

HTML, CSS, JAVA SCRIPT

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2025



Coding World

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What is HTML ?

- HTML stands for “**Hyper Text Markup Language**”.
- It is easy to learn. And it’s not a case sensitive.
- HTML is the standard markup language for creating Web pages.
- HTML describes the structure of a Web page.
- HTML elements tell the browser how to display the content.

A simple HTML structure...

```
<HTML>
<HEAD>
<TITLE> Basic HTML structure </TITLE>
</HEAD>
<BODY>
    <h1> Basic HTML structure </h1>
    <p> This is a paragraph tag </p>
</BODY>
</HTML>
```

Some instructions...

<HTML> ————— This is starting tag

</HTML> ————— This is closing tag

The HTML file must be save as –

File name.html / File name.HTML

HTML tag list...

- <HEAD> ————— It defines the head section of an HTML document.
- <TITLE> ————— It defines the title or name of an HTML document.
- <P> ————— It represents a paragraph in an HTML documents.
- ————— It is used to make a text bold.
- <I> ————— It is used to make a text italic.
- <U> ————— It is used to text underline .
- <BODY> ————— It is used to define the body section of an HTML documents.
- <HTML> ————— It represents the root of an HTML document.
-
 ————— It is used for line break or create new line.
- <sub> ————— It defines a text which displays as a subscript text.
- <sup> ————— It defines a text which is represented as superscript text.
- ————— It defines a text which has been deleted from the document.
- <h1,h2 h6> ————— It defines heading of an HTML document.
- ————— It defines an ordered list of an items.
- ————— It defines an unordered list of an items.
- ————— It is used to insert an image within an HTML document.
- <a> ————— It is termed as an anchor tag and it creates a hyperlink or link.

- <marquee> ————— It is used to scroll text or an image either horizontally or vertically.
- <table> ————— It is used to create a table.
- <th>———— It defines the head cell of an HTML table
- <tr>———— It defines the row cells in an HTML table
- <td>———— It is define the cell data in an HTML table
- <form>———— It is used to define an HTML form
- <option>———— It is used to define options or items in a drop-down list
- <optgroup>———— It is used to group the options of a drop-down list
- <nav>———— It is used to create a navigation bar
- etc

HTML tag and attributes...

What is tag ?

- Tag is a HTML instructions and look like.

e.g - <p> Hello World </p>

e.g - <h1> This is a Heading tag </h1>

What is container tags ?

- Tags that have starting as well as ending part.

e.g - <title> Title of the web page </title>

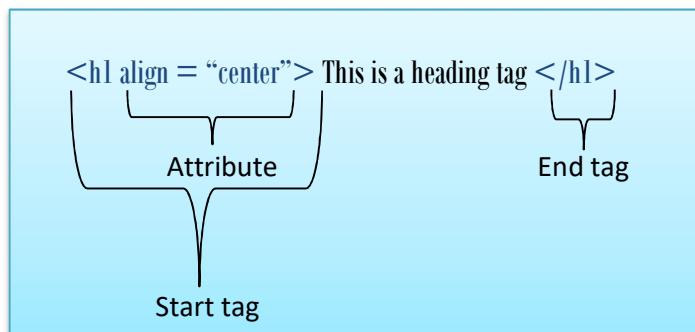
e.g - <h2> This is second heading tag </h2>

What is empty tag ?

- Tags that do not have the closing part.

e.g -
, <hr>

Attributes... An attribute is an additional features , attributes are optional.



Basic HTML

Lesson – 1

- Body tag and it's attributes
- Paragraph, Line break, Bold, Italic, Underline,
- Font tag and it's attributes

```

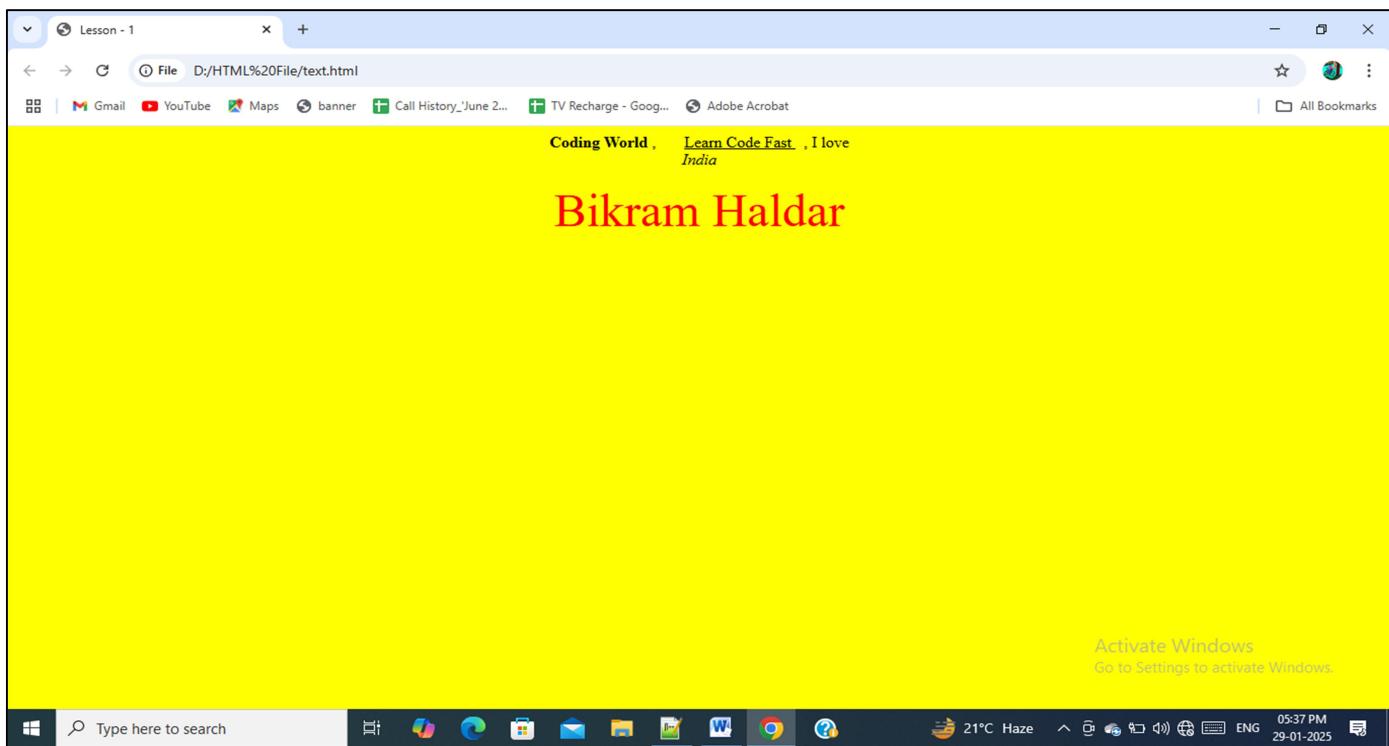
<HTML>
<HEAD>
<TITLE> Lesson - 1 </TITLE>
</HEAD>

<body bgcolor="yellow" align="center">
<P> <b> Coding World </b> , &nbsp;&nbsp;&nbsp; <u> Learn Code Fast </u> &nbsp;&nbsp;, I love <br>
<i> India </i> </P>
<font color="red" size="20px"> Bikram Haldar </font>
</body>

</HTML>

```

Text.html



Lesson – 2

- Pre tag
- Small & Big tag
- Sup & Sub tag
- Strong & Strike tag
- Font tag

Index.html

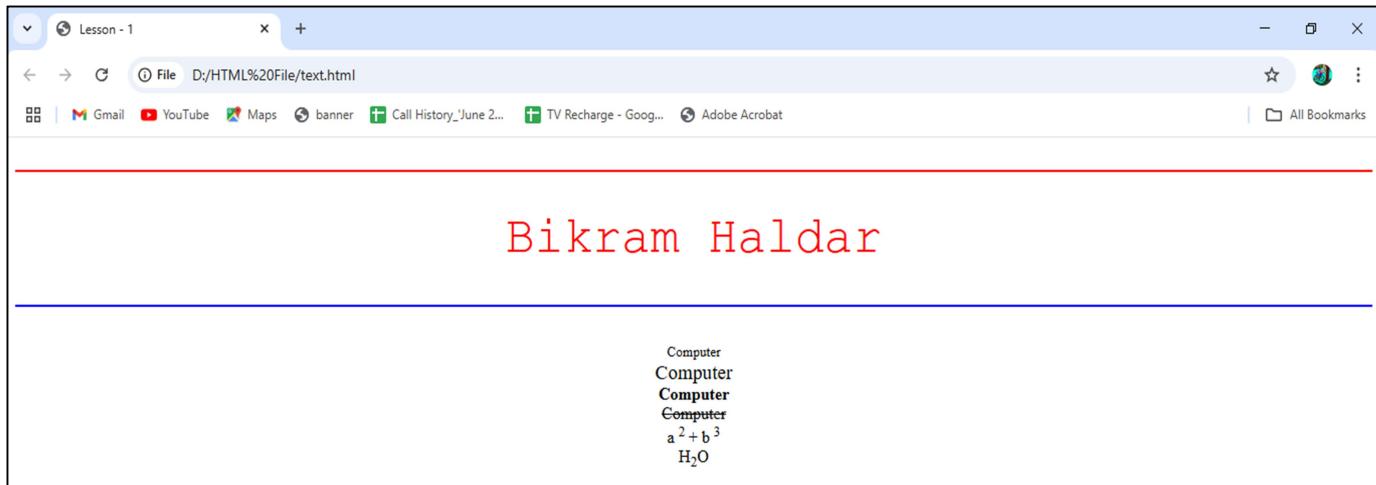
```
<HTML>
<HEAD>
<TITLE> Lesson - 1 </TITLE>
</HEAD>

<body align="center">
<pre> <hr color="red"> </pre>
<font color="red" size="20px" face="courier"> Bikram Haldar </font>
<pre> <hr color="blue"> </pre>

<small> Computer </small> <br>
<big> Computer </big> <br>
<strong> Computer </strong> <br>
<strike> Computer </strike> <br>

a <sup> 2 </sup> + b <sup> 3 </sup> <br>
H<sub>2</sub>0
</body>

</HTML>
```



Lesson - 3

- Image on background
- Image on screen

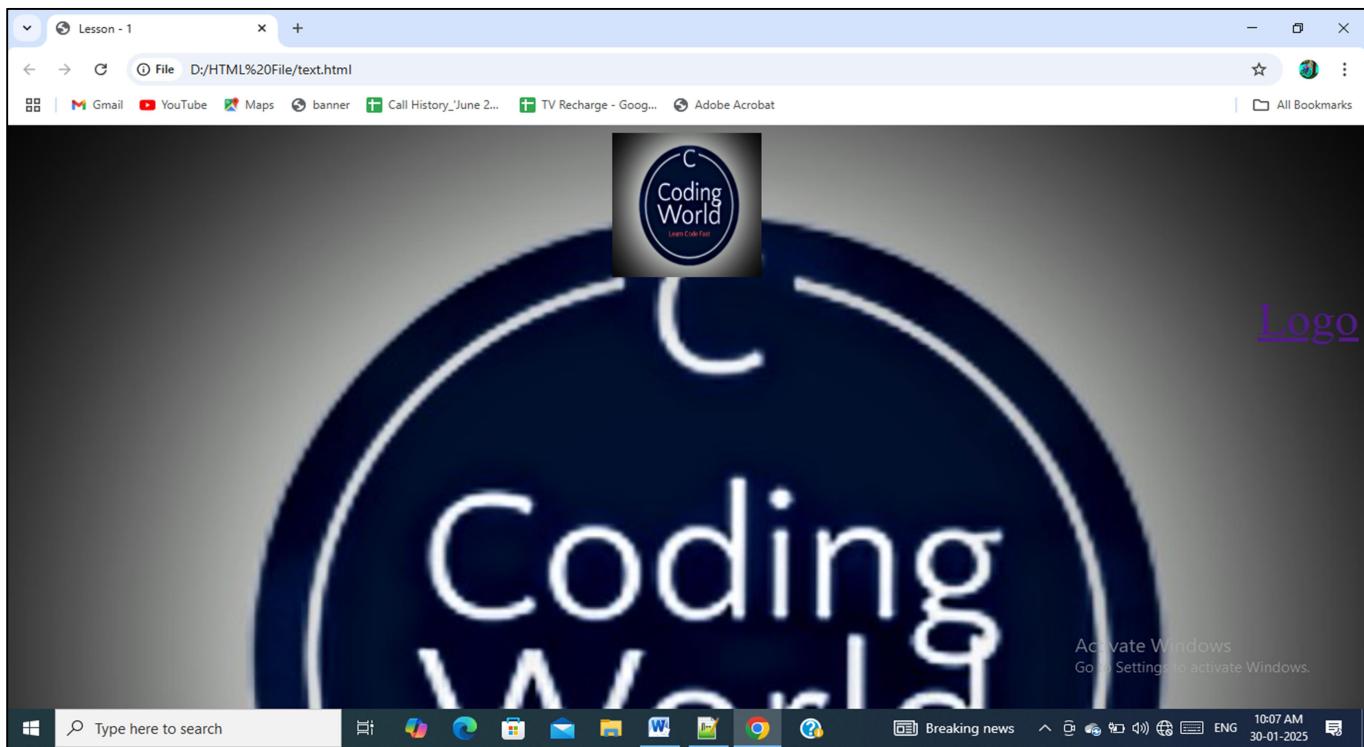
- Image on hyper link

Index.html

```
<HTML>
<HEAD>
<TITLE> Lesson - 1 </TITLE>
</HEAD>

<body background="C:\Users\user\OneDrive\Pictures\L.jpg" style="background-repeat:no-repeat;background-size:100%; align="right">
<p align="center">  </img>
</p>
<font size="50px"> <a href="C:\Users\user\OneDrive\Pictures\L.jpg"> Logo </a> </font>

</body>
```



Lesson – 4

- Heading tag
- Page align
- Marquee tag

Index.html

```
<HTML>
<HEAD>
<TITLE> HTML </TITLE>
</HEAD>

<body>

<H1> First heading </H1>
<H2 align="center"> Second heading </H2>
<H3> third heading </H3>
<H4> Fourth heading </H4>
<H5> Fifth heading </H5>
<H6> Sixth heading </H6>

<p align="center"> <font size="8" color="red"> Coding World </font> </p>

<font color="white" size="5px"> <marquee bgcolor="red" direction="left" height="30px"> Coding World
</marquee> </font>
<font color="white"> <marquee bgcolor="yellow" direction="right"> Coding World </marquee> </font>
<font color="white"> <marquee bgcolor="blue" direction="up"> Coding World </marquee> </font>
<font color="white"> <marquee bgcolor="black" direction="down"> Coding World </marquee> </font>

</body>
</HTML>
```



Lesson – 5

- Order list & Unorder list

- Table tag

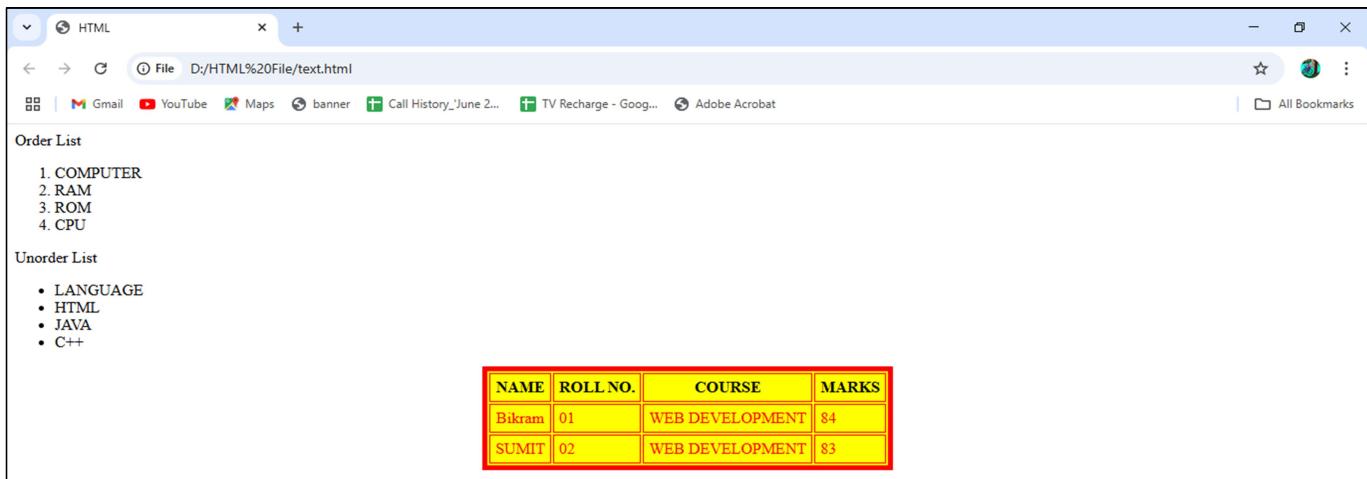
```

<HTML>
<HEAD>
<TITLE> HTML </TITLE>
<style>
td{
  align-items:center;
  color:red;
}
</style>
</HEAD>
<body>

Order List <br>
<OL> <LI> COMPUTER </LI> <LI> RAM </LI> <LI> ROM </LI> <LI> CPU </LI> </OL>
Unorder List <BR>
<UL> <LI> LANGUAGE </LI> <LI> HTML </LI> <LI> JAVA </LI> <LI> C++ </LI> </UL>

<table border="5px" bordercolor="red" bgcolor="yellow" cellpadding="5px" cellspacing="2px" height="0px"
width="0px" align="center" >
<TR> <TH> NAME </TH> <TH> ROLL NO. </TH> <TH> COURSE </TH> <TH> MARKS </TH> </TR>
<tr> <td align="center"> Bikram </td> <td> 01 </td> <td> WEB DEVELOPMENT </td> <TD> 84 </TD> </tr>
<tr> <td align="center"> SUMIT </td> <td> 02 </td> <td> WEB DEVELOPMENT </td> <TD> 83 </TD> </tr>
</table>
</body>
</HTML>

```



Lesson – 6

- Table divided into two parts
- Rowspan

File.html

```

<HTML>
<HEAD>
<TITLE> HTML </TITLE>
<style>
div{
    display:flex;
}
</style>
</HEAD>
<body>

<div>
<table border="5px" bordercolor="red" bgcolor="yellow" cellpadding="10px" cellspacing="1px" height="0px" width="0px" align="center">
    <TR> <TH COLSPAN="4"> DETAILS OF COMPUTER STUDENT </TH></TR>
    <TR> <TH colspan="2"> HARDWARE STUDENT </TH> <TH colspan="2"> SOFTWARE STUDENT </TH>
</TR>
    <tr> <th> NAME </th> <TH> ROLL NO.</TH> <th> NAME </th> <TH> ROLL NO.</TH> </tr>
    <TR> <TD> BIKRAM </TD> <TD> 01 </TD> <TD> SUMIT </TD> <TD> 01 </TD> </TR>
    <TR> <TD> SUMIT </TD> <TD> 02 </TD> <TD> SUMAN </TD> <TD> 02 </TD> </TR>
</table> <BR>

<table border="5px" bordercolor="red" bgcolor="yellow" cellpadding="15px" cellspacing="0px" height="0px" width="0px" align="center">
    <tr> <th COLSPAN="4"> Project Group List </th> </tr>
    <TR> <TH> GROUP </TH> <TH> NAME </TH> <th> Project Name </th> <TH> TIME </TH> </TR>
    <TR> <TD rowspan="2"> A </TD> <TD> Bikram Haldar </TD> <td rowspan="2"> E-Commerce website </td> <TD> 10:00 am - 12:00 pm </TD> </TR>
    <tr> <td> Sumit Kumar Ghosh </td> <td> 12:10 pm - 02:10 pm </td> </tr>
    <tr> <td rowspan="3"> B </td> <td> Suman Kalapahar </td> <td rowspan="3"> College Website </td>
    <td> 10:00 am - 11:05 am </td> </tr>
    <tr> <td> Santa Saw </td> <td> 11:10 am - 12:15 pm </td> </tr>
    <tr> <td> Ranita Samanta </td> <td> 12:20 pm - 01:25 pm </td> </tr>
</table>
</div></body></HTML>

```

DETAILS OF COMPUTER STUDENT				Project Group List					
HARDWARE STUDENT		SOFTWARE STUDENT		Project Name		TIME			
NAME	ROLL NO.	NAME	ROLL NO.						
BIKRAM	01	SUMIT	01	Bikram Haldar	E-Commerce website	10:00 am - 12:00 pm			
SUMIT	02	SUMAN	02			12:10 pm - 02:10 pm			
				Suman Kalapahar	College Website	10:00 am - 11:05 am			
						11:10 am - 12:15 pm			
						12:20 pm - 01:25 pm			

Lesson – 7

- Radio & Checkbox button
- Option tag

```

<HTML>
<HEAD>
<TITLE> HTML </TITLE>
</HEAD>
<body>

Gender
<label for="Male">
<INPUT type="radio" name="GENDER" value="Male" id="Male"> Male
</label> <label for="Female">
<INPUT type="radio" name="GENDER" value="Female" id="Female">Female
</label> <BR><br>

```

```

Course
<Select name="Course" required>
  <option value=""> -- Select -- </option>
  <option name="Course" value="WEB DEVELOPMENT"> Web Development </option>
  <option name="Course" value="JAVA PROGRAMMING"> JAVA PROGRAMMING </option>
  <option name="Course" value="C PROGRAMMING"> C PROGRAMMING </option>
</Select></body></HTML>

```

Gender Male Female

Course

Lesson – 8

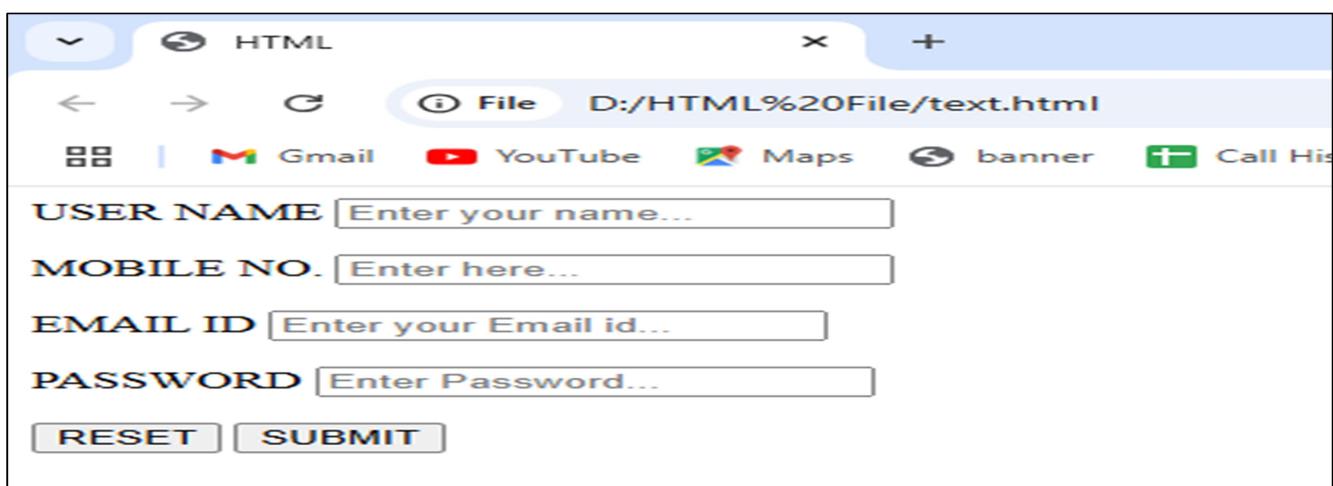
- HTML form design (Submit,Reset Button & Input type)

```
<HTML>
<HEAD>
<TITLE> HTML </TITLE>
</HEAD>
<body>
<FORM id="register" method="post" name="google-sheet">

USER NAME <INPUT type="text" name="NAME" placeholder="Enter your name..." required> <br><br>
MOBILE NO. <INPUT type="number" name="CONTACT NUMBER" placeholder="Enter here..." required> <BR><BR>
EMAIL ID <INPUT type="text" name="EMAIL" placeholder="Enter your Email id..." required> <br><br>
PASSWORD <INPUT type="password" name="PASSWORD" placeholder="Enter Password..." required> <BR><BR>

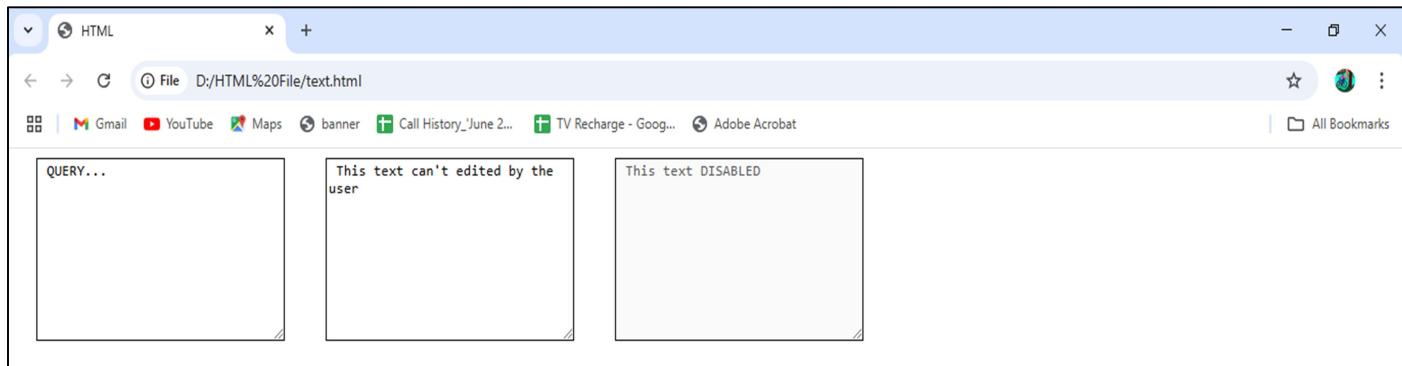
<INPUT type="RESET" value="RESET">
<INPUT type="SUBMIT" value="SUBMIT">

</FORM></body></HTML>
```

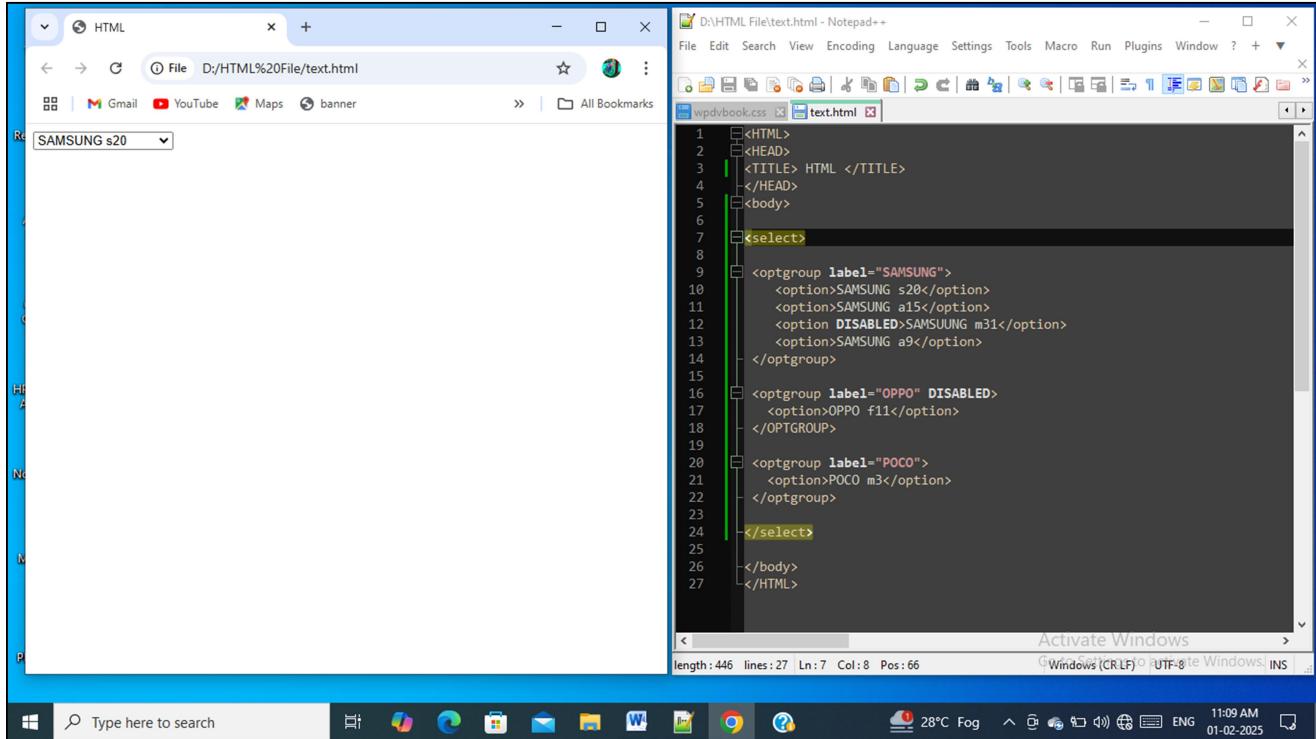


- Textarea tag

```
<HTML>
<HEAD>
<TITLE> HTML </TITLE>
<STYLE>
DIV{
display:FLEX;
}
TEXTAREA{
MARGIN-INLINE:20PX;
BORDER:1PX SOLID BLACK;
}
</STYLE>
</HEAD>
<body>
<DIV>
<TEXTAREA ROWS="10" COLS="30" placeholder="Enter here..."> QUERY... </TEXTAREA> <br><BR>
<TEXTAREA ROWS="10" COLS="30" placeholder="Enter here..." READONLY> This text can't edited by the user </TEXTAREA>
<br><BR>
<TEXTAREA ROWS="10" COLS="30" placeholder="Enter here..." DISABLED> This text DISABLED </TEXTAREA> <br>
</DIV>
</body>
</HTML>
```



- Optgroup tag



The screenshot shows a Windows desktop environment. On the left is a browser window titled 'HTML' showing a dropdown menu with options: SAMSUNG s20, SAMSUNG a15, SAMSUNG m31, and SAMSUNG a9. On the right is a Notepad++ code editor with the file 'text.html' open. The code editor shows the following HTML and CSS:

```

<HTML>
<HEAD>
<TITLE> HTML </TITLE>
<STYLE>
BODY{
    background:PINK;
}
FORM{
    WIDTH:400PX; padding:20PX; margin:AUTO; background:BLUE;
    font-size:20PX; COLOR:WHITE;
}
INPUT[TYPE="TEXT"],TEXTAREA{
    WIDTH:100%; padding:10PX; font-size:17PX;
}
INPUT[TYPE="SUBMIT"],INPUT[TYPE="RESET"]{
    padding:5PX; font-size:15PX; cursor:POINTER; WIDTH:40%;
}
INPUT[TYPE="SUBMIT"]:HOVER,INPUT[TYPE="RESET"]:HOVER{
    background-color:black; COLOR:WHITE;
}
</STYLE>
</HEAD>
<body>
<select>
<optgroup label="SAMSUNG">
    <option>SAMSUNG s20</option>
    <option>SAMSUNG a15</option>
    <option DISABLED>SAMSUNG m31</option>
    <option>SAMSUNG a9</option>
</optgroup>
<optgroup label="OPPO" DISABLED>
    <option>OPPO f11</option>
</OPTGROUP>
<optgroup label="POCO">
    <option>POCO m3</option>
</optgroup>
</select>
</body>
</HTML>

```

HTML form design using CSS

```

<HTML>
<HEAD>
<TITLE> HTML </TITLE>
<STYLE>
BODY{
    background:PINK;
}
FORM{
    WIDTH:400PX; padding:20PX; margin:AUTO; background:BLUE;
    font-size:20PX; COLOR:WHITE;
}
INPUT[TYPE="TEXT"],TEXTAREA{
    WIDTH:100%; padding:10PX; font-size:17PX;
}
INPUT[TYPE="SUBMIT"],INPUT[TYPE="RESET"]{
    padding:5PX; font-size:15PX; cursor:POINTER; WIDTH:40%;
}
INPUT[TYPE="SUBMIT"]:HOVER,INPUT[TYPE="RESET"]:HOVER{
    background-color:black; COLOR:WHITE;
}
</STYLE>
</HEAD>
<body>

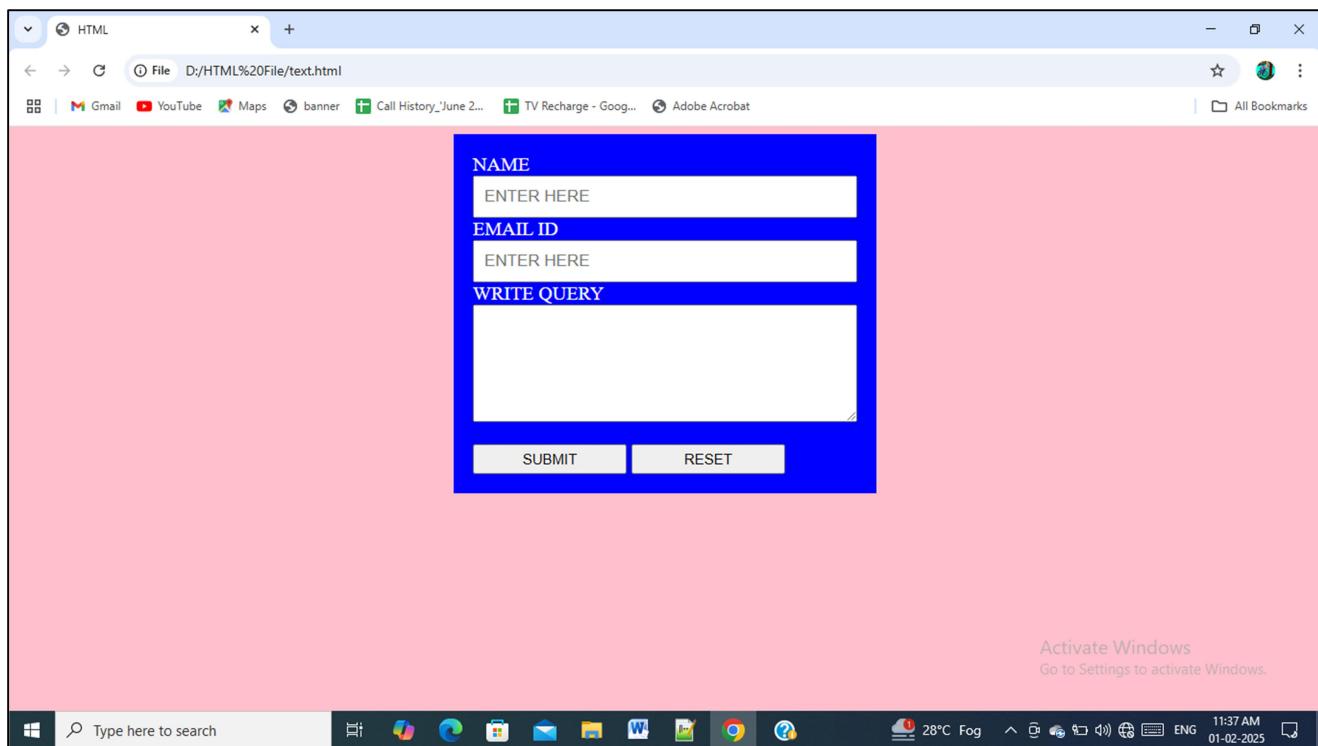
```

```

<FORM>
  NAME <BR> <INPUT TYPE="TEXT" NAME="NAME" PLACEHOLDER="ENTER HERE" REQUIRED> <BR>
  EMAIL ID <BR> <INPUT TYPE="TEXT" NAME="EMAIL ID" PLACEHOLDER="ENTER HERE" REQUIRED> <BR>
  WRITE QUERY <BR>
  <TEXTAREA COLS="21" ROWS="5" PLACEHOLDER="ENTER QUERY HERE"> </TEXTAREA> <BR><BR>
  <INPUT TYPE="SUBMIT" VALUE="SUBMIT">
  <INPUT TYPE="RESET" VALUE="RESET">
</FORM>

</body>
</HTML>

```



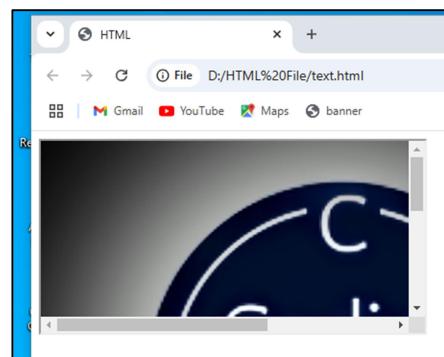
Lesson – 9

- Iframe tag

```

<iframe img src="C:\Users\user\OneDrive\Pictures\L.jpg"
width="400px" height="200px"> </iframe>

```



- Div tag

```

<HTML>
<HEAD>
<TITLE> HTML </TITLE>
<style>
.main{
    text-align:center;
    display:flex;
    flex-direction:row;
    border:1px solid red;
}
.BOX{
    margin-inline:20px;
}
</style>
</HEAD>
<body>

<div class="main">

<div class="box" style="border:2px solid gray; background-color:green; color:white; text-align:center; width:200px;">
    <h2> Box 1 </h2>
</div>

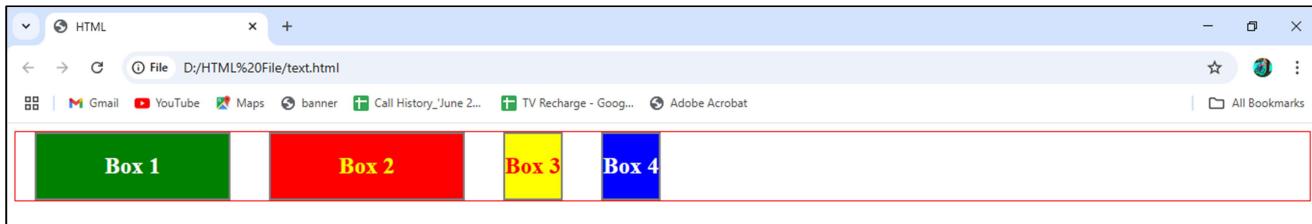
<div class="box" style="border:2px solid gray; background-color:red; color:yellow; width:200px;">
    <h2> Box 2 </h2>
</div>

<div class="box" style="border:2px solid gray; background-color:yellow; color:red;">
    <h2> Box 3 </h2>
</div>

<div class="box" style="border:2px solid gray; background-color:blue; color:white;">
    <h2> Box 4 </h2>
</div>

</div>
</body>
</HTML>

```



- Button tag

<BUTTON type="reset"> Reset </BUTTON>
 <BUTTON> Submit </BUTTON>

Values of input type attribute...

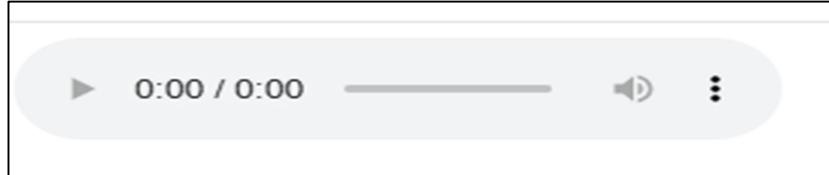
text, email, password, number, radio, checkbox, submit, reset, date, datetime-local, tel, hidden, time, month, url, image, search, range, color, file, hidden, week

file : <input type="file" name="file" accept="image/*" multiple>



- Audio tag

<audio controls preload="audio">
 <source src="#" type="audio/mp3">
</audio>



<audio controls attribute>

- Loop
- Preload="audio"/"none"
- Muted

Lesson – 10

- Video tag
- Dfn & abbr tag

<video width="500px" poster="image link paste" control>
 <source src="#" type="video/mp4">
</video>

Video tag

<h1> What is RAM ? </h1>
<P> <dfn title="RANDOM ACCESS MEMORY"> Random </dfn>
Access
<ABBR TITLE="Store the data"> Memory </ABBR> </P>

Dfn & Abbr tag

- Fieldset & Legend tag

```

<HTML>
<HEAD>
<TITLE> HTML </TITLE>
</HEAD>
<body>

<fieldset> <legend align="center" style="border:1px solid black; background-color:yellow; font-weight:bold;"> Personal
Information </legend>
Name <input type="text" placeholder="Enter here...">
Guardian Name <input type="text" placeholder="Enter here...">
</fieldset>

</body></HTML>

```



Version of HTML :

Version	Year	Developer
HTML	1991	Tim Berners Lee
HTML+	1993	
HTML 2.0	1995	
HTML 3.2	1997	
HTML 4.01	1999	
XHTML	2000	
HTML 5	2014	

- Object tag

```

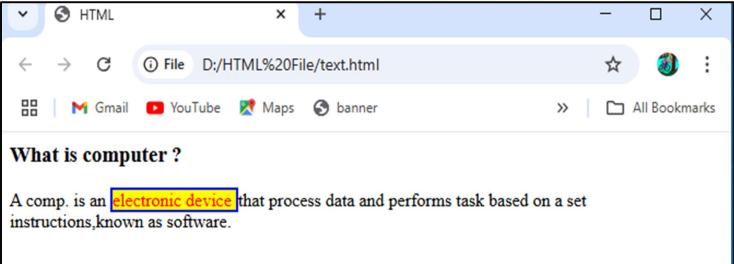
object data="paste video link here" type="video/mp4" width="400px"height="300px"
name="moviebox"></object>

```

Lesson – 11

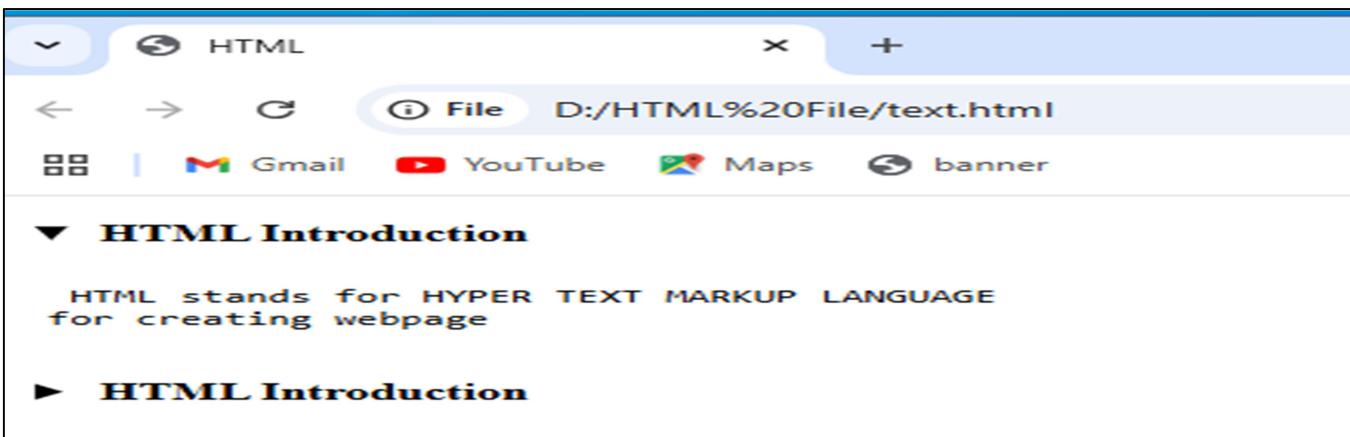
- Span tag

```
h3> What is computer ?</h3>  
  
<p>A comp. is an <span style="color:red; background:yellow; border:2px solid blue"> electronic device </span> that process data and performs task
```



- Details tag

```
<details>  
  <summary><b>HTML Introduction</b></summary>  
  <pre> <p> HTML stands for HYPER TEXT MARKUP LANGUAGE  
        for creating webpage </p> </pre>  
</details>  
  
<details>  
  <summary><b>HTML Introduction</b></summary>  
  <pre> <p> HTML stands for HYPER TEXT MARKUP LANGUAGE  
        for creating webpage </p> </pre>  
</details>
```



CSS(Cascading Style Sheets)

What is CSS ?

CSS (Cascading Style Sheets) is a language used to make websites look good. It controls the colors, fonts, layouts, spacing and overall design of a website.

Types of CSS : 3 types of CSS.

- Inline CSS.
- Internal CSS.
- External CSS.

Inline CSS

e.g - <h1 style = "color : red ;"> This is heading tag </h1>

Inline CSS

Internal CSS

e.g - <HTML>
<HEAD> <TITLE> Internal CSS </TITLE>

Internal CSS

```
<STYLE type = "text/css">
  *{
    background-color : red ;
  }
</STYLE>
```

```
</HEAD>
<BODY> </BODY>
</HTML>
```

External CSS

e.g -

	index.html
<HTML> <HEAD> <TITLE> External CSS </TITLE> <LINK rel="stylesheet" href="style.css"> </HEAD> <BODY> </BODY> </HTML>	

	Style.css
*{ background-color : red ; }	

JAVA SCRIPT

Java Script is a simple and popular programming language used to make websites interactive. It allows you to add features like pop-ups, animations and forms that respond to user input. It works in your web browser and is essential for creating modern, dynamic websites.

Two types of scripting language ----- **(a) Client Side .**
(b) Server Side .

Name print : `document.write ("Hello World");`

Rules of write Java Script in HTML file :

```
<html>
  <head><title> Java Script </title>
    <script>
      document.write ("Hello World");
    </script>
  </head>
  <body>
    <h1> Java Script </h1>
    <script>
      document.write ("Hello World 2");
    </script>
  </body>
</html>
```

Link external Java Script :

<code><html></code>	index.html
<code><head> <title> Java Script </title></code>	
<code><script src = "imp.js"> </script></code>	
<code></head></code>	
<code><body></code>	
<code><script src = "imp.js"> </script></code>	
<code></body></code>	
<code></html></code>	

imp.js
<code>document.write ("Hello World");</code>

Implement HTML tag in Java Script :

```
<html>
<head> <title> Java Script </title>
</head>
<body>
<script>
    document.write (“<u> Hello </u> <br> World”);
    document.write (“<b> Hello </b> <br> World”);
</script>
</body>
</html>
```

Arithmetic Operator

```
<script>
document.write(3+3); // ( Here '+' is a operator)
</script>
```

Variable declare :

<pre><script> var a=5; var b=5; document.write(a+b); </script></pre>	<pre><script> var a=5; var b=5; var c=a+b; document.write(c); </script></pre>	<pre><script> var a=10; var b=6; a++/a--; document.write(a); </script></pre>
--	---	--

Assignment Operator

- **Simple Assignment :** a=a+b
- **Compound Assignment :** a+=b

Simple Assignment :

```
<script>
    var a=10;
    var b=5;
    a=a+b;/a=a - b;
    document.write(a);
</script>
```

Compound Assignment :

```
<script>
    var a=10;
    var b=5;
    a+=b;/a=b;
    document.write(a);
</script>
```

**OUTPUT – (+) 15
(-) 5**

“Comment line” in Java Script :

Single line comment ---

➤ // Single line

Multiple line comment --- /* Multiple line comment */

Operators :

- ✓ Arithmetic Operators : + , - , / , *
- ✓ Assignment Operators : = , += , -= , /=
- ✓ Comparison Operators : < , > , == , <=
- ✓ Logical Operators : && , || , !
- ✓ Conditional Operators : ?, :

Google chrome console

How to open “Console Panel” : Open HTML page > Right click > click Inspect > Console
Or
CTRL + Shift + I

Print in console panel : console.log("Hello World");

Array define : <script>
 console.log([1,3,5]);
 </script>

 <script>
 console.table([1,3,5,7,9,0]);
 </script>

Comparison Operator

== (Equal to)
===(Equal value and equal type)
!= (Not equal)
!==(Not equal value and not equal type)
> (Greater than)
< (Less than)
>= (Greater than equal)
<= (Less than equal)

== (Equal to) :

<script>
 var a=10;
 var b=10;
 console.log(a==b);
</script>

OUTPUT : true

===(Equal value and equal type) :

<script>
 var a="10";
 var b=10;
 console.log(a==b);
</script>

OUTPUT : false

!= Not equal :

<script>
 var a=10;
 var b="10";
 console.log(a!=b);
</script>

OUTPUT : false

!== Not equal value and not equal type :

<script>
 var a=10;
 var b="10";
 console.log(a!==b);
</script>

OUTPUT : true

> Greater than :

```
<script>
    var a=30;
    var b=10;
    console.log(a>b);
</script>
OUTPUT : true
```

>= Greater than or equal :

```
<script>
    var a=10;
    var b=10;
    console.log(a>=b);
</script>
OUTPUT : true
```

If/else condition :

```
<script>
var a=20;
var b="20";
if (a==b){
    document.write("Number is equal");
}
else{
    document.write("Number is not equal");
}
</script>
OUTPUT : Number is equal.
```

Logical Operator

&&	1 false all false
 	1 true all true
==	Equal
=	value assign

&& :

```
<script>
var age=17;
if(age>=18 && age<=40){
    document.write("Elegible for vote");
}
else{
    document.write("Not elegible for vote");
}
OUTPUT : Not elegible for vote.
```

||:

```
<script>
var a=19;
var b=41;
if(a>=18 || b<=40){
    document.write("Elegible");
}
else{
    document.write("Not Elegible");
}
OUTPUT : Elegible.
```

If/else if statement :

```
<script>
var marks=290;
if(marks<=100 && marks>=80){
    document.write("Grade A / Pass");
}else if(marks<=79 && marks>=60){
    document.write("Grade B / Pass");
}else if(marks<=59 && marks>=30){
    document.write("Grade C / Pass");
}
else if(marks<=29){
    document.write("Fail");
}
else{
    document.write("Number is unsufficient");
}
</script>
```

OUTPUT : Number is unsufficient.

Variable : Used to store data.

```
<script>
    var fn = "Bikram";
    var ln = "Haldar";
    document.write(ln);
</script>
```

OUTPUT : Haldar

```
<script>
    var fn,ln,age;
    fn = "Coding";
    ln = "World";
    age = 21;
    document.write(fn, " ",ln," - ",age);
</script>
```

OUTPUT : Coding World - 21

Const , Let :

```
<script>
const name = "Coding";
const nam = "World";
const na = "vl.l";
document.write(na);
</script>
```

OUTPUT : vl.l

***Same variable (const,let)
name will be not allowed .**

```
<script>
let name = "Coding";
    nam = "World";
document.write(name);
</script>
```

OUTPUT : Coding

Data Type :

Preemptive : String , Number , Boolean , Null , Undefine

Non – Preemptive : Object , Array

String

```
<script>
    var a = "Coding World";
    document.write(a);
    document.write("<br>");
    document.write(typeof a);
</script>
```

OUTPUT : Coding World

string

Number

```
<script>
    var a = 20;
    document.write(a);
    document.write("<br>");
    document.write(typeof a);
</script>
```

OUTPUT : 20

number

Boolean

```
<script>
    var a = true;
    document.write(a);
    document.write("<br>");
    document.write(typeof a);
</script>
```

OUTPUT : true

boolean

Non - Preemptive : <script>

Object

```
var a = ["red","green","blue"];
document.write(a);
document.write("<br>");      OUTPUT : object
document.write(typeof a);
</script>
```

Object

```
<script>
  var a = {Name:"Bikram" , Country:"Bhrat"};
  document.write(a.Name , " " , a.Country);
  document.write("<br>");
  document.write(typeof a);
</script>
```

OUTPUT : Bikram Bharat

Object

Ternary Operator :

Conditional Operator

```
<script>
  var age = 18;
  var vote;
  if(age>=18){
    vote = "Yes you are elegible";
  }
  else{
    vote = "You are not elegible";
  }
  document.write(vote);
</script>
```

OUTPUT : Yes you are elegible

```
<script>
  var age = 17;
  var vote = age>=18 ? "Yes" : "Not";
  document.write(vote);
</script>
```

OUTPUT : Not

Switch Case :

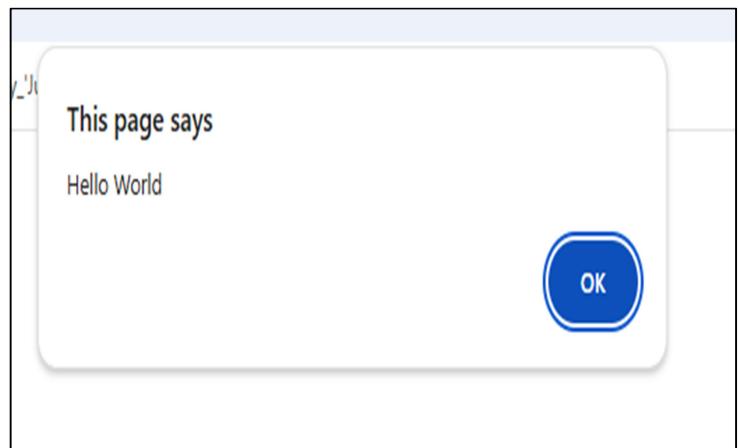
```
<script>
  var ch="E";
  switch(ch){
    case "A":
    case 'E':
      document.write("Vowel");
      break;
    default:
      document.write("Consonent");
  };
</script>
```

OUTPUT : Vowel

```
<script>
  var ch=prompt("Enter");
  switch(ch){
    case "A":
    case 'E':
      document.write("Vowel");
      break;
    default:
      document.write("Consonent");
  };
</script>
```

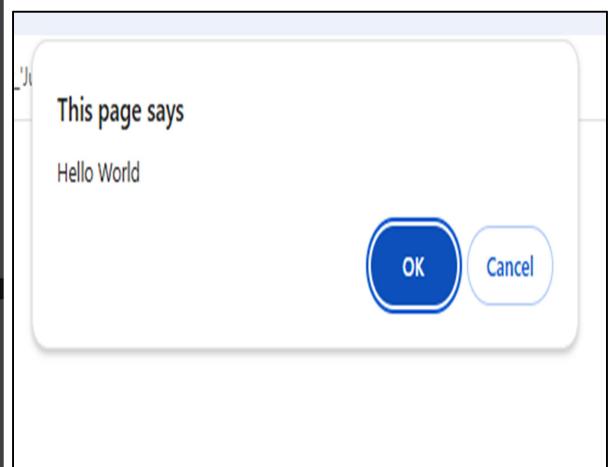
Alert box :

```
1 <HTML>
2  <HEAD>
3    <TITLE> HTML file </TITLE>
4  </HEAD>
5  <BODY>
6
7    <!-- This is alert box -->
8  <script>
9    alert("Hello World");
10 </script>
11
12
13 </BODY>
14 </HTML>
```



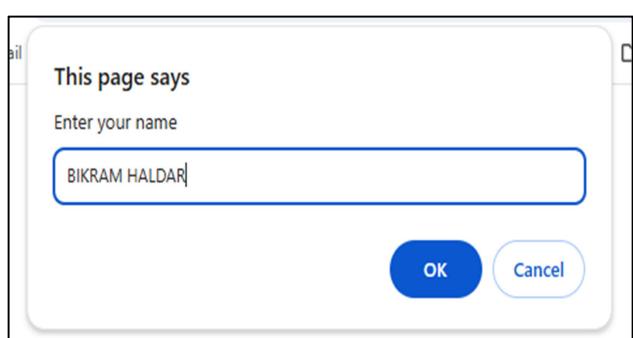
Confirm box :

```
1 <HTML>
2  <HEAD>
3    <TITLE> HTML file </TITLE>
4  </HEAD>
5  <BODY>
6
7    <!-- This is confirm box -->
8  <script>
9    confirm("Hello World");
10 </script>
11
12    <!-- Confirm box -->
13  <script>
14    var x = confirm("Hello");
15    alert(x);
16  </script>
17
18    <!-- Confirm box -->
19  <script>
20    var x = confirm ("Do you like our webpage");
21    if(x){
22      alert("Thanks");
23    }
24    else{
25      alert("It's ok");
26    };
27  </script>
28
29 </BODY>
30 </HTML>
```



Prompt box :

```
1 <HTML>
2  <HEAD>
3    <TITLE> HTML file </TITLE>
4  </HEAD>
5  <BODY>
6
7    <!-- This is prompt box -->
8  <script>
9    prompt("Enter your name");
10 </script>
11
12    <!-- Prompt box -->
13  <script>
14    var x = prompt("Enter Your name");
15    alert(x);
16  </script>
17
18    <!-- prompt box -->
19  <script>
20    var x = prompt("Enter your name");
21    document.write("Welcome" + " " + x);
22  </script>
23
24
25 </BODY>
26 </HTML>
```



Function :

Writing format :

```
Function function_name ( ) {  
    Statement ( );  
}
```

```
<!-- This function -->  
<script>  
    function myfc(){  
        document.write("JAVA SCRIPT");  
        document.write("<BR>");  
        document.write("HTML");  
        document.write("<BR>");  
        document.write("CSS");  
        document.write("<br>");  
  
        document.write("<br>");  
    };  
    myfc ();  
    myfc ();  
</script>
```

```
JAVA SCRIPT  
HTML  
CSS  
JAVA SCRIPT  
HTML  
CSS
```

Function with parameter :

```
Function function_name (parameter 1 , parameter 2){  
    Function_name (argument 1 , argument 2);  
}
```

```
<!-- This function with parameter -->  
<script>  
    function myfc (fname,lname){  
        document.write("Hii mr." + " " + fname + " " +  
        lname);  
    };  
    myfc("Bikram","Haldar");  
</script>
```

OUTPUT : Hii mr. Bikram Haldar

```
<!-- This function with parameter -->  
<script>  
    function myfc (fname = "Bikram", lname = "Haldar"){  
        document.write("Hii" + " " + fname + " " + lname +  
        "<br>");  
    };  
    myfc();/myfc("Haldar","Bikram");  
    myfc("Bikram","Haldar");  
    myfc("B","H");  
    myfc("h","H");  
</script>
```

```
<!-- This function with parameter -->
<script>
    function myfc (x,y){
        document.write(x+y+" "+<br>);
    };
    myfc (10,2);
    myfc (12,3);
    myfc (13,3);
</script>
```

OUTPUT : 12
15
16

Function Return Value :

```
<script>
    function name (fname,lname){
        var x = "Hello" + " " + fname + " " + lname + "<br>";
        return x ;
    };
    var y = name ("Bikram","Haldar");
    document.write(y);
</script>
```

OUTPUT : Hello Bikram Haldar

```
<script>
    document.write("Total Marks - 500","<br>");
    function marks(Ben,Eng,Math){
        var x = Ben+Eng+Math;
        return x;
    };

    var y = marks(50,30,25);
    document.write("Obtain Marks - " + y + "<br>");

    function percentage(tm){
        var z = tm*100/500;
        return z;
    };

    var a = percentage(y);
    document.write("Percentage - "+a+"%");
</script>
```

OUTPUT :
Total Marks - 500
Obtain Marks - 105
Percentage - 21%

Global v/s Local variable :

Global Variable :

```
<script>
    var name = "Bikram Haldar";
    document.write(name);
</script>
```

OUTPUT : Bikram Haldar

Local Variable :

```
<script>
function name(){
    var x = "Bikram Haldar";
    document.write("Hello," + " " + x + "<br>");
}
name();
name();
</script>
```

OUTPUT : Bikram Haldar
Bikram Haldar

Loop :

- 1. For Loop**
- 2. While Loop**
- 3. Do – While Loop**

For Loop :

```
<script>
    var x;
    for (x=1;x<=10;x++){
        document.write(x + "<br>");
    }
</script>
```

1 **OUTPUT**
2
3
4
5
6
7
8
9
10

While Loop :

```
<script>
    var x=1;
    while(x<=7){
        document.write(x + "<br>");
        x++;
    };
</script>
```

1
2
3
4
5
6
7

OUTPUT

Do – While Loop : *(If condition is false then program will be execute atleast 1time)

```
<script>
    var i=1;
    do{
        document.write(i + "<br>");
        i++;
    }
    while(i<=8);
</script>
```

1
2
3
4
5
6
7
8

OUTPUT

Array : An array is a data structure that stores a collection of elements of the same type in a contiguous block of memory. Each element in the array can be accessed using an index which typically starts at 0.

Print all :

```
<script>
    var sub = ["Bengali","English",'Math'];
    document.write(sub);
</script>
```

Bengali,English,Math

OUTPUT

Print particular subject :

```
<script>
    var sub = ["Bengali","English",'Math'];
    document.write(sub[2]);
</script>
```

Math

OUTPUT

Update any value in array :

```
<script>
    var sub = ["Bengali", "English", "Math"];
    sub[0] = 'Sanskrit';
    document.write(sub + "<br>");
    document.write(sub[0]);
</script>
```

Sanskrit,English,Math
Sanskrit

OUTPUT

Array Methods :

1. **Length** (Check how many element available in the array)
2. **Push** (Add new element in the array from the last)
3. **Unshift** (Add new element in the array from the first)
4. **Pop** (Delete element from the last)
5. **Shift** (Delete element from the first)
6. **Splice** (Delete multiple element from the middle)
7. **IndexOf** (Check element position in the array)
8. **Split** (Convert text to element)

Length :

```
<script>
    var sub = ["Bikram", "Haldar", "B", "H", ""];
    document.write(sub.length);
</script>
```

OUTPUT : 5

Push :

```
<script>
    var sub = ["Bikram", "Haldar", "B", "H"];
    sub.push("Coding World");
    document.write(sub + "<br>");

    document.write(sub.length);
</script>
```

OUTPUT : Bikram,Haldar,B,H,Coding World

5

Unshift :

```
<script>
    var sub = ["Bengali", "English", 'Math'];
    sub.unshift("Computer");
    document.write(sub + "<br>");

    document.write(sub.length);
</script>
```

OUTPUT: Computer,Bengali,English,Math

4

Pop :

```
<script>
    var sub = ["Bengali", "English", 'Math'];
    sub.pop();
    document.write(sub + "<br>");

    document.write(sub.length);
</script>
```

OUTPUT: Bengali,English

2

Shift :

```
<script>
    var sub = ["Bengali", "English", 'Math'];
    sub.shift();
    document.write(sub + "<br>");

    document.write(sub.length);
</script>
```

OUTPUT : English,Math

2

Splice :

```
<script>
    var sub = ["B","E",'M',"C",'j'];
    sub.splice(1,2);
    document.write(sub + "<br>");

    document.write(sub.length);
</script>
```

OUTPUT : B,C,j
3

indexOf :

```
<script>
    var sub = ["B","E",'M',"C",'j'];
    var ch = sub.indexOf("M");
    document.write(ch);
</script>
```

OUTPUT : 2

Split :

```
<script>
    var text = "This is coding world";
    var word = text.split(" ");
    document.write(word);
</script>
```

OUTPUT : This,is,coding,world