**HTML**

* HTML stands for Hyper Text Markup Language
* most widely used language on Web to develop web pages.
* HTML Hello World program

<!DOCTYPE html>

<html>

<head>

<title>This is document title</title>

</head>

<body>

<h1>This is a heading</h1>

<p>Hello World!</p>

</body>

</html>

* Heading Tags:
* Any document starts with a heading.
* Use different sizes for your headings.
* HTML also has six levels of headings, which use the elements <h1>, <h2>, <h3>, <h4>, <h5>, and <h6>.

<!DOCTYPE html>

<html>

<head>

<title>Heading Example</title>

</head>

<body>

<h1>This is heading 1</h1>

<h2>This is heading 2</h2>

<h3>This is heading 3</h3>

<h4>This is heading 4</h4>

<h5>This is heading 5</h5>

<h6>This is heading 6</h6>

</body>

</html>

* Paragraph Tag :
* The <p> tag offers a way to structure your text into different paragraphs.
* Each paragraph of text should go in between an opening <p> and a closing </p> tag

<!DOCTYPE html>

<html>

<head>

<title>Paragraph Example</title>

</head>

<body>

<p>Here is a first paragraph of text.</p>

<p>Here is a second paragraph of text.</p>

<p>Here is a third paragraph of text.</p>

</body>

</html>

* Line Break Tag
* Whenever you use the <br /> element, anything following it starts from the next line.
* This tag is an example of an empty element, where you do not need opening and closing tags, as there is nothing to go in between them.

<!DOCTYPE html>

<html>

<head>

<title>Line Break Example</title>

</head>

<body>

<p>Hello<br />

You delivered your assignment ontime.<br />

Thanks<br />

Mahnaz</p>

</body>

</html>

* Centering Content:
* You can use <center> tag to put any content in the center of the page or any table cell.

<!DOCTYPE html>

<html>

<head>

<title>Centring Content Example</title>

</head>

<body>

<p>This text is not in the center.</p>

<center>

<p>This text is in the center.</p>

</center>

</body>

</html>

* Image Tag:
* Insert Image
* insert any image in your web page by using <img> tag.
* syntax :

<img src = "Image URL" ... attributes-list/>

* Table tag:
* The HTML tables are created using the <table> tag
* the <tr> tag is used to create table rows
* <th>is used to create table head
* <td> tag is used to create data cells.
* The elements under <td> are regular and left aligned by default

<!DOCTYPE html>

<html>

<head>

<title>HTML Tables</title>

</head>

<body>

<table border = "1">

<tr>

<th>table head1</th>

<th>table head2</th>

</tr>

<tr>

<td>Row 1, Column 1</td>

<td>Row 1, Column 2</td>

</tr>

<tr>

<td>Row 2, Column 1</td>

<td>Row 2, Column 2</td>

</tr>

</table>

</body>

</html>

* List Tags :
* All lists must contain one or more list elements.
* <ul> − An unordered list. This will list items using plain bullets.
* <ol> − An ordered list. This will use different schemes of numbers to list your items.
* <dl> − A definition list. This arranges your items in the same way as they are arranged in a dictionary.
* <ul> types

<ul type = "square">

<ul type = "disc">

<ul type = "circle">

* <ol> types

<ol type = "1"> - Default-Case Numerals.

<ol type = "I"> - Upper-Case Numerals.

<ol type = "i"> - Lower-Case Numerals.

<ol type = "A"> - Upper-Case Letters.

<ol type = "a"> - Lower-Case Letters.

* <dl> syntax:

<dl>

<dt>Beast of Bodmin</dt>

<dd>A large feline inhabiting Bodmin Moor.</dd>

<dt>Morgawr</dt>

<dd>A sea serpent.</dd>

<dt>Owlman</dt>

<dd>A giant owl-like creature.</dd>

</dl>

* Form Tag:
* HTML Forms are required, when you want to collect some data from the site visitor.
* For example, during user registration you would like to collect information such as name, email address, credit card, etc.
* A form will take input from the site visitor and then will post it to a back-end application such as CGI, ASP Script or PHP script etc.
* The back-end application will perform required processing on the passed data based on defined business logic inside the application.
* There are various form elements available like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.
* syntax :

<form action = "Script URL" method = "GET|POST">

form elements like input, textarea etc.

</form>

* Form Attributes:
* Action: Backend script ready to process your passed data.
* Method: Method to be used to upload data. The most frequently used are GET and POST methods.
* Target: Specify the target window or frame where the result of the script will be displayed. It takes values like \_blank, \_self, \_parent etc.
* Enctype: You can use the enctype attribute to specify how the browser encodes the data before it sends it to the server. Possible values are −

application/x-www-form-urlencoded − This is the standard method most forms use in simple scenarios.

mutlipart/form-data − This is used when you want to upload binary data in the form of files like image, word file etc.

* HTML Form Controls
  + Text Input Controls
  + Checkboxes Controls
  + Radio Box Controls
  + Select Box Controls
  + File Select boxes
  + Hidden Controls
  + Clickable Buttons
  + Submit and Reset Button

JavaScript

* A script is a small piece of program that can add interactivity to your website.
* For example, a script could generate a pop-up alert box message, or provide a dropdown menu. This script could be written using JavaScript or VBScript.
* You can write various small functions, called event handlers using any of the scripting language and then you can trigger those functions using HTML attributes.
* JavaScript is a dynamic computer programming language.
* It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages.
* It is an interpreted programming language with object-oriented capabilities.
* JavaScript can be implemented using JavaScript statements that are placed within the <script>... </script> HTML tags in a web page.
* You can place the <script> tags, containing your JavaScript, anywhere within your web page, but it is normally recommended that you should keep it within the <head> tags.
* Syntax:

<script ...>

JavaScript code

</script>

<script language = "javascript" type = "text/javascript">

JavaScript code

</script>

* Example:

<html>

<body>

<script language = "javascript" type = "text/javascript">

<!--

document.write("Hello World!")

//-->

</script>

</body>

</html>

Cascading Style Sheets (CSS)

* Cascading Style Sheets (CSS) describe how documents are presented on screens, in print, or perhaps how they are pronounced.
* Cascading Style Sheets (CSS) provide easy and effective alternatives to specify various attributes for the HTML tags.
* Using CSS, you can specify a number of style properties for a given HTML element.
* Each property has a name and a value, separated by a colon (:). Each property declaration is separated by a semi-colon (;).
* Types:
* External Style Sheet − Define style sheet rules in a separate .css file and then include that file in your HTML document using HTML <link> tag.
* Internal Style Sheet − Define style sheet rules in header section of the HTML document using <style> tag.
* Inline Style Sheet − Define style sheet rules directly along-with the HTML elements using style attribute.
* Syntax:

selector { property: value }

* Selector − A selector is an HTML tag at which a style will be applied. This could be any tag like <h1> or <table> etc.
* Property − A property is a type of attribute of HTML tag. Put simply, all the HTML attributes are converted into CSS properties. They could be color, border etc.
* Value − Values are assigned to properties. For example, color property can have value either red or #F1F1F1 etc.