



HTML:- Hyper text markup Language. HTML is a document layout & hypertext specification Language.

HTML is	HTML is Not
→ Document Layout	→ Word Processing tool
→ Hypertext Specification Language.	→ Programming Language

Elements of HTML :- Basically two types :-

① TAGS $\langle \rangle$ eg- $\langle \text{BODY} \rangle$ $\langle / \text{BODY} \rangle$

② Attributes :- These are properties of tags which are written with tags. e.g:- $\langle \text{Body} \text{ Bg Color = Red} \rangle$

(Attributes are align = sign)

(Attribute is Bg Color = P)

HTML is not case sensitive

$\langle \text{BODY} \rangle$ $\langle \text{body} \rangle$
meaning of both is same

Types of TAGS :- Tags are specify in angular tag

Container type tags

→ Closing & Starting tags

e.g:- $\langle \text{body} \rangle$ $\langle / \text{body} \rangle$

Empty type tags

(only starting tag)

$\langle \text{br} \rangle$

$\langle \text{b} \rangle$

$\langle \text{img} \rangle$

Container type are those that require

Starting as well as closing tag.

Empty type tag are those which require only starting tag.



HTML TAG Structure

- HTML tag basically define that our web page is in HTML.
- Head tag give the information about the document.
- Title display txt in browser's tab
- Body
- * (1) Open note
- (2) Write HTML code
- (3) Save with .html / .htm
- (4) Run in Browser.

* Some commonly used container tags :-

< HTML > --- </ HTML >

- ① → It defined a HTML document.
- ② → <head> --- </head>
It defines the document & contain information about document.
- ③ - <TITLE> --- </TITLE>
- ④ <Body> --- </Body>

attribute

e.g.:- <Body bg-color = "Text" = "# FFF">

① Bg color

② LINK

③ ^LINK (Active Link)

④ VLINK (Visited link)

XML :- Extensible Markup Language

XML is a text Based mark up language that allows to Create Structured documents.

- XML is a Meta Language (we can create new own tag)
- XML is derived from SGML (Standard Generalized Markup Language)



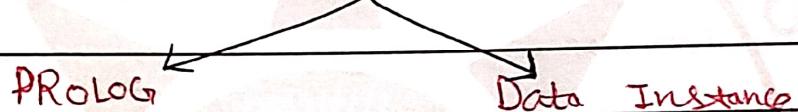
HTML

- ① It displays Web Page data.
- ② HTML tags are Predefined.
- ③ HTML tag may be container or empty type.
- ④ HTML is not Case Sensitive.
- ⑤ It displays directly in the browser.

XML

- ① It displays & carry data.
- ② XML tags are not predefined.
- ③ XML tags contain type (Must be).
- ④ XML is a Case Sensitive.
- ⑤ It displays only if CSS is defined.

Structure of XML Document :- XML



- Preface or Introduction to your XML document as well as comments.

It contains the actual data.

Features:-

- ① XML is defined designed to display & carry data.
- ② XML is self Descriptive.
- ③ Free & Extensible (Meta Language) no need.
- ④ Platform Independent.
- ⑤ **** -- **** → Bold
- ⑥ **<i>** -- **</i>** → Italicized
- ⑦ **<u>** -- **</u>** → Underline
- ⑧ **_b** -- **</sub>** → Subscript e.g. **(H₂O)**
- ⑨ **^x** -- **</sup>** → Super Script **(x²)**
- ⑩ **<p>** -- **</p>** → Paragraph = **biggest size**
- ⑪ **<h₁>** -- **</h₁>** → Size of text. **(h₁, h₂, h₃, h₄, h₅, h₆)** **smallest**



Attributes **<h₁ align = "center">** -- **</h₁>**



(19) ` --- `

↓ attribute

` --- `

` --- `

↓
writing change

* Empty type tag:-

- ① `<base font>` → by default set for whole page. we can not change.
- ② `
` → break
- ③ `<hr>` → horizontal
- ④ `<!--` → Comment
- ⑤ `Img` → Photo.

CSS :- It stands for Cascading Style Sheet

It is a style sheet lang. which is used to describe the looking of Formating of a document written in markup language.

- ⇒ You can add new looks to your old HTML doc.
- ⇒ You can change the look of your website.

Why we use CSS :- ① Solve a big problem

② It saves a lot of time

③ It provides more attributes.

Syntax :- `h1 {color : Yellow ; Font Size : 10 bx ;}`

Selector property Value

CSS :- Style sheet is a compact set of style rules written in a specific format.

→ This set of rule instruct to the browser how to present the html document.



Learn to Excel

Baddi University
of Emerging Sciences & Technology

→ Style define how to display html.

CSS Syntax :- A CSS rule has two main parts:-

- ① a selector
- ② declaration

`(h1) { color : blue ; font-size : 12px }`

Selector Declaration Declaration

→ Selector :- It determines the elements to which rule is applied. (`h1, h2, ...`)

→ Declaration :- It specifies the exact property & value to be applied to the element (tag).

To change the background using CSS :-

`<Style>`

`body { background-color : green ; }`

`</Style>`

Steps for adding CSS to HTML :-

- ① Write content of webpage using HTML
- ② In head tag add CSS using `<Style>` tag.

Properties :-

- ① Color :- Changing the text color; Value equivalent to all color.
- ② Text-align :- Changing alignment of text; Value = center, right, left.
- ③ Font-family :- Changing the font type; Value = all font name.
- ④ Background-Image :- Setting background of the image.
- ⑤ Font Style :- Changing the font style; Value = italic, oblique / normal.
- * ⑥ Font-weight :- Setting the font weight like, bold, lighter, passing value = normal, bold, bolder, light, lighter.
- ⑦ Background-color :- Setting background color of webpage.
- ⑧ Word-spacing :- Set the space b/w the word.
- ⑨ Letter-spacing :- Setting space b/w characters.



(10) text-decoration :- Decorate the text.

Passing Value = blink, none, underline, overline, ~~line-through~~

CSS:- Why use CSS

→ CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices & screen size.

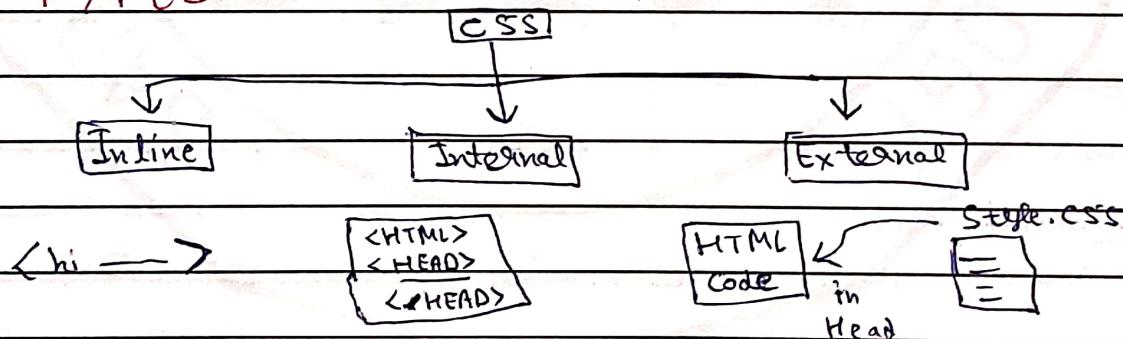
CSS Syntax:-

→ A CSS rule-set consist of a Selector & a declaration block.

Declaration	Declaration
h1 { Color : blue ; Font-Size : 12px ; }	
↑ ↑ ↑ ↑ ↑	
Selector Property Value Property Value	

- The Selector Points to the HTML element you want to style.
- The declaration block contains one or more declaration separated by semicolons.

CSS-TYPES



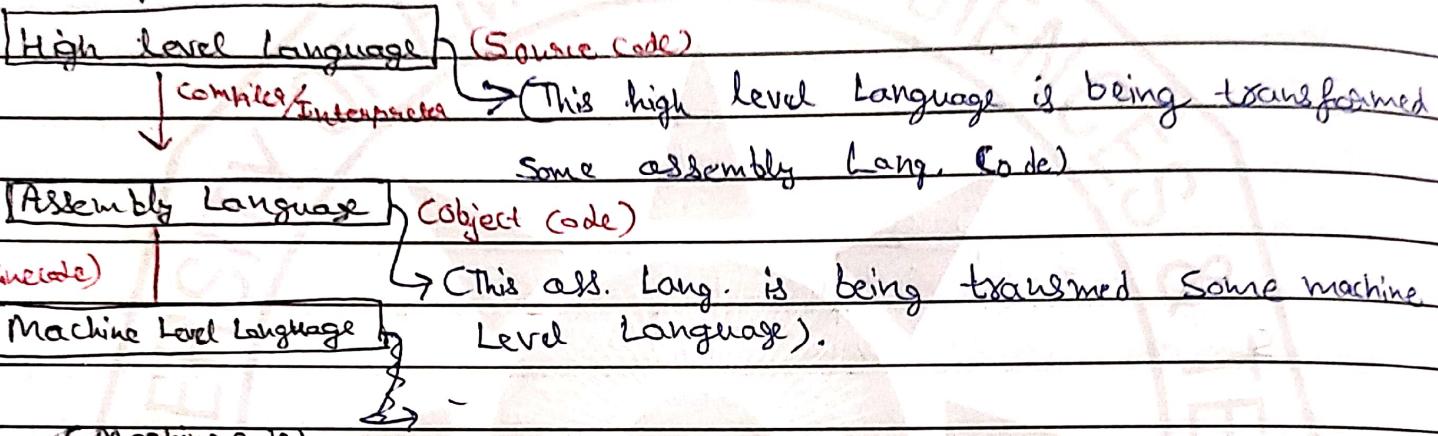


* Programming Languages:-

PROGRAM :- A Sequence of instruction to perform some specific task using a Computer.

PROGRAMMING :- is the process of writing a Program.

Usually we write our Program in high level Language ~~e.g. C, C++, Java~~.



* **Machine Level Language** :- It is fundamental to computer's Processor. It is in the form of 0's and 1's.

(Lower level code) or ~~Object code~~

* **Assembly Language** :- It is a symbolic representation of machine code. Machine code is sequence of 0 & 1 So if we want to perform any operation like addition so assembly code assign some symbol like - ADD

(Source code)

* **High Level Language Code** :- Easier to learn, English like statements.
(Machine code & assembly code are both are machine dependent means a machine code run for your computer will not run on my own.)

But High level Language code like a Program written in C or Java it will run similarly in your Machine and also in my machine so it is machine independent.)



Q : Who does the Transformation?

① Compiler :- is a program which convert high level code into a lower level code.

② Interpreter :- it takes single line or single instruction from high level code and it converts it lower level code and it directly execute it. It convert line by line while compiler convert full program at a time.

③ Assembler :- It convert object code or Assembly level code into machine level code. So after the high level code fully converted to machine level code then only it is executed by your computer.

Note ⇒ Compiler :- (C, C++, Fortran, COBOL...) These language which uses compiler for conversion.

⇒ Interpreter :- (Perl, Python, BASIC...)

Java uses both, compiler & interpreter.