WEB TECHNOLOGIES LABORATORY

LAB MANUAL

Year	:	2018 - 2019
Course Code	:	ACS105
Regulations	:	IARE - R16
Semester	:	IV
Branch	:	CSE

Prepared by

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)
Dundigal, Hyderabad - 500 043

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1. PROGRAM OUTCOMES:

PROGRAM OUTCOMES (POs)	
PO-1:	Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems (**Engineering Knowledge**).
PO-2:	Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences **(Problem Analysis).**
PO-3:	Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations **(Design/Development of Solutions).**
PO-4:	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions **(Conduct Investigations of Complex Problems).**
PO-5:	Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations (**Modern Tool Usage**).
PO-6:	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice **(The Engineer and Society).**
PO-7:	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development **(Environment and Sustainability).**
PO-8:	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice (**Ethics**).
PO-9:	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings (**Individual and Team Work**).
PO-10:	Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions (**Communication**).
PO-11:	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO-12:	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change (**Life-long learning**).

2. PROGRAM SPECIFIC OUTCOMES (PSOs):

PROGRAM SPECIFIC OUTCOMES (PSO'S)	
PSO – I	**Professional Skills:** The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexity.
PSO – II	**Problem-Solving Skills:** The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.
PSO – III	**Successful Career and Entrepreneurship:** The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, and a zest for higher studies.

3. ATTAINMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

WEEK. NO	Experiment	Program Outcomes Attained	Program Specific Outcomes Attained
1.	INSTALLATIONS	PO1, PO2, PO5	PSO2
2.	HTML	PO1, PO2, PO5	PSO2
3.	HTML	PO1, PO2, PO5	PSO2
4.	HTML	PO1, PO2, PO5	PSO2
5.	HTML	PO1, PO2, PO5	PSO2
6.	CASCADING STYLE SHEET	PO1, PO2, PO3, PO4, PO12	PSO1, PSO2
7.	JAVASCRIPT	PO1, PO2, PO3, PO4, PO5, PO12	PSO1, PSO2
8.	JAVASCRIPT	PO1, PO2, PO3, PO4, PO5, PO12	PSO1, PSO2
9.	PHP	PO1, PO2, PO3, PO4, PO5, PO12	PSO1, PSO2
10.	PHP	PO1, PO2, PO3, PO4, PO5, PO12	PSO1, PSO2
11.	PHP	PO1, PO2, PO3, PO4, PO5, PO12	PSO1, PSO2
12.	PHP	PO1, PO2, PO3, PO4, PO5, PO12	PSO1, PSO2
13.	PHP	PO1, PO2, PO3, PO4, PO5, PO12	PSO1, PSO2

4. MAPPING COURSE OBJECTIVES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES:

Course Objectives (COs)	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
I	√	√	√										√		
II	√	√		√	√								√		
III			√		√							√	√	√	
IV	√	√	√									√		√	

5. SYLLABUS:

WEB TECHNOLOGIES LABORATORY

IV Semester: CSE								
Course Code	**Category**	**Hours / Week**			**Credits**	**Maximum Marks**		
ACS105	**Foundation**	**L**	**T**	**P**	**C**	**CIA**	**SEE**	**Total**
		-	-	3	2	30	70	100
Contact Classes: Nil	**Tutorial Classes: Nil**	**Practical Classes: 39**				**Total Classes: 39**		

OBJECTIVES:

The course will enable the students to:

I.   Demonstrate the ability to retrieve data from a database and present it in a web page.
II. Use FTP to transfer web pages to a server.
III. Construct pages that meet, guidelines for efficient download and cater to the needs of an identified audience.
IV. Evaluate the functions of specific types of web pages in relationship to an entire web site.
V.   Create web pages that meet accessibility needs of those with physical disabilities and apply the effects of CSS in web page creation.

LIST OF EXPERIMENTS	
WEEK-1	**INSTALLATIONS**
Installation of XAMPP and WAMP servers.	
WEEK-2	**HTML**
a. Create a table to show your class time table. b. Use tables to provide layout to your HTML page describing your college infrastructure. c. Use <span> and <div> tags to provide a layout to the above page instead of a table layout.	
WEEK-3	**HTML**
a. Use frames such that page is divided into 3 frames 20% on left to show contents of pages, 60% in center to show body of page, remaining on right to show remarks. b. Embed Audio and Video into your HTML web page.	
WEEK-4	**HTML**
a. Create a webpage with HTML describing your department use paragraph and list tags. b. Apply various colors to suitably distinguish key words , also apply font styling like italics, underline and two other fonts to words you find appropriate , also use header tags. c. Create links on the words e.g. —Wi-Fi and —LAN‖ to link them to Wikipedia pages. d. Insert an image and create a link such that clicking on image takes user to other page. e. Change the background color of the page; At the bottom create a link to take user to the top of the page.	
WEEK-5	**HTML**
Develop static pages (using only HTML) of an online book store, the pages should resemble: www.amazon.com, the website should consist the following pages, home page, registration and user login, user profile page, books catalog, shopping cart, payment by credit card, order confirmation.	
WEEK-6	**CASCADING STYLE SHEET**
Write an HTML page that contains a selection box with a list of 5 countries, when the user selects a country, its capital should be printed next to the list; Add CSS to customize the properties of the font of the capital (color, bold and font size).	
WEEK-7	**JAVASCRIPT**
a. Write a java script program to test the first character of a string is uppercase or not. b. Write a pattern that matches e-mail addresses. c. Write a java script function to print an integer with commas as thousands separators.	

WEEK-8	JAVASCRIPT

a. Write a java script program to sort a list of elements using quick sort.
b. Write a java script for loop that will iterate from 0 to 15 for each iteration, it will check if the current number is odd or even, and display a message to the screen.

WEEK-9	JAVASCRIPT

a. Write a java script program which compute, the average marks of the following students then this average is used to determine the corresponding grade.
b. Write a java script program to sum the multiple s of 3 and 5 under 1000.
c. To design the scientific calculator and make event for each button using java script.

WEEK-10	PHP

a. A simple calculator web application that takes two numbers and an operator (+, ,/,*and %) from an HTML page and returns the result page with the operation performed on the operands.
b. Write PHP program how to send mail using PHP.

WEEK-11	PHP

a. Write PHP program to convert a string, lower to upper case and upper case to lower case or capital case.
b. Write PHP program to change image automatically using switch case.
c. Write PHP program to calculate current age without using any pre-define function.
d. Write PHP program to upload image to the server using html and PHP.

WEEK-12	PHP

a. Write PHP program to upload registration form into database.
b. Write PHP program to display the registration form from the database.

WEEK-13	PHP

a. Write PHP program to update the registration form present in database.
b. Write PHP program to delete the registration form from database .

ADDITIONAL PROGRAMS

1. Let your visitors change the style sheet on your web site, this script will let your visitors choose between five style sheets, which can create yourself or use the one's included.

2. Create a "registration form "with the following fields
                a) Name (Text field)
                b) Password (password field)
                c) E-mail id (text field)
                d) Phone number (text field)
                e) Sex (radio button)
                f) Date of birth (3 select boxes)

g) Languages known (check boxes – English, Telugu, Hindi, Tamil)
   h) Address (text area)

3. Write JavaScript to validate the following fields of the above registration page.
   Name (Name should contains alphabets and the length should not be less than 6 characters).
   Password (Password should not be less than 6 characters length).
   E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)
   Phone number (Phone number should contain 10 digits only).

4. Design a web page using **CSS (C**ascading **S**tyle **S**heets**)** which includes the following:
   a) Use different font, styles:
   In the style definition you define how each selector should work (font, color etc.).
   Then, in the body of your pages, you refer to these selectors to activate the styles.

5. Set a background image for both the page and single elements on the page.

6. Control the repetition of the image with the background-repeat property.

As background-repeat: repeat Tiles the image until the entire page is filled, just   like an ordinary background image in plain HTML.

Reference Books:

1. Uttam K Roy, ―Web Technologies‖, Oxford University Press, 1st Edition, 2010.
2. Steven Holzner, ―The Complete Reference PHP‖, Tata McGraw-Hill, 1st Edition, 2007.

Web References:

1.   http://www.scoopworld.in
2.   http://www.sxecw.edu.in
3.   http://www.technofest2u.blogspot.com
4.   http://www.ptutorial.com/php-example/php-upload-image
5.   http://www.ptutorial.com/php-example/php-change-case

SOFTWARE AND HARDWARE REQUIREMENTS FOR A BATCH OF 36 STUDENTS:

HARDWARE:
Intel Desktop Systems: 36 nos

SOFTWARE:
System Software: Microsoft Windows 7 Academic Get Genuine Legalization License
Application Software's: MS Office, Antivirus (Symantec Endpoint Protection 12.1.5),Notepad++,
XAMPP Server.

6. INDEX:

WEEK-6		**CASCADING STYLE SHEET**	
		Write an HTML page that contains a selection box with a list of 5 countries, when the user selects a country, its capital should be printed next to the list; Add CSS to customize the properties of the font of the capital (color, bold and font size).	46
WEEK-7		**JAVASCRIPT**	
	a.	Write a java script program to test the first character of a string is uppercase or not.	66
	b.	Write a pattern that matches e-mail addresses.	70
	c.	Write a java script function to print an integer with commas as thousands separators.	
WEEK-8		**JAVASCRIPT**	
	a.	Write a java script program to sort a list of elements using quick sort.	75
	b.	Write a java script for loop that will iterate from 0 to 15 for each iteration, it will check if the current number is odd or even, and display a message to the screen.	83
WEEK-9		**JAVASCRIPT**	
	a.	Write a java script program which compute, the average marks of the following students then this average is used to determine the corresponding grade.	85
	b.	Write a java script program to sum the multiples of 3 and 5 under 1000.	
	c.	To design the scientific calculator and make event for each button using java script.	
WEEK-10		**PHP**	
	a.	A simple calculator web application that takes two numbers and an operator (+, -,/,*and %) from an HTML page and returns the result page with the operation performed on the operands.	
	b.	Write PHP program how to send mail using PHP.	
WEEK-11		**PHP**	
	a.	Write PHP program to convert a string, lower to upper case and upper case to lower case or capital case.	
	b.	Write PHP program to change image automatically using switch case.	
	c.	Write PHP program to calculate current age without using any pre-define function.	
	d.	Write PHP program to upload image to the server using html and PHP.	

WEEK-12		**PHP**	
	a.	Write PHP program to upload registration form into database.	
	b.	Write PHP program to display the registration form from the database.	
WEEK-13		**PHP**	
	c.	Write PHP program to update the registration form present in database.	
	d.	Write PHP program to delete the registration form from database.	
		ADDITIONAL PROGRAMS	
	1.	Let your visitors change the style sheet on your web site, this script will let your visitors choose between five style sheets, which can create yourself or use the one's included.	89

	2.	Create a "registration form "with the following fields
		    a) Name (Text field)
		    b) Password (password field)
		    c) E-mail id (text field)
		    d) Phone number (text field)
		    e) Sex (radio button)
		    f) Date of birth (3 select boxes)
		    g) Languages known (check boxes – English, Telugu, Hindi, Tamil)
		    h) Address (text area)
			91

	3.	Write JavaScript to validate the following fields of the above registration page.
		        Name (Name should contains alphabets and the length should not be less than 6 characters).
		        Password (Password should not be less than 6 characters length).
		        E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)Phone number (Phone number should contain 10 digits only).
			94

	4.	Design a web page using CSS (Cascading **S**tyle **S**heets**)** which includes the following: a) Use different font, styles: In the style definition you define how each selector should work (font, color etc.).Then, in the body of your pages, you refer to these selectors to activate the styles.	97
	5.	Set a background image for both the page and single elements on the page.	100
	6.	Control the repetition of the image with the background-repeat property. As background-repeat: repeat Tiles the image until the entire page is filled, just like an ordinary background image in plain HTML.	

HTML

1.1   OBJECTIVE:
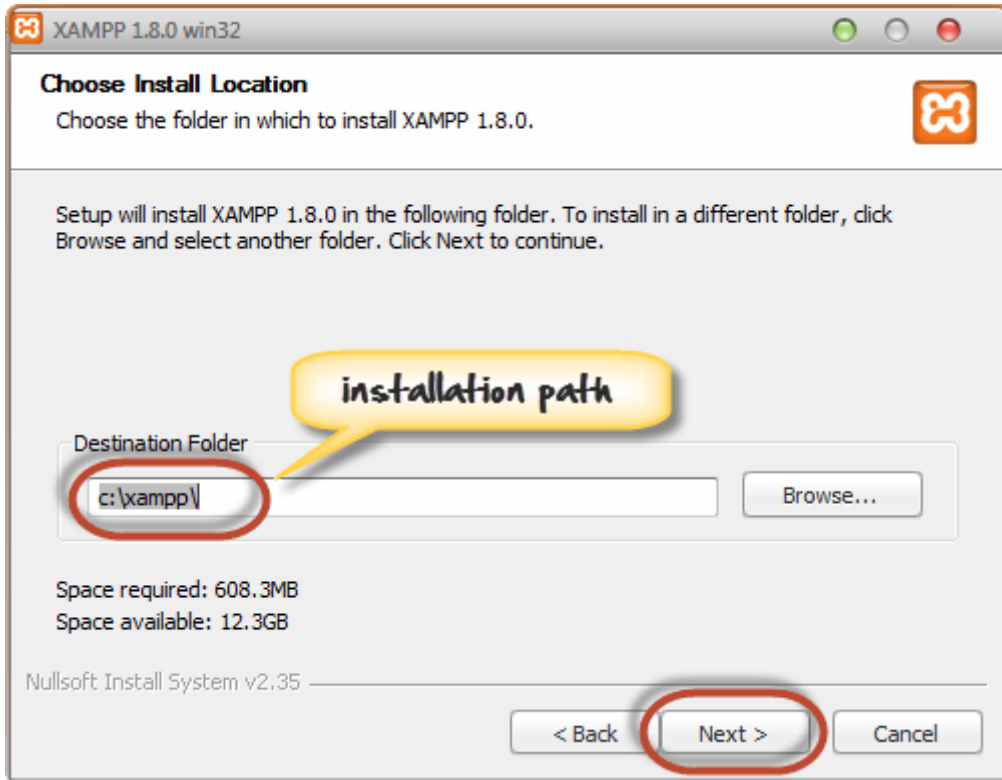
To Install XAMPP Stack Server.

1.2   RESOURCES:

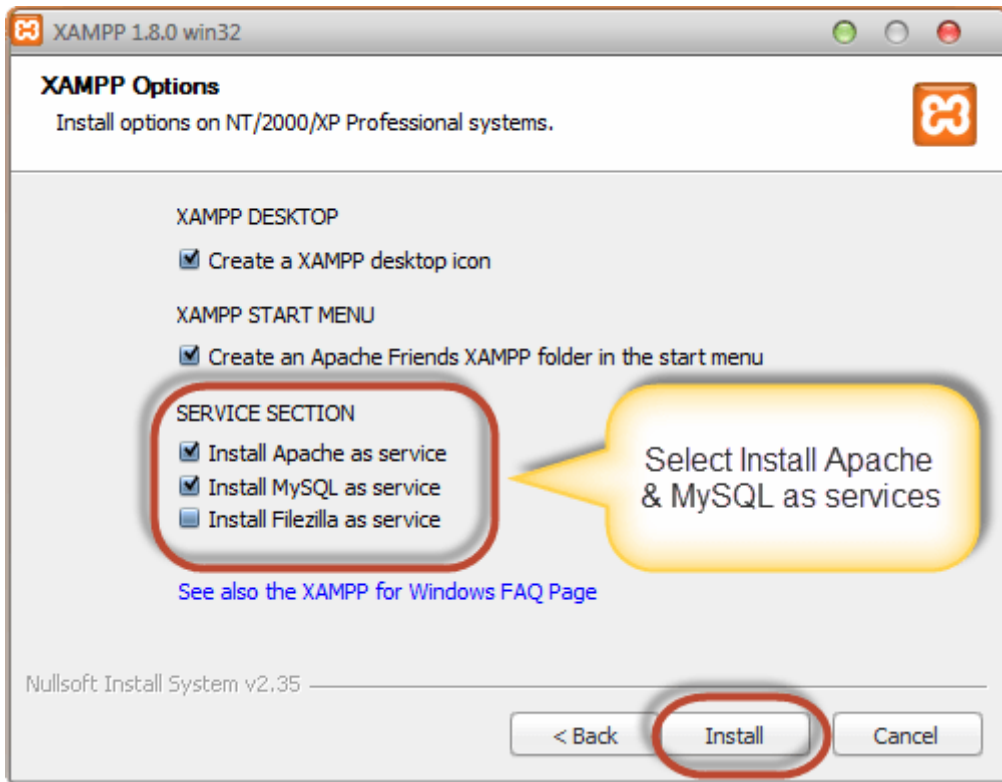XAMPP Stack Software, 1GB RAM, Hard Disk 80 GB.

1.3   PROGRAM LOGIC:

1. Run the XAMPP setup software.
2. In the next Screen, Select the path if required and then click on the Next Button.

3. In the next screen select Apache and MySQL. You may optionally select FileZilla (FTP Client) if needed. Click Install.
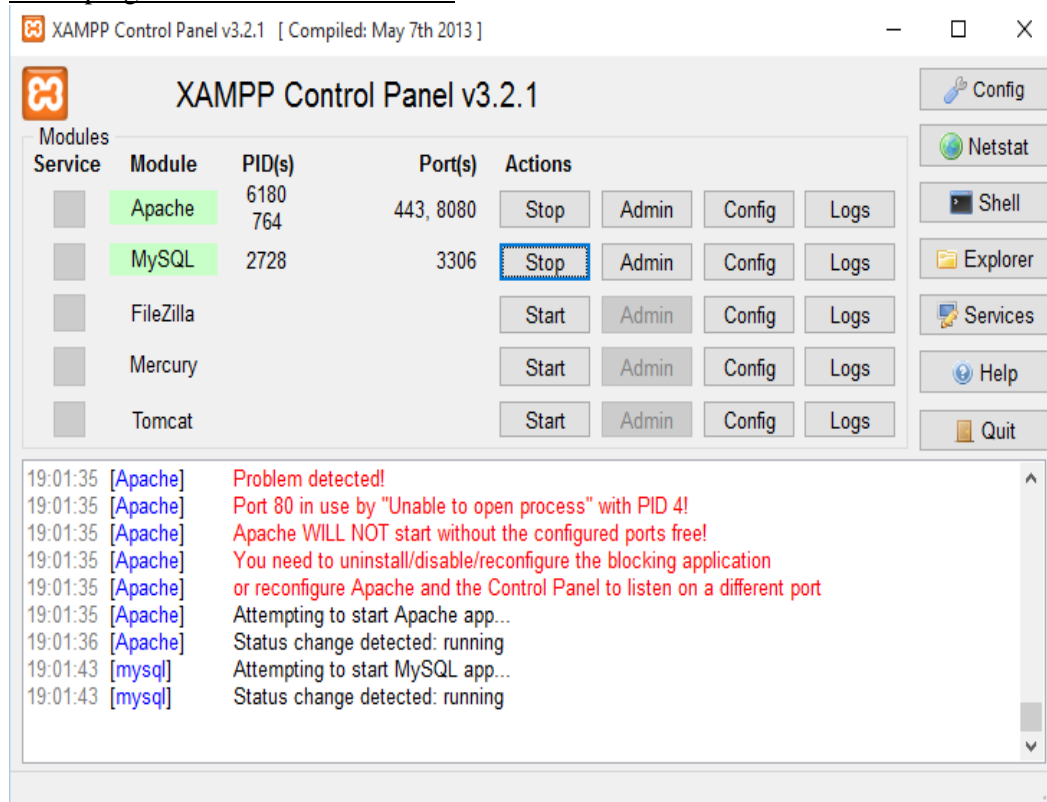
4. On successful completion of installation, the following window will appear.

5. Click on Finish button.

1.4 INPUT/OUTPUT

Small program of about 10 to 15 lines

1.5 PRE LAB VIVA QUESTIONS:

1. What is XAMPP stack?
2. What is setup file?
3. What is client side scripting?
4. What is server side scripting?

1.6 LAB ASSIGNMENT:

1. Install WAMP Stack Server?
2. Install LAMP Stack Server?

1.7 POST LAB VIVA QUESTIONS:

1. What is MYSQL?
2. Why is the name as MYSQL?
3. What is the usage of apache tomcat server?
4. How to run the PHP file?

HTML

2.1   OBJECTIVE:

1. Create a table to show your class time table.
2. Use tables to provide layout to your HTML page describing your college infrastructure.
3. Use and tags to provide a layout to the above page instead of a table layout.

2.2   RESOURCES:

Notepad++, Web Browser, 1GB RAM, Hard Disk 80 GB.

2.3   PROGRAM LOGIC:

Time Table

1.   Create an HTMLl file
2.   Create a table tag using <table> </table>.
3.   Create the rows in the table .
4.   <tr>dt</tr>.
5.   Insert data into the rows.
6.   <td>days</td>
7.   Close table tag
8.   Close </html> tag

College Infrastructure using table tag

1.   Create an html file
2.   Create a table tag using <table> </table>.
3.   Create the rows in the table .
4.   <tr>dt</tr>.
5.   Insert data into the rows.
6.   <td>college infrastructure</td>
7.   Close table tag
8.   Close HTML tag

College Infrastructure without using table

1. Create an html file.
2. Create a pre tag .
3. Insert data in the form of a table.
4. Close the pre tag.
5. Close HTML tag.

2.4   INPUT/OUTPUT:

Time table
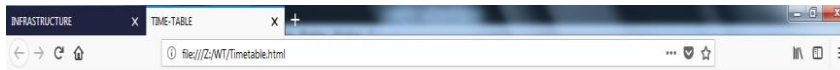
TIME-TABLE

Day/Period	I 9:30-10:20	II 10:20-11:10	III 11:10-12:00	12:00-12:40	IV 12:40-1:30	V 1:30-2:20	VI 2:20-3:10	VII 3:10-4:00
Monday	CN	TOC	DBMS		WT	METE		
Tuesday	OS LAB			L U N C H	CN	DBMS	OS	WT
Wednesday	TOC	OS	CN		DBMS	DBMS	WT	LIB/SPRT
Thursday	WT	CN	OS		DBMS LAB			TOC
Friday	ATP LAB				TOC	WT	CN	OS
Saturday	OS	DBMS	TOC		WT LAB			CCA/ECA

College Infrastructure

INFRASTRUCTURE

ITEM NAME	ID NO.	BUILDING LOCATION	DESCRIPTION LIST
E-classroom	1004	Bharadwaja block ground floor	○ no. of chairs ○ no. of ac's ○ no. of tables ○ no. of boards
labs	1104	Bharadwaja block	○ no. of systems ○ no. of ac's
	1111	Bharadwaja block	○ no. of systems ○ no. of ac's
	1110	Bharadwaja block	○ no. of systems ○ no. of ac's
	1103	Bharadwaja block	○ no. of systems ○ no. of ac's
Auditorium	2303	APJ block third floor	○ no. of chairs ○ no. of rooms
	CSE-1210	APJ block second floor	○ no. of benches ○ no. of fans
	ECE-1310	Bharadwaja block second floor	○ no. of tables ○ no. of chalks
	CIVIL-3103	Aryabhatta block second floor	○ no. of tables ○ no. of chalks

College Infrastructure without table
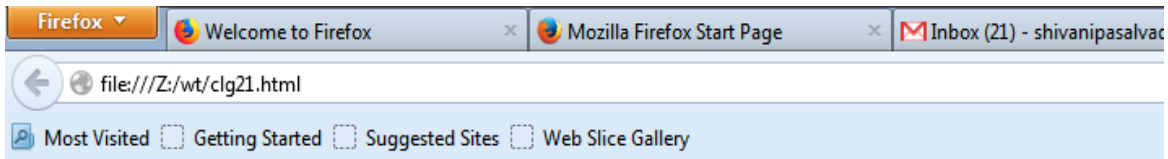
```
item name      room no    location            description
e-class room   1004       bharadwaja block    no.of chairs
                                              no.of ac's

labs
               1111       bharadwaja block    no.of tables no.of chairs
               1110       bharadwaja block    no.of systems no.of chairs
               1103       bharadwaja block    no.of systems no.of chairs
auditorium
               2302          APJ block           no.of rows
                                              no.of chairs
                                              no.of speakers
               CSE-2202      APJ block        no.of rows
                                              no.of chairs
                                              no.of speakers
               ECE-3302      APJ block        no.of rows
                                              no.of chairs
                                              no.of speakers
```

2.5 PRE LAB VIVA QUESTIONS:

1. Describe the syntax of table tag with their attributes?
2. What is the pre tag?
3. How to draw a horizontal line?
4. How to create the list in ordered list?

2.6 LAB ASSIGNMENT:

1. Design the web page for showing the chess board by using the table tag.
2. Design the N-queens problems by using the table tag.

2.7 POST LAB VIVA QUESTIONS:

1. Describe the tag for list?
2. Different type of lists?
3. What is the unordered list?
4. When we use table tag?

HTML

3.1   OBJECTIVE:

1. Use frames such that page is divided into 3 frames 20% on left to show contents of pages, 60% in center to show body of page, remaining on right to show remarks.
2. Embed Audio and Video into your HTML web page.

3.2   RESOURCES:

Notepad++,web browser, 1GB RAM, Hard Disk 80 GB.

3.3   PROGRAM LOGIC:

Frames
1. Create an HTML file
2. Create Frames by using Frameset tag.
3. In Frameset tag create three frames for three columns.
4. In the first column load link.html file.
5. In third column load remarks.html file.
6. Close the html file.

Audio and Video
1. Create an HTML file.
2. Create an video tag for loading the videos.
3. Create an audio tag for loading the audios.
4. Close the HTML file.

3.4   INPUT/OUTPUT:

Frames

DEPARTMENTS	cse	REMARKS
CSE ECE CIV	The fast changing technological scenario poses to the Institute a challenge of continuously updating its curriculum and faculty to be able to provide state-of-the-art education to the students.Changes, both major and subtle, have been made by the department of Computer Science and Engineering (CSE), to be better prepared for tomorrow.	submit

Audio and Video

3.5 PRE-LAB VIVA QUESTIONS:

1. What is a form?
2. What are the attributes of a form?
3. How to create the text field?
4. How to create the submit button?

3.6 LAB ASSIGNMENT:

1. Write a javascript program to replace a letter with another letter(eg: in dog replace o with i output dig)
2. Write a javascript Program to Find the Frequency of Characters in a String

3.7 POST-LAB VIVA QUESTIONS:

1. What method should be used to create the password field in HTML?
2. What is the use of password field?
3. How to create the textarea in the form?
4. What is the use of the submit button and reset button?

HTML

4.1   OBJECTIVE:

1. Create a webpage with HTML describing your department use paragraph and list tags.
2. Apply various colors to suitably distinguish key words, also apply font styling like italics, underline and two other fonts to words you find appropriate, also use header tags.
3. Create links on the words e.g. ―Wi-Fi and ―LAN to link them to Wikipedia pages.
4. Insert an image and create a link such that clicking on image takes user to other page.
5. Change the background color of the page; At the bottom create a link to take user to the top of the page.

4.2   RESOURCES:

Notepad++, web browser, 1GB RAM, Hard Disk 80 GB.

4.3   PROGRAM LOGIC:

Describing department using Paragraph and list tags.

1. Create the HTML file.
2. Create Paragraph tag in the body section.
3. Create list tag in the body section.
4. Add list items in the list.
5. Apply color attribute to the tags.
6. Close paragraph tag, list tag and body section.
7. Close the HTML file.

Create links on the words

1. Create the HTML file.
2. Create links by using anchor tag.
3. Create link on the words WIFI and LAN in the body section.
4. Close the anchor tag and body section.
5. Close the HTML file.

Insert an image and create a link

1. Create the HTML file.
2. Create links by using anchor tag.

3. Create image tag in the anchor tag.
4. Close the anchor tag and body section.
5. Close the HTML file.

Change the background color

1. Create the HTML file.
2. In the body tag add bgcolor attribute.
3. Include two image tags in the body section.
4. Close the body section.
5. Close the HTML file.

4.4 INPUT/OUTPUT:

Describing department using Paragraph and list tags.

WHAT IS COMPUTER SCIENCE ENGINEERING ?

Computer science engineering (CSE) is one of the popular courses among engineering aspirants which focuses on the basic elements of computer programming and networking. Students pursuing computer science courses will gain knowledge of design, implementation and management of information system of both hardware and software. Going by the name, CSE course deals primarily with the theory of computation and design of computational systems. The course is offered across the globe in technical institutions at undergraduate as well as postgraduate levels awarding B.Tech and M.tech degrees, respectively.

ELIGIBILITY CRITERIA

- For UG: The candidate should have passed 10+2 examination from CBSE or any other equivalent examination board with Physics, Chemistry and Mathematics as core subjects. The candidates should also fulfil minimum qualifying marks in aggregate of the subjects.
- For PG: The candidate should have a B.Tech degree with a minimum passing percentage in aggregate of the subjects studied at the degree level.

SCOPE OF COMPUTER SCIENCE ENGINEERING

- The present and future world can't live without technology and the boom in the technology sector will lead to lucrative opportunities.
- Increasing number of software companies and IT hubs like 'Silicon Valley' indicate an increasing demand for CSE experts.
- Concepts like 'cloud computing' upon which future technologies will be based need specialists in this domain.

Applying Various colours
CSE

The fast changing technological scenario poses to the Institute a challenge of continuously updating its curriculum and faculty to be able to provide state-of-the-art education to the students.
Changes, both major and subtle, have been made by the department of *Computer Science and Engineering (CSE)*, to be better prepared for tomorrow.

- **For UG:** The candidate should have passed 10+2 examination from **CBSE** or any other equivalent examination board with Physics, Chemistry and Mathematics as core subjects. The candidates should also fulfil minimum qualifying marks in aggregate of the subjects.
- **For PG:** The candidate should have a B.Tech degree with a minimum passing percentage in aggregate of the subjects studied at the degree level.

Create links on the words

WI-FI

LAN

Insert an image and create a link

Change the background color

4.5   PRE LAB VIVA QUESTIONS:

1. Paragraph tag in HTML?
2. Basic tags in HTML?
3. What is the purpose of including head section?
4. What is the purpose of including title tag in the head section?

4.6   LAB ASSIGNMENT

1   Create a class MyCalculator which consists of a single method power(int,int). This method takes two integers, n and p, as parameters and finds n^p. If either n or p is negative, then the method must throw an exception which says "n and p should be non-negative".
2   Define an exception called " NoMatchException" that is thrown when a string is not equal to "India". Write a program that uses this Exception.

4.7   POST LAB VIVA QUESTIONS:

1. What is DOCTYPE tag?
2. How to create the HTML document?
3. How to create the text area in an HTML document?
4. How to create the submit button in an HTML document?

5.1 OBJECTIVE:

Develop static pages (using only HTML) of an online book store, the pages should resemble: www.amazon.com, the website should consist the following pages, home page, registration and user login, user profile page, books catalog, shopping cart, payment by credit card, order confirmation.

5.2 RESOURCES:

Notepad++, web browser, 1GB RAM, Hard Disk 80 GB.

5.3 PROGRAM LOGIC:

online book store

1. Create the HTML file.
2. Create the form and include the submit button.
3. Create the home page, registration and user login, user profile page, books catalog, shopping cart, payment by credit card, order confirmation using various HTML tags.
4. Close the HTML file.
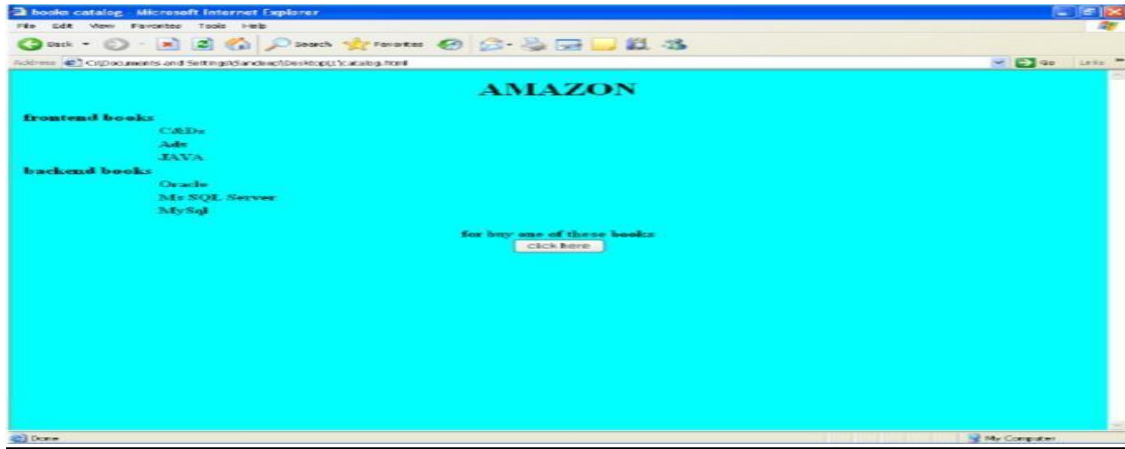
5.4 INPUT/OUTPUT:

online book store: home page
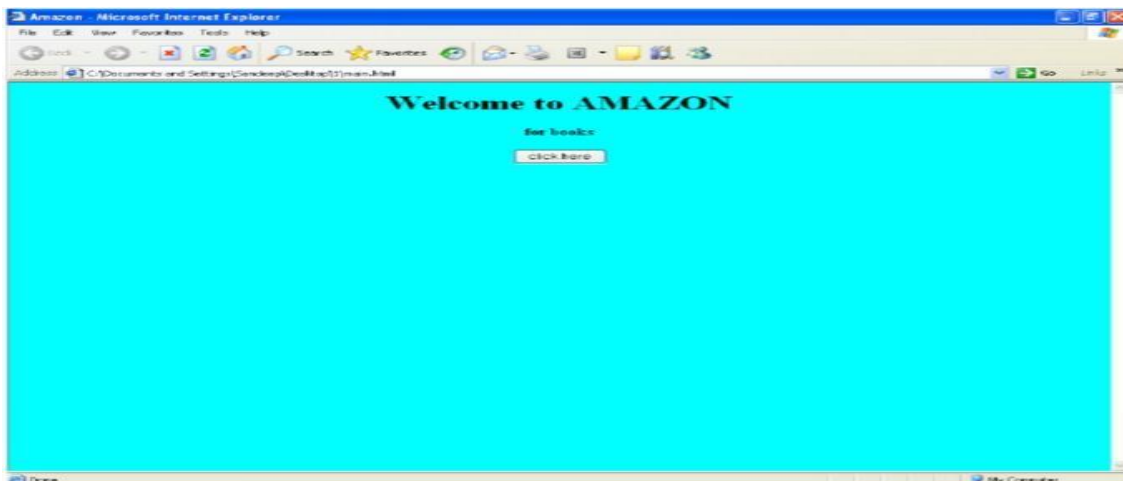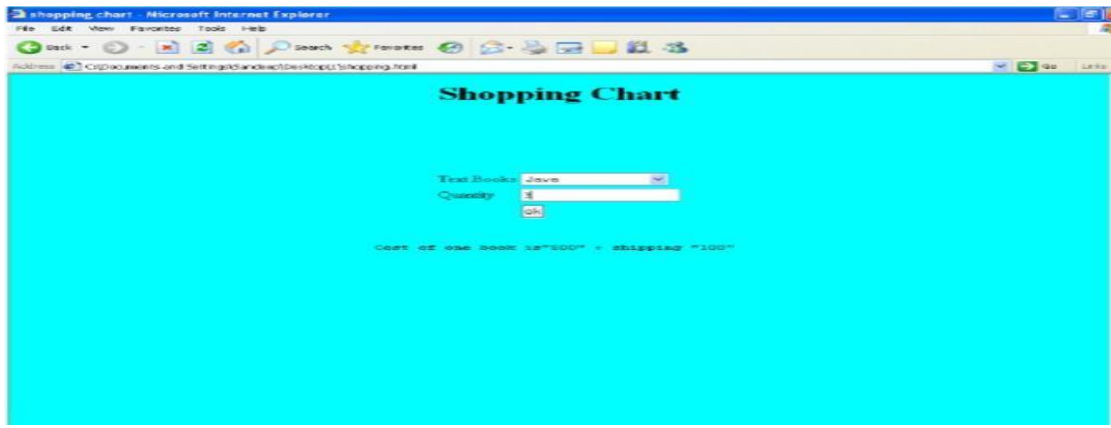
online book store: registration and user login
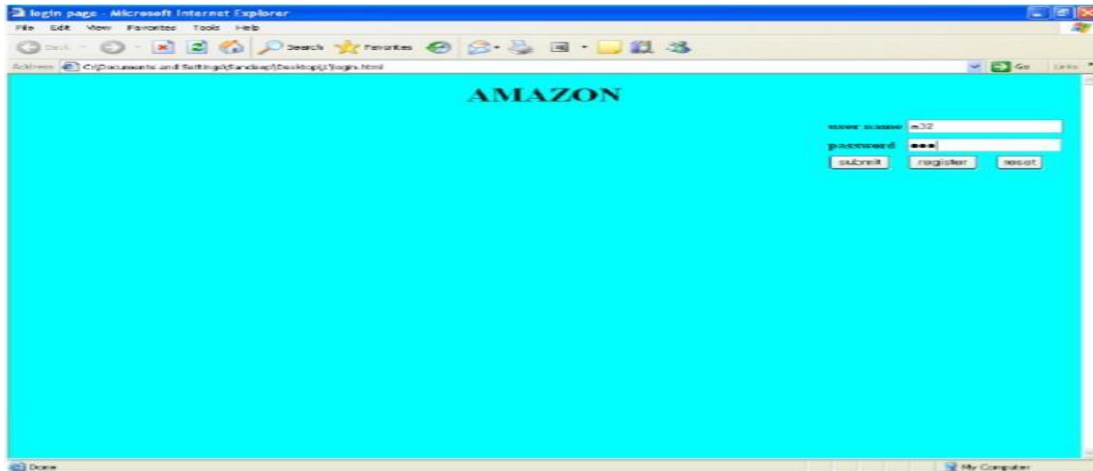
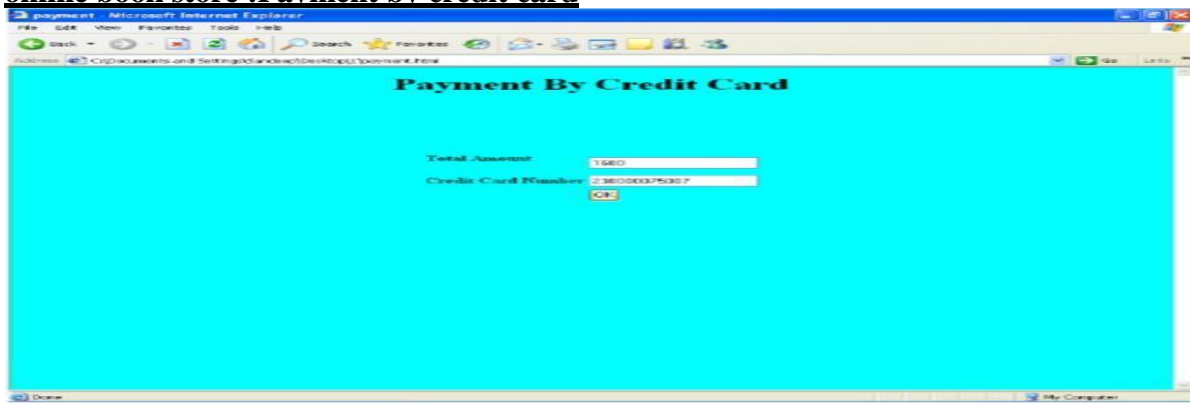**online book store :User profile page:**
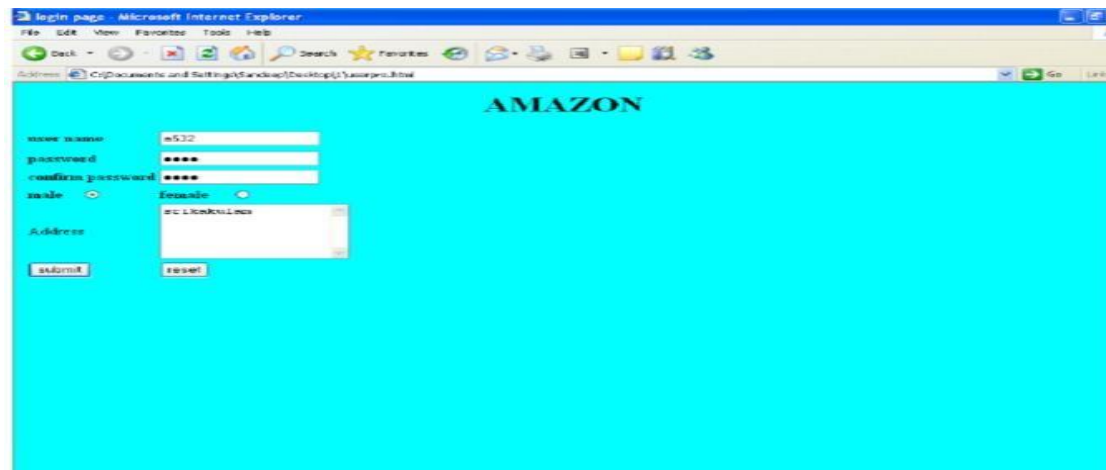
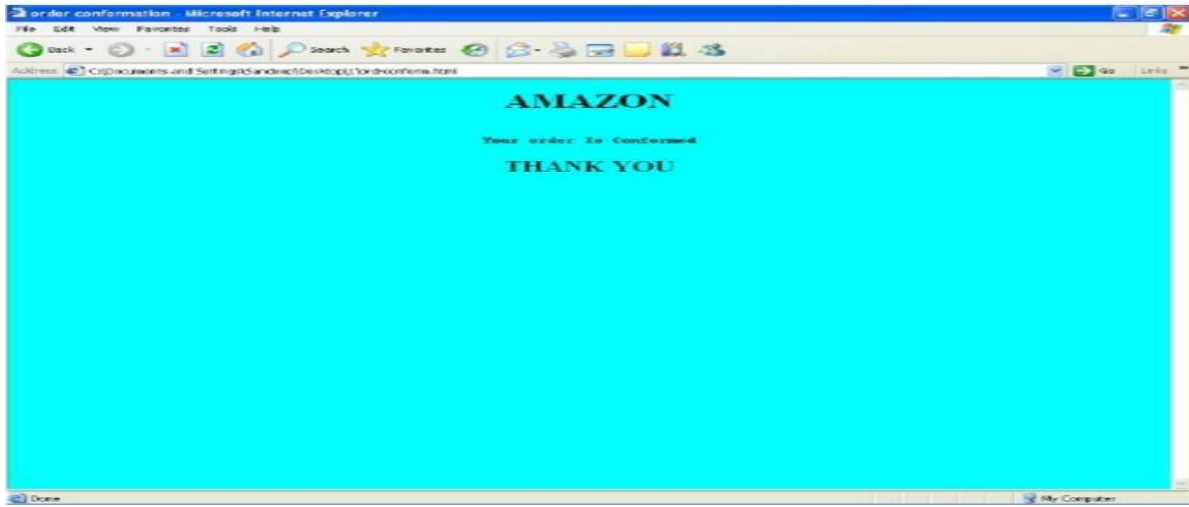**online book store :Books catalog:**

online book store :Shopping cart:

online book store :Payment by credit card

online book store :Order Conformation:

5.5 PRE-LAB VIVA QUESTIONS:

1. How do you insert a comment in html?
2. What are some of the common lists that can be used when designing a page?
3. How do you create links to sections within the same page?
4. Does a hyperlink apply to text only?

5.6 LAB ASSIGNMENT:

1 Write a program that creates three threads. First thread displays "Good Morning" every one second, the second thread displays "Hello" every two seconds and the third thread displays "Welcome" every three seconds**.**

2 Write a program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the number.

5.7 POST-LAB VIVA QUESTIONS:

1. If the user's operating system does not support the needed character, how can the symbol be represented?
2. How do you change the number type in the middle of a list?
3. Is it possible to set specific colors for table borders?
4. How do you create a link that will connect to another web page when clicked?

CASCADING STYLE SHEET

6.1   OBJECTIVE:

Write an HTML page that contains a selection box with a list of 5 countries, when the user selects a country, its capital should be printed next to the list; Add CSS to customize the properties of the font of the capital (color, bold and font size).
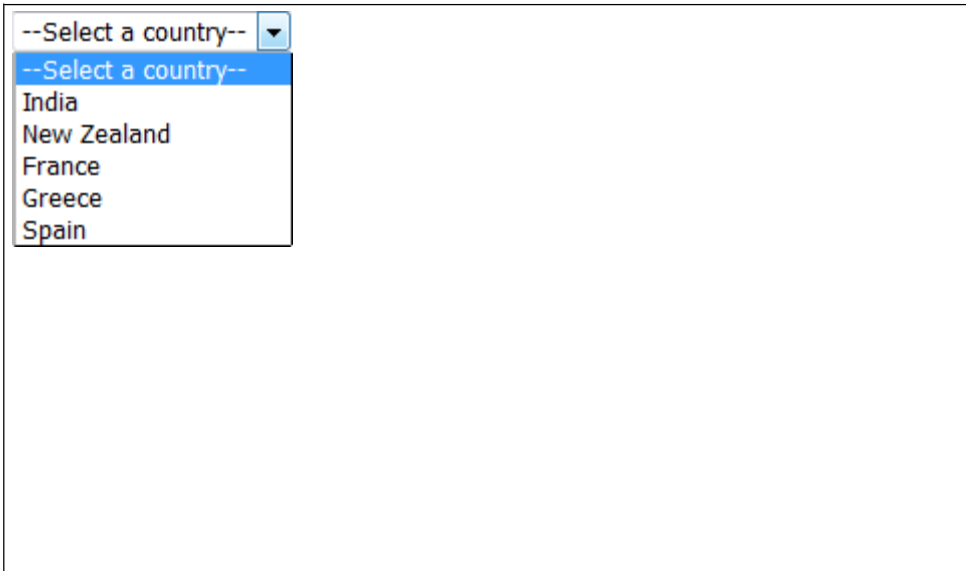
6.2   RESOURCES:

Notepad++, web browser, 1GB RAM, Hard Disk 80 GB.

6.3   PROGRAM LOGIC:

1. Create an HTML file from which select the country from the selection box.
2. Once the user selects the country it should display the selected country's capital.
3. Include the JavaScript display the capital for selected country.
4. Create the CSS file which includes the properties like color, bold and font size.

6.4 INPUT/OUTPUT:

6.5 PRE-LAB VIVA QUESTIONS:

1. How to handle the exceptions in javascript?
2. How to catch exceptions using java script?
3. How to read the XML file using java language?
4. How many types of parsers we have in XML?

6.6 LAB ASSIGNMENT:

1. Write a HTML Program to demonstrate Form Fields.
2. Write a HTML Demonstration of Navigation through various frames
3. To create a PHP program to demonstrate the different file handling methods.

6.7 POST-LAB VIVA QUESTIONS:

1. How do you change the number type in the middle of a list?
2. Is it possible to set specific colors for body section ?
3. How do you create a link that will link to an image?

JAVASCRIPT

7.1   OBJECTIVE:

1. Write a java script program to test the first character of a string is uppercase or not.
2. Write a pattern that matches e-mail addresses.
3. Write a java script function to print an integer with commas as thousands separators.

7.2   RESOURCES:

Notepad++,web browser, 1GB RAM, Hard Disk 80 GB.

7.3   PROGRAM LOGIC:

To test the first character of a string is uppercase or not:
1. Start the program.
2. Define a function upper_case in head section within the script
3. Declare and read the string variable using window.prompt in body section
4. Call the function upper_case in body section
5. Check the string for uppercase or not using if condition in head section
6. Display result in alert box

Pattern that matches e-mail addresses:

1. Start the program
2. Define a function valid_email in head section within the script
3. Declare and read a variable str in body section using window.prompt
4. Call a function valid_email in body section
5. Check the mailformat using if condition.
6. Mailformat should be "/^\w+([\.-]?\w+)*@\w+([\.-]?\w+)*(\.\w{2,3})+$/"

To print an integer with commas as thousands separators.
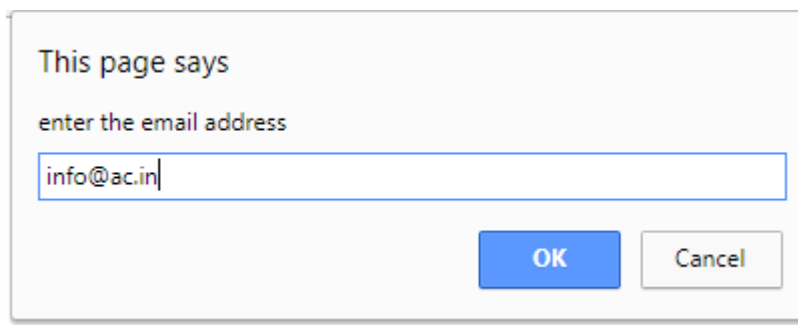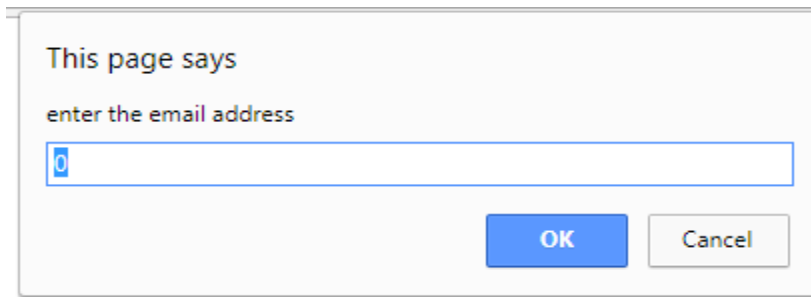
1. Start the program
2. Define the function thousands_separators in body section within the script
3. Call the function thousands_separators from body section
4. Display the result based on the arguments passed to thousands_separators in document.write

7.4 INPUT/OUTPUT:

To test the first character of a string is uppercase or not:
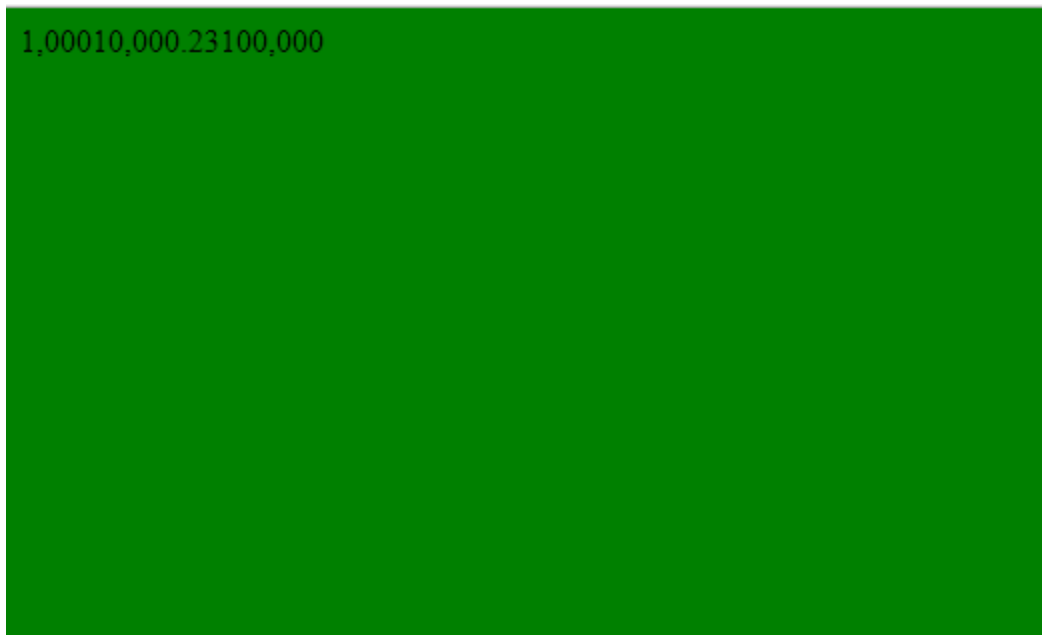
This page says:

String's first character is not uppercase

OK

Pattern that matches e-mail addresses:

This page says

enter the email address

0

OK   Cancel

This page says

enter the email address

info@ac.in

OK   Cancel

This page says

Valid email address!

OK

To print an integer with commas as thousands separators.

1,00010,000.23100,000
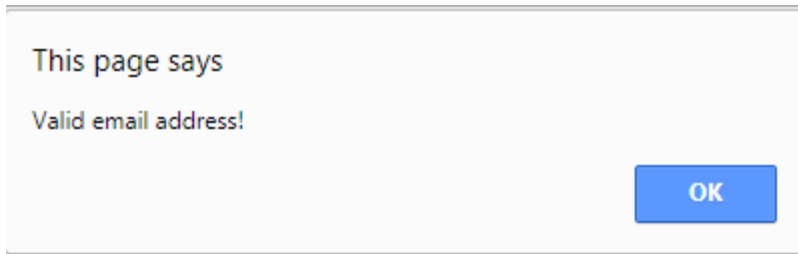
7.5   PRE-LAB VIVA QUESTIONS:

1. Is JavaScript is scripting language?
2. What is object oriented language?
3. What is form validation?

7.6   LAB ASSIGNMENT:

1   Write a JavaScript program to sort a list of elements using Merge sort?

7.7   POST-LAB VIVA QUESTIONS:

1. How do we validate the e-mail?
2. How to check the check box by default?
3. How to create the radio button group?
4. How to create the check box group?

JAVASCRIPT

8.1   OBJECTIVE:

1. Write a java script program to sort a list of elements using quick sort.
2.   Write a java script for loop that will iterate from 0 to 15 for each iteration, it will check if the current number is odd or even, and display a message to the screen.

8.2   RESOURCES:

Notepad++,web browser, 1GB RAM, Hard Disk 80 GB.

8.3   PROGRAM LOGIC:

To sort a list of elements using quick sort
1. Start the program
2.   Declare and Intialize the array in body section within the script
3. Define a function quick_Sort in head section
4. Call the quick_Sort function from body section
5. Sort the array using quicksort method.
6. Print the sorted list using document.write

current number is odd or even

1. Start the program
2. Declare and read a variable n using window.prompt in body section within the script
3. Check from inital value zero to n using for loop for tracing even or odd number.
4. Check the even or odd using if condition within for loop
5. Print the even or odd number using document.write

8.4   INPUT/OUTPUT:

To sort a list of elements using quick sort

Original array: 3,0,2,5,-1,4,1
Sorted array: -1,0,1,2,3,4,5

current number is odd or even

This page says

enter the value for i

0

OK   Cancel

This page says

enter the value for i

20

OK   Cancel

```
0is even
1 is odd
2 is even
3 is odd
4 is even
5 is odd
6 is even
7 is odd
8 is even
9 is odd
10 is even
11 is odd
12 is even
13 is odd
14 is even
15 is odd
16 is even
17 is odd
18 is even
19 is odd
20 is even
```

8.5 PRE-LAB VIVA QUESTIONS:

1. What is the purpose of sorting?
2. How is quick sort performed?
3. How many types of sorting techniques are present?

8.6 LAB ASSIGNMENT:

1   Write a java script function which will take an array of numbers stored and find the second lowest and second greatest numbers, respectively.

8.7 POST-LAB VIVA QUESTIONS:

1. How to retrieve the form data?
2. What is the purpose of writing document.getElementById ('anumber').value?
3. How to create an array in JavaScript?

JAVASCRIPT

9.1   OBJECTIVE:

1. Write a java script program which compute, the average marks of the following students then this average is used to determine the corresponding grade.
2. Write a java script program to sum the multiples of 3 and 5 under 1000.

9.2   RESOURCES:

Notepad++,web browser, 1GB RAM, Hard Disk 80 GB.

**9.3   PROGRAM LOGIC:**

Average marks

1. Create the HTML file
2. Declare the array for storing the marks.
3. Sum all the marks.
4. Compute Average of all the marks.
5. Close the HTML file.

sum the multiples of 3 and 5 under 1000.

1. Create the HTML file.
2. Check the number divisible by 3 and number divisible by 5.
3. Add all the values which are divisible by 3 and 5.
4. Close the HTML file.

9.4 INPUT / OUTPUT :
Average marks
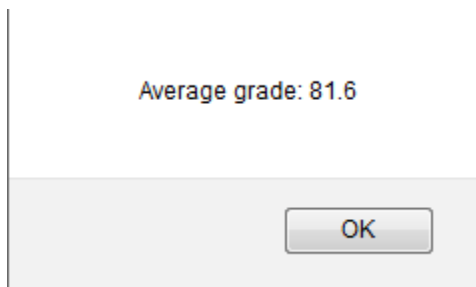
sum the multiples of 3 and 5 under 1000

233168

9.5 PRE-LAB VIVA QUESTIONS:

1. What is an example of client side scripting language?
2. What are JavaScript data types?
3. How do we submit the form in JavaScript?
4. What is JavaScript?

9.6 LAB ASSIGNMENT

1. Write a program to design the scientific calculator and make event for each button using java script.
2. Write a JavaScript program for printing the days of a week?

9.7 PRE-LAB VIVA QUESTIONS:

1. How to create the text field?

2. How to retrieve the form data?

3. What is the purpose of writing document.getElementById ('anumber').value?

4. How to create an array in JavaScript?

10.1 OBJECTIVE:

1. A simple calculator web application that takes two numbers and an operator (+, -,/,*and %) from an HTML page and returns the result page with the operation performed on the operands.
2. Write php program how to send mail using PHP.

10.2 RESOURCES:

Notepad++, XAMPP Server, Web Browser, 1GB RAM, Hard Disk 80 GB.

## 10.3 PROGRAM LOGIC:

Simple calculator

1. Start the program.
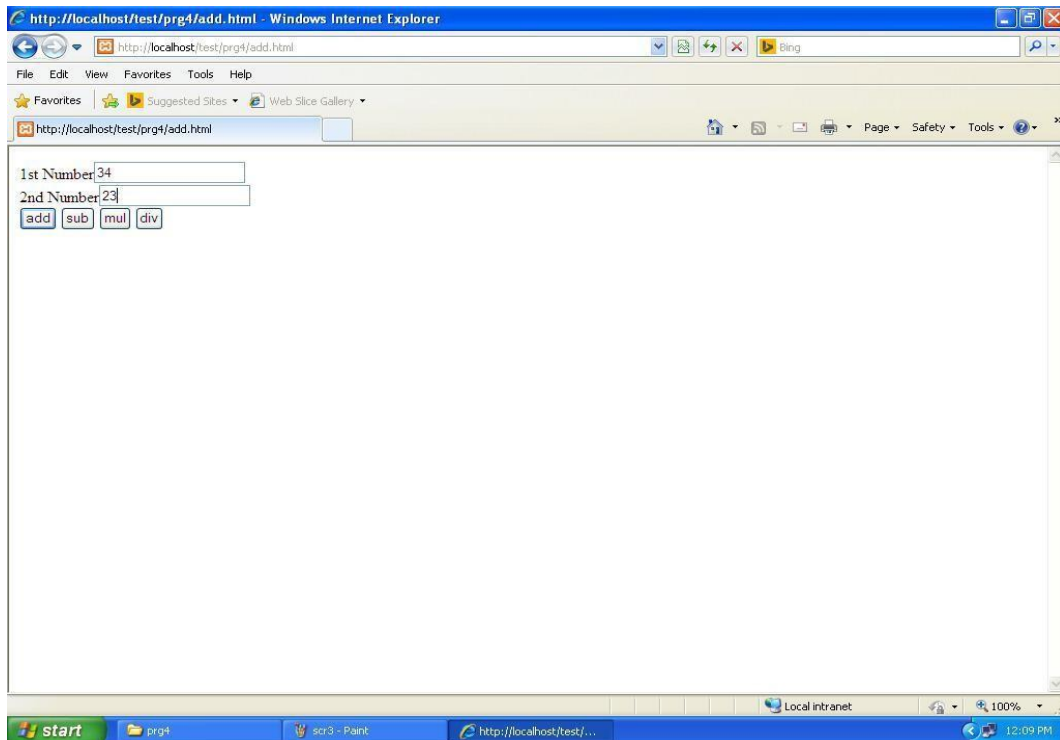2. Create a form with two textboxes and four buttons
3. create a php page for simple calculator
4. perform the add,sub mul,and div operations using if condition

To send mail

1. Start the program.
2. Create a PHP
3. Declare variables for storing to, message and subject.
4. Set content-type as when sending HTML email as MIME type.
5. Close the PHP.

10.4 INPUT / OUTPUT:

Simple calculator
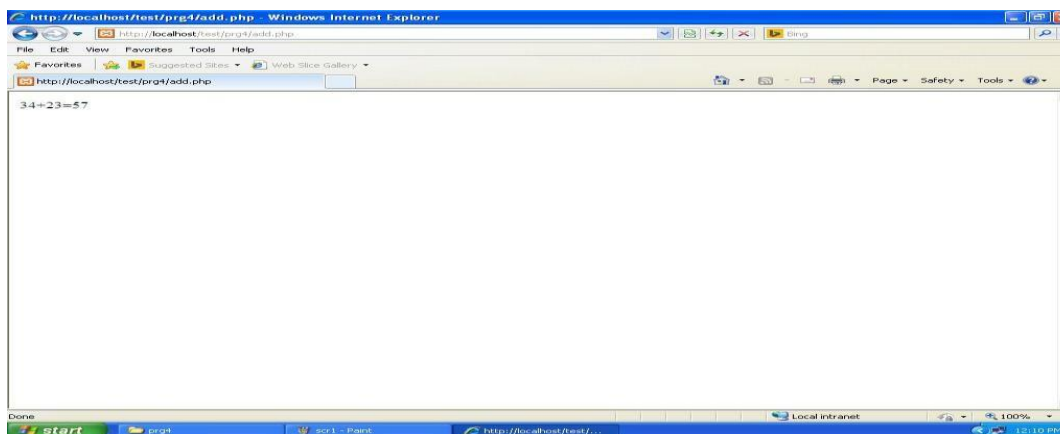
To send mail :

Enter email:

somebody@example.com, somebodyelse@example.com

10.5 PRE-LAB VIVA QUESTIONS:

1. What is the purpose of str.split(' ')?
2. What is the purpose of str.split('\n')?

3. How to find the length of the array?

4. How to create the alert message?

10.6   LAB ASSIGNMENT:

1. Write a PHP code to display position of input string from given string?

2. Write a PHP code to replace the input string in actual string?

10.7   POST-LAB VIVA QUESTIONS:

1. How to handle the exceptions in java?
2. How to catch exceptions using java language?
3. How to read the XML file using java language?
4. How many types of parsers we have in XML?

11.1   OBJECTIVE:

1. Write program to convert a string, lower to upper case and upper case to lower case or capital case.
2. Write php program to change image automatically using switch case.
3. Write php program to calculate current age without using any pre-define function.
4. Write php program to upload image to the server using html and PHP.

11.2   RESOURCES:

Notepad++, XAMPP Server, Web Browser, 1GB RAM, Hard Disk 80 GB.

11.3   PROGRAM LOGIC:

To convert a string, lower to upper case and upper case to lower case or capital case:

1. Create the PHP.
2. Convert the string to upper case.
3. Convert the string to lower case
4. Close the PHP tag.

To change image automatically using switch case.:

1.   Create the PHP.
2.   Declare a variable and assign an image to it.
3.   By using the switch case change the image by using the image tag.
4.Close the PHP.

current age:

1. Create the PHP .
2. Declare an object to the date
3. Display the Date
4. Close the PHP.

upload image:

1. Create the PHP.
2. Assign an image in to the variable.
3. Store that image into the server by using PHP file.
4. Close the PHP.

11.4   INPUT/OUTPUT:

To convert a string, lower to upper case and upper case to lower case or capital case:

HELLO WORLD!hello world!

To change image automatically using switch case:

rose image

To calculate current age without using any pre-define function.

Age is:27

To upload image to the server

11.5   PRE-LAB VIVA QUESTIONS:

1. What are the built-in objects?
2. Describe the methods of Number object?
3. Describe about the window object?

11.6   LAB ASSIGNMENT:

1. Write a JavaScript program for checking a number is even or odd?
2. Write a JavaScript program for a string is palindrome or not?

11.7   POST-LAB VIVA QUESTIONS:

1. How Can We Extract String "Abc.Com" From A String
   Mailto:info@Abc.Com?Subject=Feedback" Using Regular Expression Of PHP?
2. What is the syntax of switch statement structure in php

12.1   OBJECTIVE:

1.   Write php program to upload registration form into database.
2.   Write php program to display the registration form from the database.

12.2   RESOURCES:

Notepad++, XAMPP Server, Web Browser, 1GB RAM, Hard Disk 80 GB.

12.3   PROGRAM LOGIC:

To upload registration form into database.

1. Create a database First login to phpmyadmin, then click on Databases tab
2. In the input field enter database name and click on create database button.
3. Creating table with five fields(id,username,email,password,active)
4. Create form in html
   Here this is simple html for generating form. This form contains user name field, email, password a submit button and a link to login.php file
5. Adding styles to form
6. Connect to the database using php
   Create a file with name connect.php. Writing logic for user registration script in php

To display the registration form from the database.

1. Create a database First login to phpmyadmin, then click on Databases tab
2. In the input field enter database name and click on create database button.
3. Creating table with five fields(id,username,email,password,active)
4. Create form in html
   Here this is simple html for generating form. This form contains user name field, email, password a submit button and a link to login.php file
5. Adding styles to form
6. Connect to the database using php and retrieve the data from the database.
   Create a file with name connect.php. Writing logic for user registration script in php

12.4   INPUT/OUTPUT:

   To upload registration form into database.

   The inserted data is ravi 40 123

   To display the registration form from the database.

   Name:ravi
   Age:40
   Id:123

12.5   PRE-LAB VIVA QUESTIONS:

   1. What does the initials of PHP stand for?
   2. Which programming language does PHP resemble to?
   3. What is the actually used PHP version?
   4. How do you execute a PHP script from the command line?
   5. How can PHP and HTML interact?

12.6   LAB ASSIGNMENT:

   1.Write a HTML program to demonstrate HTML Headers.
   2.Write a HTML program using images as link Anchor.
   3.Write a HTML program for adding images with HTML.

12.7   POST-LAB VIVA QUESTIONS:

   1. What is difference between them require_once(), require(), include().?
   2. How we can retrieve the data in the result set of MySQL using PHP?
   3. Write down the code for save an uploaded file in php.

PHP

13.1 OBJECTIVE:

1. Write php program to update the registration form present in database.
2. Write php program to delete the registration form from database

13.2 RESOURCES:

Notepad++, XAMPP Server, Web Browser, 1GB RAM, Hard Disk 80 GB.

13.3   PROGRAM LOGIC:

To update the registration form present in database.

1. Create a database First login to phpmyadmin, then click on Databases tab

2. In the input field enter database name and click on create database button.

3. Creating table with five fields(id,username,email,password,active)

4. Create form in html .Here this is simple html for generating form. This form contains user name field, email, password a submit button and a link to login.php file

5. Adding styles to form for connecting to the database using php Create a file with name connect.php. Writing logic for updating the registration script in php

To delete the registration form from database

1. Create a database First login to phpmyadmin, then click on Databases tab

2. In the input field enter database name and click on create database button.

3. Creating table with five fields(id,username,email,password,active)

4. Create form in html .Here this is simple html for generating form. This form contains user name field, email, password a submit button and a link to login.php file

5. Adding styles to form

6. Connect to the database using php and retrieve the data from the database.Create a file with name connect.php. Writing logic for deleting the registration form in php

13.4 INPUT/OUTPUT:

<u>To update the registration form present in database.</u>

Data updated

<u>To delete the registration form from database</u>

Data deleted

13.5   PRE-LAB VIVA QUESTIONS:

1. How many values can the SET function of MySQL take?
2. List out the predefined classes in PHP?
3. What are encryption functions in PHP?
4. What is use of header() function in PHP ?

13.6 LAB ASSIGNMENT:

1. A program to store and display student marks using arrays?
2. Write a HTML Program to demonstrate different forms of Lists- Ordered, Unordered, Nested and description lists .
3. Write a HTML Demonstration of Navigation through various frames

13.7   POST-LAB VIVA QUESTIONS:

1. How to store the uploaded file to the final location?
2. How can we submit a form without a submit button?
3. In how many ways we can retrieve the data in the result set of MySQL using PHP?
4. What is the difference between $message and $$message?