The bottom most section changes the content dynamically. Create internal CSS for hyperlinked files with three properties.
Get the handwritten code checked and corrected from the examiner. (4)
Type and save the code on the computer with appropriate file names.
Execute and demonstrate the functioning of the code to the examiner. (3)
Obtain hard copy of the code. (2)

Experiment No. 3

Hyperlink on a Web page using Client side image Mapping

Create a web page with an inserted image having jpeg or gif extension. Create 3 different shapes which do not overlap, note their coordinates making use of Ms-Paint. Each shape should be mapped with a different URL of which to should be to the functional world wide web and one URL should be link to a local web page.

Get the handwritten code checked and corrected form the examiner (4)

Create the web page without using existing code and save the code. Demonstrate the execution of the code to the examiner (3)

Obtain hard copy of the code (2)

Note: Shape should not be drawn on the image. Shape should not go beyond the boundary of the image displayed.

Experiment No. 4

Hyperlink on a Web page using Server side image Mapping

Create a web page with an inserted image having jpeg or gif extension. Create 3 different shape which do not overlap. Make use of server side external image map where the map file is stored on a web server and the hotspots coordinates should be noted using the Ms-Paint. Each shape should be mapped with a different URLs and same should be functional on the world wide web. Do not create URLs to local Web Pages and do not create the target web pages.

Get the handwritten HTML code as well as code written for the external map file checked and corrected form the examiner before using a computer. (4)

Create the map file and Web page without using any pre-existing web pages or code. Save the files, upload the map file to any web server that is local or a free web server on the World Wide Web that supports image maps. Execute the same. Demonstrate proper functioning of the same to the examiner. (3)

Obtain a hardcopy of the HTML code of the web page. (2)

Note: Use IIS 6.0 to execute Server Side image mapping program. Shape should not be drawn on the image. Shape should not go beyond the boundary of the image displayed.

Experiment No. 5

Use of Audio and Animation on web pages

Create a webpage that continuously plays a background sound for specific number of times without controls. This page must also contain an animated file where display dimensions are 100X100 pixels. Make use of alternate text.

Create another webpage that plays a sound continuously with controls. The webpage should contain animated image with display dimensions 100X100 pixels along with alternate text.
The audio files should be provided by the examiner and need not be encoded or created by students. Any Wave,MP3 or Au sound may be used.

Get handwritten Html code for both the pages checked and corrected from the examiner before using a computer. (4)
Type the handwritten code and save it on the computer. Demonstrate the proper functioning of the same to the examiner. (3)
Obtain a hardcopy of the HTML codes of both the web pages. (2)

Experiment No. 6

Use of Video on webpages

Create a webpage that plays a video infinite number of times with controls. The displayed video should have dimensions 200X150 pixels. The video must being playing on users interaction.

Create another webpage that plays a video without controls for some specific number of times. The dimension of video file should be 150X200 pixels. The video should play when the mouse is placed over the video area.

The video files should be provided by the examiner and need not be encoded or created by students. Any AVI, MOV or MPEG file may be used.

Get handwritten Html code for both the pages checked and corrected from the examiner before using a computer. (4)
Type the handwritten code and save it on the computer. Demonstrate the proper functioning of the same to the examiner. (3)
Obtain a hardcopy of the HTML codes of both the web pages. (2)

Experiment No. 7

Creation and Publishing a Website using FTP

Create a website using 3 HTML files, 2 JPEG images having file size not exceeding 40kb per image, 3 GIF images having file size not exceeding 30 kb per image. The webpages must be linked to each other using hyperlinks and may also have the display the images. One of them must carry a link to the executable file. Ensure that all linked web pages along with the images are stored in a common folder/ directory.
Get the handwritten HTML codes of all the pages checked and corrected from the examiner before using a computer. (4)

Create the webpages without using any pre-existing web pages or code. Save the files, execute the same and verify the functioning of the pages and links before upload. (3)
Locate a free FTP server on your local network or on the internet. Make use of WS_FTP, Cute FTP or other free GUI based FTP client program. Using this client create a folder called "HSCFINALPRAC" on the server. Upload the created website files in the newly created folder on the server.

After the upload process, ensure that the uploaded website is functional and can be viewed through a web browser. Show this to the examiner.
Obtain a hardcopy of the HTML codes of all the pages. (2)

Experiment No. 8

Cross browser testing and verifying links

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, display of a blink text and insertion of background sound. The differences must be clearly distinguishable between the two Browsers Microsoft Internet Explorer 6 or higher and Mozilla 2 or higher.
** Images that are not existing, missing or not available are called as broken images.*
Get the handwritten HTML code checked and corrected from the examiner before using a computer. (4)
Create the Web Page without using any pre-existing Web Pages or code. Save the files and execute the same on the two browsers. Observe the differences and note down the same on the answer sheet. Demonstrate the differences in rendering between the browsers to the Examiner. (3)
Obtain a hardcopy of the HTML code. (2)

Experiment No. 9

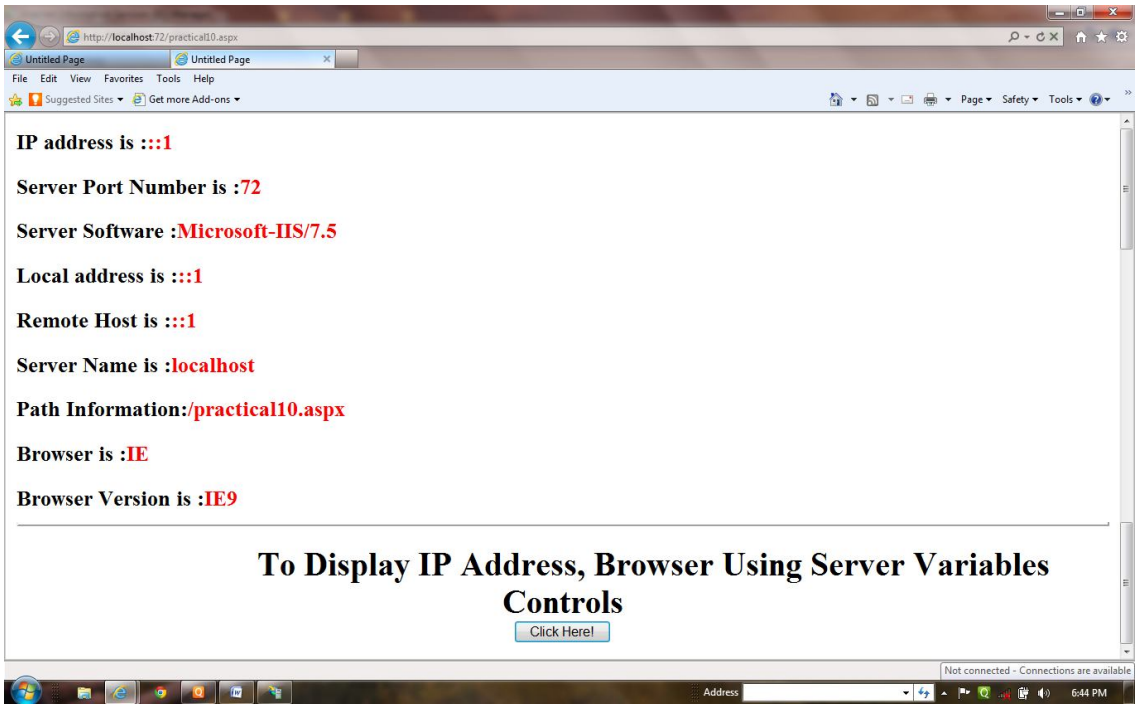
Use of an Embedded Indian Font on a Webpage

Creation of webpage in Devnagri Script (Marathi or Hindi) using unicode. Select a proper theme like 'India', 'Pollution' and write five lines information. Use MS-Word with Baraha IME **or Arial Unicode or Mangal** font and save as html. The examiner should provide Baraha IME/Mangal font to the students. Write the HTML code get it checked and corrected from the examiner before using a computer.Type the code and save with appropriate file name.	(4)
Demonstrate the execution of the same to the examiner.	(3)
Obtain a hardcopy of the HTML code.	(2)

Group B

Experiment No. 10

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



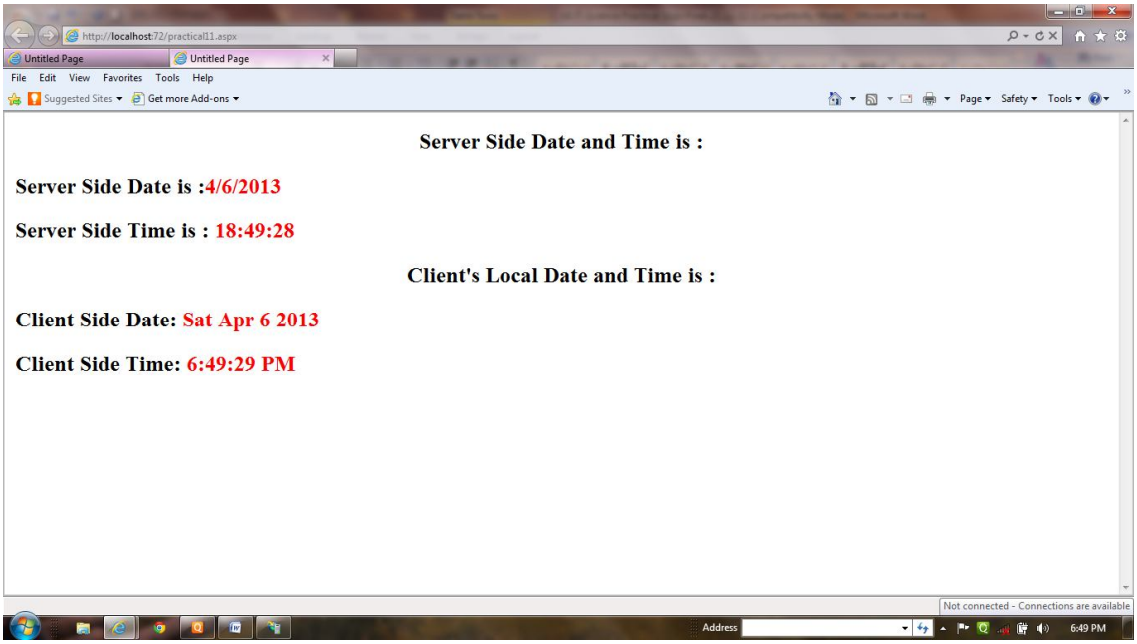
1. Display IP address of the remote host making the request
2. Display port number to which the request was sent
3. Display name and version of the server software that answers the request and runs the gateway.
4. Display browser name and version.
5. Display server host name.
6. Protocol name making the request.
7. Display the Path information of current file etc…

Get the handwritten code checked and corrected from the examiner before using a computer. (4)
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

Experiment No. 11

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



Write code using ASP.NET and JavaScript/VBScript that would display server side time and date as well as client side time and date on the same page.
The code should perform the following validation:
On basis of the date, the display must include the Weekday (i.e. Sunday, Monday etc.) as well as the name of the display month i.e. (March, April etc.) in words for both client side as well as server side.

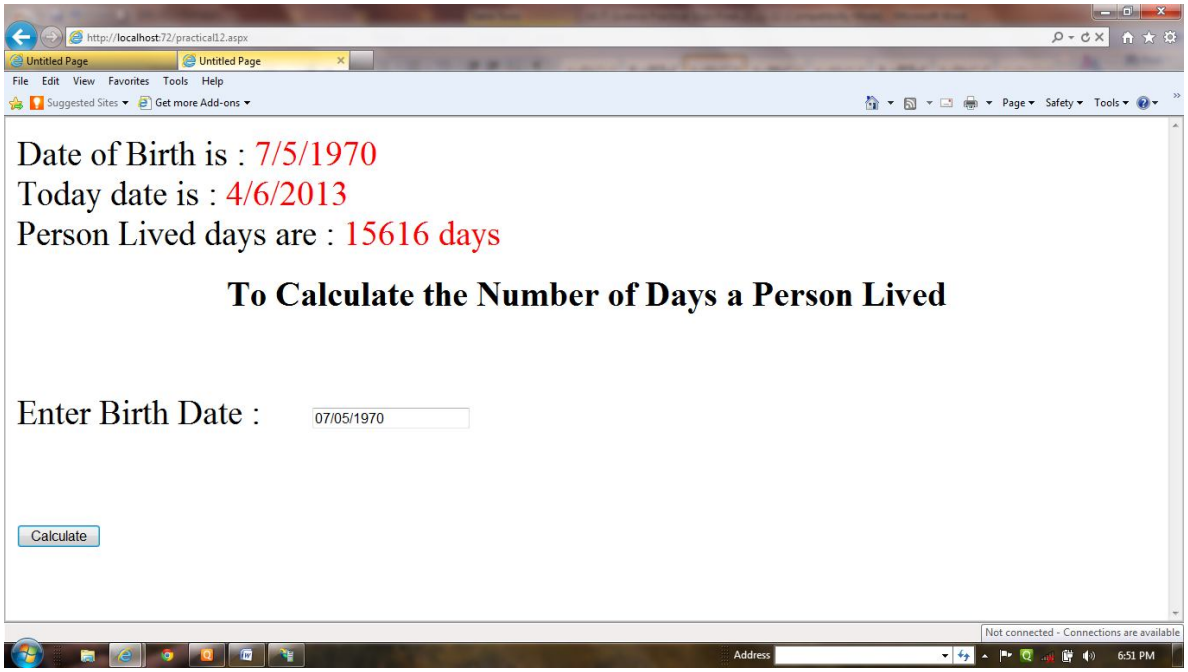
Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

Experiment No. 12

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.



Write code using ASP.NET that requests the user to enter his/her date of birth in a text box. After submitting this data, must display the total number of days the user has lived on the basis of the Date of Birth.

The page may contain proper instructions to the user regarding the manner in which the date must be entered.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

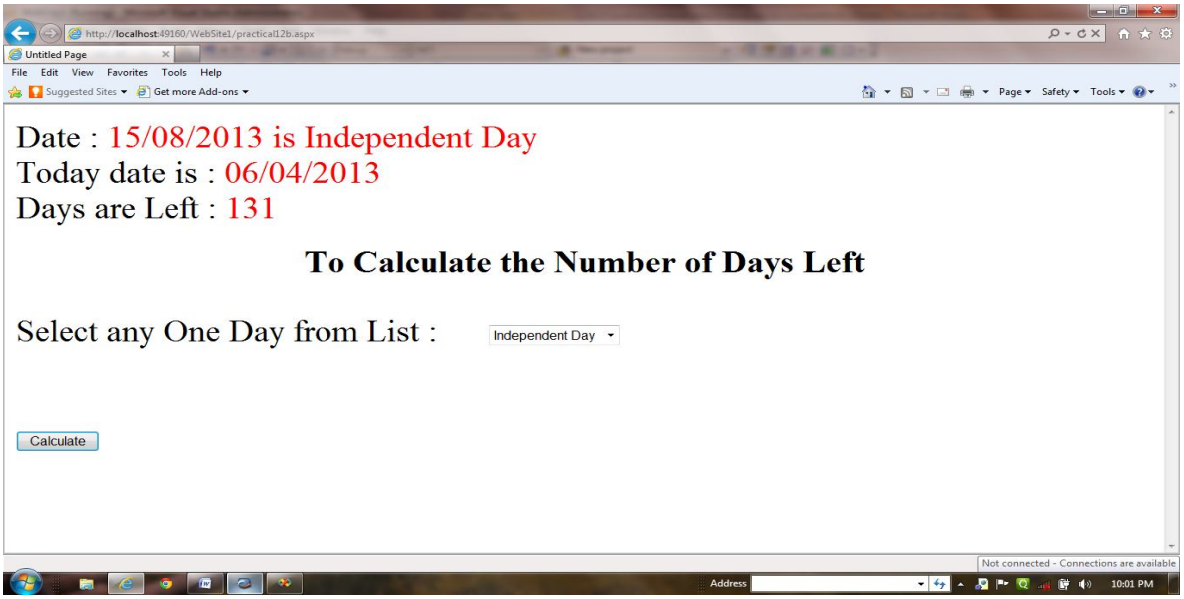
Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

OR

Experiment No. 12

Create ASP.NET web application using Visual Basic.NET to calculate the number of days left before the next occurrence of selected day.



Write code using ASP.NET that requests the user to select any one day (like Maharashtra Day, Republic Day and Independent Day) from drop down list. After submitting this data, must display the information that how many days are left from the current date till the next occurrence of the selected day.

The page may contain proper instructions to the user regarding the manner in which the date must be entered.

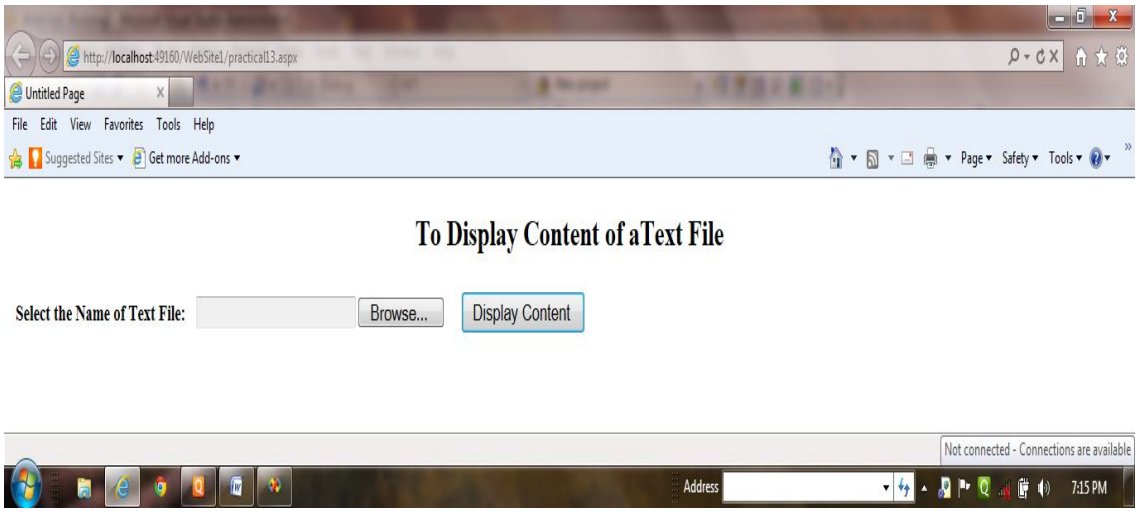
Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

Experiment No. 13

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



Create a text file containing few lines of text and select the name file to do following by using ASP.NET:

Read and display a text file and skipping display of the first ____ number of characters.

Read and display a text file and skipping display of the first line.

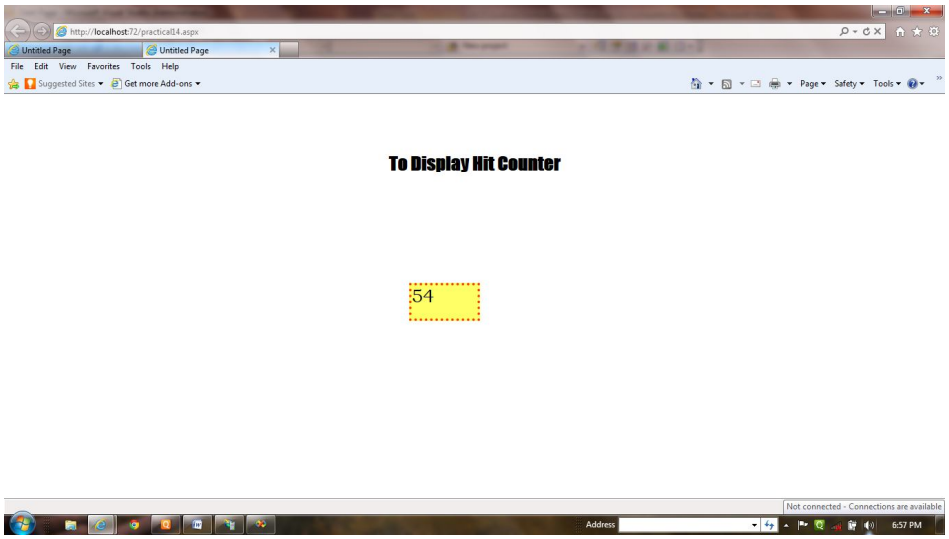
Get the handwritten codes for both the pages checked and corrected from the examiner before using a computer. (4)

Enter the codes on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain hardcopies of the original text file and coding of both the pages (.aspx and aspx.vb). (2)

Experiment No. 14

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



Write code using ASP.NET that should be display the total number of times the page is visited by the user.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

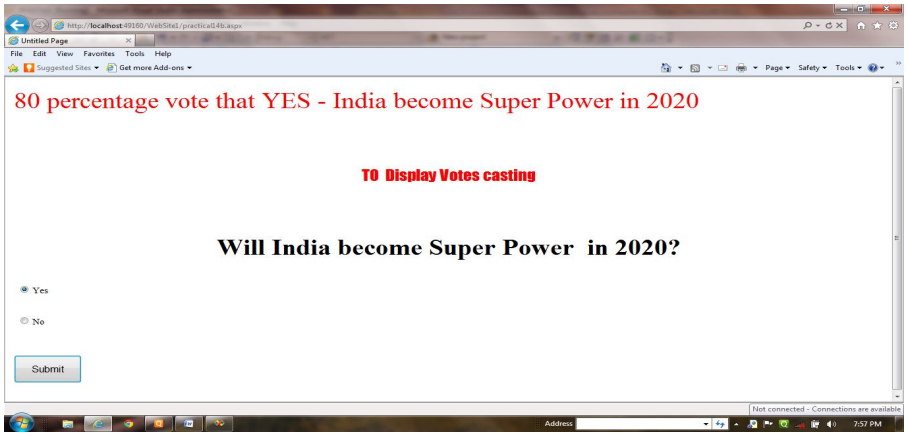
Enter the code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

OR

Experiment No. 14

Create ASP.NET web application using Visual Basic.NET to create to display Number of Votes Cast.



Write code using ASP.NET that has a question to which users are supposed to cast a Vote. There should be two buttons giving users two options: "**Yes**" and "**No**". The server should keep a count of the Number of votes that have been cast in favour of each option. Whenever a user or voter views this page, he/ she should get an account of how many votes have already been cast against the available options as well provision to cast the vote. The count of the number of votes that have been cast in favour of each option should be absolute for any user who views the web page at the same time.

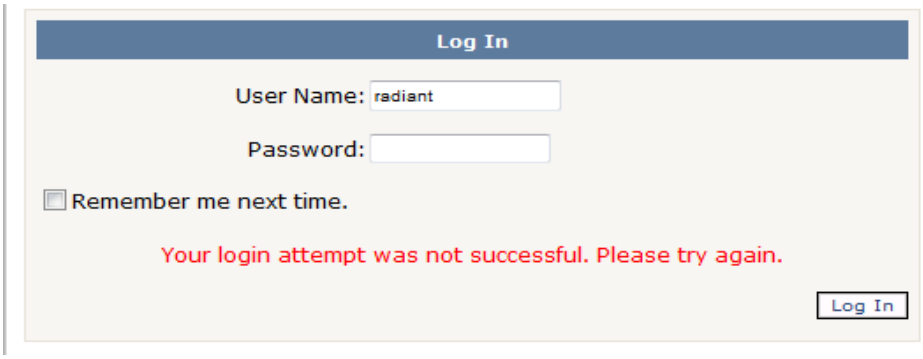
Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

Experiment No. 15

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.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Create the database, connect the same on the server. Enter the ASP.NET code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

\

OR

Experiment No. 15

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.

Student Entry Form

Create a database using Microsoft Access containing 5 Fields Rollno, Student_name, DOB, Fees and Gender. 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

Accept data and puts same into a database.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Create the database, connect the same on the server. Enter the ASP.NET code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

Experiment 16 Creation of a database and ASP.NET code that allows a user to view relevant information from the same

Create a database using Microsoft Access containing 5 Fields, Employee No, Employee Name, Address, Contact No and Salary. Feed at least 25 records. Write ASP.NET code that displays all records from this database.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Create the database and Use **OLEDB** or **Use and configure ODBC Data Source Administrator** to link to this database. Create the ASP.NET code on the computer without using any pre-existing code. Save the files and execute the same. (3)

Demonstrate proper functioning of the same to the Examiner. (2)

Obtain a hardcopy of the .aspx and aspx.vb files.

OR

Experiment 16 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.

Database Entry

Employee Number	Salary
1010	12568
1022	7896
1033	9876
1045	10258

Please enter the new salary to be changed.

Employee Number: [ ] New Salary: [ ] change salary

Use **OLEDB** or **Use and configure ODBC Data Source Administrator** to link to this database.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without using any pre-existing code. Save the files and execute the same. Demonstrate proper functioning of the same to the Examiner. (3)

Obtain a hardcopy of the .aspx and aspx.vb files. (2)

Experiment No. 17

Event Driven Client Side Script

Create a web page in HTML having a white background and two Button Objects. Write code using JavaScript such that when the mouse is placed over the first button object without clicking, the color of the background of the page should change after every __ seconds. There should at least be 7 different and visibly distinct background colors excluding the default color. When the second button object is clicked, appropriate message should be displayed in Browsers status bar.

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.

(4)

Get the handwritten codes for both the pages checked and corrected from the examiner before using a computer. (3)

Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (2)

Obtain a hardcopy of the code for both the pages.

Experiment No. 18

Use of JavaScript for Validation of Pin code and Amount

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.

- **Get the handwritten code checked and corrected from the examiner before using a computer.** (4)
- **Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner.** (3)
- **Obtain a hardcopy of the code.** (2)

OR

Experiment 18

Use of JavaScript for Validation of Telephone Number and Amt

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. (4)

Get the handwritten code checked and corrected from the examiner before using a computer. (3)

Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (2)

Obtain a hardcopy of the code.

Experiment No. 19

Use of JavaScript 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:

1. 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.
2. The username characters can consist only of Lowercase alphabets and digits. No other symbols are allowed including blank spaces.
3. The password characters cannot consist of any blank space character as well as the following characters which are also to be excluded: **( ) [ ] { } , . # < > ? ***
4. The password field should not display the password as it is typed in. Each character should be represented by the '*' character.

- Get the handwritten code checked and corrected from the examiner before using a computer. (4)
- Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)
- Obtain a hardcopy of the code. (2)

Experiment No. 20

Use of JavaScript for Validation of Date

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 **dd-mm-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.

- Get the handwritten code checked and corrected from the examiner before using a computer. (4)
- Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)
- Obtain a hardcopy of the code. (2)

OR

Experiment 20

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.

If the e-mail address entered is invalid in any way, a message box showing the message "**Invalid e-mail address! Please Re-Enter**" should appear, the entered e-mail address should get deleted and focus should be back on the text box to re-enter the same.

If E-mail address is valid and acceptable, then a pre existing Html file should get displayed.

A single validation button should be used to validate e-mail address.

Get the handwritten code checked and corrected from the examiner before using a computer. (4)

Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner. (3)

Obtain a hardcopy of the code. (2)

Experiment No. 20

Use of JavaScript for Validation of Date

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 **dd-mm-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:

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

- **Get the handwritten code checked and corrected from the examiner before using a computer.**

(4)

• **Enter the code on the computer without reference to any pre-existing code. Save the files, execute the same, and demonstrate its functioning to the examiner.** • **Obtain a hardcopy of the code.**	(3) (2)