

Problem No : 01

Problem Name : Write HTML & CSS code for following table : A test table with merged cells

			Red eyes
	height	Weight	
Males	1.9	0.003	40%
Females	1.7	0.002	43%

Objectives :

- (1) To know how a html construct using table tag.
- (2) To know about merged cells in table using html tag and css.

Theory : In this problem we have used these css and html tags :-

- (1) The `<table>` element creates a table with a border, and specifies that the table should take up 50% of the width of its container and be centered using the margin and auto properties.
- (2) The first `<tr>` element within the table defines the second row of the table, which contains a single cell with a `rowspan` attribute of 2 to merge it with the second column in the next row.

(3) The second `<tr>` element defines the second row of the table, which contains three cells with headings "Average Height", "Average Weight", and "Red Eyes". The first two cells are merged using the `colspan` attribute.

(4) The third and fourth `<tr>` elements define the third and fourth rows of the table, which contain data for males and females, respectively.

(5) The `<th>` and `<td>` elements are used to define table headers and data cells, respectively. The `<th>` elements have a light gray background color, while the `<td>` elements have a white background color.

(6) The CSS code within the `<style>` element defines styles for the various elements in the document. The `border-collapse` property is used to center the text within cells. The `background-color` property is used to set the background color of the table headers, and the `margin` and `auto` properties are used to center the table horizontally on the page.

Problem No : 02

Problem Name: Create a webpage for internal link. When the user clicks on different links on the webpage it should go to the appropriate locations / sections in the same page.

Objectives:

- (1) To know about internal links.
- (2) To know how internal links works and how we can use internal links to locate appropriate locations / sections.

Theory: In this problem, we have used the following HTML tags:

<a> - Creates a hyperlink.

<h2> - Creates subheading for each sections.

<hr> - Creates a horizontal rule for separate sections.

<p> - Creates a paragraph containing a link to go back to the top of the page.

id - Sets a unique identifier for each ~~other~~ section. We have used these identifiers as targets for the internal links.

href - sets the URL of the hyperlink. We have used a hashtag (#) followed by the ID of the target section to create an internal link.

Problem NO : 08

Problem Name: Write HTML for the following registration page & use CSS to beautify it as your own choice.

Personal Details

Name:

E-mail:

Phone Number:

Password:

Gender : ☐ Male ☐ Female

Objectives:

- (1) To know how to construct a form using HTML and CSS
- (2) To know how to design a form using CSS.
- (3) To know about submit button.

Theory: We have used HTML and CSS code for a form that captures personal details such as name, email, phone number, password, and gender. The CSS code sets the styles for the different elements of the form, such as the text alignment, font weight, width, margin, padding, and border radius, among others.

The form is wrapped inside a div with a class "form", which sets the width, display, and margin of the form. The form contains input fields for capturing the user's name, email, phone number, and password.

Problem No : 07

Problem Name: Write JavaScript to validate the following fields of the Question 06 registration page.

- i) Name (Name should contain alphabets and the length should not be less than 6 characters)
- ii) E-mail (should not contain any invalid and must follow the standard pattern name @domain.com)
- iii) Phone Number (phone number should contain 10 digits only).
- iv) Password (password should not be less than 6 characters length).

Objectives:

- (1) To know about javascript function.
- (2) To know about validation of name, email, number and password.
- (3) To know about condition operator in javascript

Theory : In this problem, The `validateForm()` is called when the form is submitted. It performs the following validation.

The name field should not be empty and should contain only alphabets with length not less than 6 characters.

The email should not be empty and should have length not less than 6 characters.

The phone number field should not be empty and should contain 10 digits only.

If any of the validations fail, an alert message is displayed and the form submission is prevented. If all the validations pass, a success message is displayed and the form is submitted.

Experiment No:- 05

Experiment Name: Write HTML page named home.html to create a frameset with two vertical frames: the first frame is 250 pixels wide. Fill the first frame (left-vertical) with links.html. Second frame further divided into two horizontal frames (400px, 350px). Fill the top frame (right-top) with ice.html and bottom (right-bottom) with it.html.

Objectives:

- (1) To divided webpage into multiple sections.
- (2) To display multiple web pages simultaneously and reduce page loading time.

Theory: HTML stands for Hyper Text Markup Language. HTML frames are a deprecated feature

that allow us to divide a web page into multiple sections or frames, each of which can load

a separate HTML documents. Each frame is

defined by a separate <frame> element

of the frames are defined with a frameset element.

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Objectives:

- (1) To divided webpage into multiple sections.
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Theory: HTML stands for Hyper Text Markup Language. HTML frames are a deprecated feature that allow us to divide a web page into multiple sections or frames, each of which can contain a separate HTML documents. Each frame is defined by a separate <frame> element, and all of the frames are defined within a <frameset> element.

Problem No - 06

Problem Name: Write a JavaScript 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.

Objectives:

- (1) To know how using a loop and conditional operator we can determine a number is even or odd within a range.
- (2) To know how a loop working in javascript.

Theory: In this problem we developed a script to create a for loop based on the user input. The loop will start from the value entered by the user as the starting point and end at the value entered as the ending point. The loop will iterate over each value between the starting and ending points, and for each value, the script will check if it is even or odd. If the value is even, it will print a message saying so, and if it is odd, it will print a message saying so. The messages are ~~described~~ displayed in the HTML documents using the document.write() method.

Problem No : 07

Problem Name : Write a PHP program to calculate Electricity bill in single page.

Objectives :

- (1) To know how to calculate electricity bill in PHP
- (2) To know how to show calculated value in web-page.

Theory :

We will learn calculation of electricity bill using PHP if else conditional operator. The electricity bill's unit is varies based on unit. In this program we will find out the calculate value of electricity bill.

Conditions :

For units less 50 - Taka - 3.50/unit

For units 51 to 100 - Taka - 4.00/unit

For units 101 to 200 - Taka - 5.20/unit

For units above 250 - Taka - 6.50/unit

Problem No : 08

Problem Name : Write a simple calculator program using PHP in single page.

Operations :

* Addition

* Subtraction

* Multiplication

* Division

Objectives :

- (1) To understand basic arithmetic operations.
- (2) To enhance user experience.
- (3) To add functionality to our website.

Theory :

Addition : To addition in PHP program. If we take two variable as \$x and \$y then the result $\$z = \$x + \$y$;

Subtraction : The subtraction in PHP program. If we take two variable as \$x and \$y then the result $\$z = \$x - \$y$;

Multiplication : The multiplication in PHP program. If we take two variable as \$x and \$y then the result $\$z = \$x * \$y$;

Division : The division in PHP program, If we take two variables as \$x and \$y then the result $\$z = \$x / \$y$;

Problem No : 09

Problem Name : Solving the following Task-1 and Task-2.

Task-1 : Create a database called student in Xampp MySQL.

Task-2 : Create a table called Semester-Reg in the student having database.

Structure as shown below :

Field Name	Data Type	Requirement
ID	Number	Mandatory and primary key
Name	Text	Mandatory
Session	Text	Must follow the format like 2017-18
Phone Number	Text	Optional
City	Text	For example Patna
Gender	Text	Only (Male or Female)

Task-3 : Insert some simple data into Semester-Reg table using PHP program.

Task-4 : Write a program (PHP) to show the all records of Semester-Reg table.

Task-5 : Delete single simple data from Semester-Reg table using PHP program.

Task-6 : Updates one sample data of Semester-Reg table using PHP program.

(1) To learn how to create a database in XAMPP MySQL.

(2) To learn how to create a table in database.

(3) To learn how to update, delete, and insert in database using PHP.

Theory: MySQL is an open source relational database management system. It is commonly used in used webpage application to store and manage data.

PHP is a popular server scripting language used to create dynamic web page. The combination of MySQL and PHP provides an efficient way to manage data in web application.

Problem Name: Solve the following Task-1 and Task-2

Task-1: Create a database called programmer in XAM

Task-2: Create a table called student Reg in programmer database having the structure as experiment-12.

Task-3: Insert some sample data stu-Reg table including an encryption algorithm to secure the password.

Task-4: Write a PHP program to show the all records of stu-Reg table.

Task-5: Delete single sample from stu-Reg table Using PHP program.

Objectives:

(1) To learn how to create a database in XAMPP MySQL.

(2) To learn how to create a table in database.

(3) To learn how to insert data in table and also to learn encryption algorithm to secure the password.

Theory : XAMPP is an open source software package that provides a local server environment for developing and testing web application. It includes Apache, MySQL, PHP, and Perl. MySQL is a popular open source relational management system used to manage and store data.