Overview of html.

- It is a “core part of web programming.
- It stand for “ hyper text markup language”.
- It was developed by “ Tim Berners lee”.
- Its main objective to developed ‘static web page’.
  This type of web page can not be change automatically.
- It is not programming language because we can not perform any arithmetic operation on web page. So we can say that is only designing tool.
- Its file extension is “.html or .htm”.
- It is an interpreter based language because it can be executed with the help of web browser.
- It is case insensitive programming language.
- It is open source technology so it is free to use.
- It is plateform independent because it can be executed on different operating system as windows, mac, unix etc.
- It can be imbeded in to server sided programming langauge as PHP,JSP(java server page) ASP.net etc.

Dis-advantage of html.

- It not secure because we can view source code of any web page after right clicking.
- Its execution is slow due to “interpreter”.
- It can not perform any arithmetic and logical operation.
- Some browser do not support all tag of html.

How to write HTML programe.

- Notepad.
- Notepad++.
- Dream weaver.

Structure of HTML programe.

```
<html>  -> root tag
<head>
<title> welcome to html </title>
</head>

<body>
Content of web page.
</body>

</html>
```

<html>:- Describe the document of web page.

<head>:- Describe the head section of web page.

<body>:- Describe the content of web page.

Simple program.

```
<html>
<head>
<title>  simple</title>
</head>
<body>
Welcome to html.
</body>
</html>
```

How to save?

It must be saved with the help of (.html or ,htm) extention.

Eg; d:\html\welcome to html.html

How to execute?

Duble click on html file

Html tags

❖ <html> tags:-

We know that html is a collection of predefine tages. This tags are used to create program according to requirement. Every tags consists a special meaning. There are two types of html tags. Every tags must be written in left and right angular bracket.

1. Paired/ closed tags.
2. Unpair/ unclose tages.

1. Paired/closed tags:-

   It refers both opening and closing tags.

   <body>
   Welcome
   </body>

2. Unpaired/unclosed tags:-

   It refers either opening or closing tags.

   Welcome

   To

   Html </br>

Attribute of tags.

Every html tags consists of own attributes/properties. The value of attribute is enclosed within single or double quort.

Eg:-

<body>

- Bgcolor=”red”

or

- Bgcolor=’red’

Eg:-

<body bgcolor=”red” text=”green”>

</body>

❖ <body> tag:-

This tag is used to represent the over all content of web page.

Attributes of <body> tags:-

- Bgcolor:- to change the background color of web page.
- Txt:- to change the text color of web page.
- Background:- to insert background-image on web page.
- Vlink:- to change the color of visited link.
- Alink:- to change color of active link.
- Link:- to change the color of link

Eg:- <body vlink=”red” alink=”yellow” link=”green”>

-
 :- to generate the new line.

Q. Wap in html to change background & forground color of web page.

```
<html>
<head>
<title> my address</title>
</head>
<body bgcolor=”red” text=”green”>
Neeraj kumar singh.<br>
Working on amity <br>
```

```
Mob=”7277062425”
</body>
</html>
```

- ❖ <font> tags:-

It is usede to change font name, color and size of text.

Attributes:-

- Face= used to specify font name.
- Size=used to specify font size(1 to 7).
- Color=used to specify font color.

Eg:-

```
<font face=”courier” color=”magenta” size=”5”>
Welcome to html.
</font>
```

- ❖ <img> tags:-

It is used to insert image on web page.

Attribute:-

- Src=specifies the url of image.
- Height
- Width
- Alt:- alternate massage is displayed, if image is not inserted.

Eg:-

```
<img src=”image.jpg” height=”100px” width=”200px”>
</img>
```

- ❖ tags:-

It is used to set content in center on web page.

Eg:-

COC

Formatted tags:-

<p> → for paragraph.

<b> → for bold face.

<u> → for underline.

<i> → for italic.

<pre> → for pre-define format according to requirement.

<sup> → for super script.

<sub> → for sub script.

<address> → for address.

 → for new line.

 (new break space) → for space.

List:-

List is a collection of element which represented in particular order on the web page. Ordered can be numbering or bulleted.

List can be classified into two parts.

1. Numbering/ ordered list.
2. Bulleted/ un-ordered list.
3. Definition list.

1. Numbering/ordered list:- In this list all element is specified in order. It created with the help of <ol> tag.

 tag :- it is used to specify element of list.

Attributes:-

 tag:-

- Start=”3”
- Type=”A”

Eg:-

```
<ol type =”a” start=”3” reversed>
<li> red </li>
<li> green </li>
<li> blue </li>
</ol>
```

2. Bulleted list:-

In this list element is represented in bulleted formatted as disk, square and circle with the help of “ ” tag.

Eg:-

```
<ul type =”circle”>
<li> red</li>
<li> blue</li>
<li> green</li>
</ul>
```

3. Definnation list:-

<dl> tags:- In this list we create definition list in which in which definition term is created and define. In this case we use three tags.

<dl>:- used to create definition list.

<dt>:- used to define definition term.

<dd>:- it is used to define the

Eg:-

```
<dl>
<dt>      html </dt>
<dd> it stand for hyper text markup language</dd>
```

</dl>

4. Nested list:-

When one list is define within another list.

Eg:-

- Course
  - Bca
  - Bsc(it)
- Bsc(it) 1
- Bca 1

Created table in html:-

❖ <table>tag:-

This tag is used to create table in which we represent data in tabular formate.

<tr> → table row.

Bgcolor
height
align

<td> → table coloumn.

<th> → table heading.

<caption> → caption of table.

Attribute:-

➢ Align:- horizontal alignment is controlled by the ALIGN attribute. It can be set to left, right, center, justify or inherit.

- Valign:- controls the vertical alignment of cell content. It accepts the value top, middle, or bottom.
- Width:- set the width to specific number of pixels.
- Height:- set the height to specific number of pixels.
- Cellpadding:- controls the distance between the data in a cell and the boundaries of the cell.
- Cellspacing:- controls the distance between adjacent cells.
- Colspan:- this attribute is used to inside a <th> <td> tag. It is used to marge two or more than column.
- Rowspan:- this attribute is used to marge two or more than row.

Eg:-

< th rowspan=”2”> </th>

<th colspan=”3”> </th>

❖ <marquee> tag:-

This tag is used to scroll text and image in any particular direction.

Attribute:-

- Loop
- Direction.- left/ right/top/bottom.
- Scroll amount.- ctrl speed of marquee.
- Scrolldelay.- delay speed of marquee speed.
- Height.
- Width.
- Behavior- slide/scrall/alternate.

❖ <Video> tag:-

This tag is used to play video on webpage.

Attribute:-

- Src.
- Height.

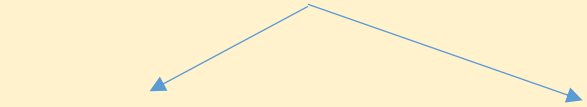
- Width.
- Controls.
- Muted.
- Autoplay.
- Loop.

❖ <Audio> tag:-

This tag is used to play audio on web page.

How to create hyperlink

Hyperlink (it connected one page to another page)



Hypertext.
(link of text)

Hypermedia.
(link of image/audio/video)

❖ <A> tag:- (Anchor tag) This tag is used to create link on web page.

Attribute:-

- Href(hyper reference)= Specifies URL.
- Target
  - -blank.
  - -self(default).
  - -parent.
  - -top.
  - Frame name.
- Download.
- Name.

HTML FORM

Form is a collection of GUI component as ratio button, checked button, text button, button etc.

Some components are available.

1. Gender ● male ○ female(radio button)
2. Hobby ☐ news ☐ music ☐ painting (check box)
3. Select course (combo box) course ^

4. Button submit
5. User name Text box

How to create form.

- <form> tag:-
  - Name
  - Method = get or post;
  - Action= specifies server file name
- <input> tag:-

This tag is used to create different type of form's element on web page.

Attribute:-

1) Type
   a) Text
   b) Password
   c) Check box
   d) Radio
   e) Color
   f) File
   g) Search
   h) Reset

i) Button
j) Number
k) url
l) Email
m) Date
n) time
o) tel
p) submit

2) name
3) id
4) autofocus
5) required
6) title
7) enabled
8) disabled

9) size
10) maxlength
11) pattern [A-Z] or [a-zA-Z]
12) min
13) max
14) Autocomplete
15) readonly
16) value
17) placeholder
18) Accesskey

- <fieldset> tag:- Used to create field around any particular object.
- <legend> tag:- Used to this type of

Eg:-

```
<fieldset> <legend> gender </lengend>
<input type="radio" value="male" >
<input type="radio" value="female" >
</fieldset>
```

- <option> :- This tag is used to create multiple option in combo box.
- <select> :- This tag is used to create combo box and multiple selection box. (selected- to select any vale firstly, size – to define size of box)
- <optgroup>:- (lable)-

Used to create group in combo box.

Eg:-

```
<select multiple>
<optgroup lable="bachelor">
<option> bca </option>
< option> bba </option>
< option> bsc </option>
</optgroup>
----------
----------
----------
</select>
```

Button

Eg:-

<input type="submit" value="submit">(to create submit button)
<input type="reset" value="reset"> (to create reset button)
<input type="button" value=" button"> (to create normal button)

❖ <frameset> tag:-

This tag is used to devide web page into multiple section according to requirement

HTML 5 does not support frameset.

Attribute:-

- Rows= this attribute is used to divide screen into multiple rows.

  The value can be=(px, %, *)

  This * symbol which indicate the remaining space.

- Cols:- this attribute is used to divide screen into multiple column.
- Border= This attribute specify the border of each frame in pixels.

Note- frame and frameset tag can't be define in body tag.

Frameborder:- this attribute specify whether a three dimensional border should be displayed between frames.

Framespacing:- this attribute specify the amount of space between frame and frameset. This can be take integer value.

Create progress bar:-

<imput type =”progress” > </progress>

Create slider:-

<input type=”range”>

<datalist>

List with autocomplete facilities.

How to embade external files like PDF, PHOTOSHOP, EXCEL file in web page?

< Object> tag:- this tag is used to embade any object file in web page.

Attribute:-

- Data.
- Height.
- Weidth.

Eg:-

<object data=” babu.paf” height=”200px” width=”300px” ></obect>

HTML-5

- Video and audio tag.
- Divide web page into multiple section through tag direction.
  eg: <header>, <footer>, <aside>, <nav>.
- Does not support <frameset> and <frame> tag.

- Graphic facilities.
- Storage facilities.

❖ DOCTYPE:-

- It specify html 5.0.
- It must be written as first line statement.
- It stand for document type definition.
- It always written in html 5.

  i.e, <! Doctype html>

  Note :- , <big>, <frameset>, <frame>, <base font>, <font> these tag are not support in html.5.

❖ tag:- This tag is used to divide webpage into multiple section according to requirement with the help of CSS. It is block level tag because it generate new line automatically.

Blocke level tag:- The tag which generate new line automatically is called block level tag.

Eg:-< div>, <hr>, <p>, <tr>, <h1> to <h6> etc.

Inline level tag:- :- The tag which does not generate new line automatically is called inline level tag.

Eg:- <b>, <u>, <img>, <a> etc.

❖ <SPAN> tag:- This tad is used to group more element in same line. It is inline level tag because it dpes not generate new line automatically.

❖ SVG (scalable vector graphics):- It is used to drow graphics componenet as circle, ellipse, rectangle, text, line etc.

HTML 5 support graphics with the help of <svg > tag.

❖ <svg> tag:- This tag specifies boundary area for designing graphics component.

Attribute:-

- Height.
- Width.

Syntax:-

<svg height=”100px” width=”300px”>

</svg>

❖ Graphics component:-

1. <Circle>
   Syntax:-
   <circle cx="245" cy="210" r="60" stroke="red" fill="transparent">
   </circle>
2. <Rect>
   Syntax:-
   <rect height="90" width="40" fill="khaki" x="360" y="360" stroke="black" stroke-width="2px"> </rect>
3. <Ellipse>
   Syntax:-
   <ellipse cx="100" cy="100" rx="60" ry="40" fill="skyblue"/>

4. <Line>
   Syntax:-
   <line x1="5" y1="5" x2="5" y2="800" stroke="brown" stroke-width="3px" ></line>

5. <text>

Syntax:-

<text x="290" y="155" fill="white" font-style="georgian" font-size="40px"> C++ </text>

6. <Polygon>

Syntax:-

<polygon points="245,210 200,300 290,300" fill="red" stroke="black" />

❖ <ifeame>:- This tag is used to create inline frame in which we lode separate any html document and graphics data as audio, video etc.

It is generally used for online advertisement and map.

Attribute:-

- Src.
- Height.
- Width.
- Allowfullscreen.
- Frame.
- Border.
- Id.
- Name.
- Class.

Eg:-

```
<html>
<body>
<iframe src="video.mp4" allowfullscreen></iframe>
<details open>ghgjgjjhjhj</br>
vjhgjgjkhk</br>
fhgfjhfjgjgj</br>
```

```
<summary>Read More.....</summary>
</details>
<details>WISDOM IT SOLUTION
<summary>Coaching</summary>
</details>
<details>Manoj Kumar
<summary>Director</summary>
</details>
</body>
</html>
```

How to create map?

- This tag is used to create map tag.
- It is created with the help of <img> tag.
- An image map is an image which provides clickable area in image.
- Clickable area is created with the help of <area> tag.

Attribute:-

- Shape.
  - rect.
  - circle.
  - poly.
- Href.
- Cords.

How to use caption of image?

<figure> & <figcaption> tag.
Eg:-

```
<figure>
<img src=”one.jpg” height=”100px” width=”300px”>
<figcaption> pic1 </figcaption>
</figure>
```

- ❖ <META> tag:-
  - ➢ It describe data (information) about data.
  - ➢ It describe information of html page as description content, author name, title, keyword.
  - ➢ It must be define within head tag.
  - ➢ It define portability in this case webpage can be executed different platform/device without any modification.

Overview of CSS:-

- ➢ It stands for cascading style sheet.
- ➢ Its main objective is to enhance an attractive look of created webpage in HTML.
- ➢ It is only designing tool.
- ➢ It is a collection of style which are used with HTML tags.
- ➢ It file extension is css .
- ➢ It is not case sensitive.

❖ Components of css:-

- ➢ selector

- property / style
- Value

Eg:-

```
<p> caption
{
Font-style:30px;
property   value
}
```

Selector:-

Selector is an element in which we can define/set style according to requirement.

There are five types of selector.

1. Tag selector /element selector.
2. Class selector.
3. Id selector.
4. Group selector.
5. Universal selector.

Tag selector:- It represent the name of HTML Tag.

```
eg:-  {
        font-size:20px;
        font-family:courier;
      }
```

Class selector:-

- It is identified with the help of any particular name a/c to identifier

rule.

- It must be started with dot(.) symbol.
- It is applied with multiple tags a/c to requirement.
- It can be use multiple times.

```
eg:-    .box
        {
          height:100px;
          width:200px;
          border:2px solid black;
          }
```

❖ How to use?

```
<div class ="box">
 ---------------------
</div>
```

```
eg:-  <p  class="box">

      ----------------------------

      ----------------------------

      </p>
```

Id selector:-

- It is similar to class selector but it is written with the help of of # symbol.
- One major difference b/w Id and class is that Id can be used only once time but class can be used multiple times according to requirement.

```
Syntax:-
 #logo
 {
  background-color:red;
  color:yellow;
 }
```

```
eg:-  <p id ="logo">
      welcome to id.
      </p>

     <div id="logo">
     welcome to id.
     </div>
```

Group selector :-

- In this case we define styles with multiple tag.

```
eg:- p,div,h
     {
      background-color:red;
      }
```

Universal selector :-

- It is applied for all elements.
- It is represented with the help of (*)star .

```
eg:- *
        {
     padding:0px;
     margin:0px;
      }
```

Method for using style in CSS :-

a) Inline style.
b) Internal style.
c) External style / Embedded style.

Inline style:- It is mainly used with perticular tag.

syntax:-

style=" property 1: value property2 : value;……;"

```
Eg:-
<div style="height:200px; width:300px">
----------------
----------------
</div>
```

Internal style:-

- It is used for only single webpage.
- It is written within <style> tag.
- <style> tag must be define in <head> tag.

Syntax:-

```
<head>
<style= type=”text/css”>
Sector name
{
Property1: value;
Property2: value;
}
</style>
</head>
```

Eg:-

```
<head>
<style= type=”text/css”>
div
{
height: 400px;
width: 500px;
}
</style>
</head>
```

External style/embedded style.

- It is used for multiple webpages.
- It consist of separate CSS file in which only style or property are defined.
- <link> tag is used to embed CSS file in html webpage.
- <link> tag is define within <head> tag.

Syntax:-

```
<head>
<link rel=”stylesheet” href=”css file”>
</head>
```

Eg:-

```
<head>
<link rel=”stylesheet” href=”myfile.css”>
</head>
```

Background style:-

Styles;	example;
Background-color	**Background-color:red**
Background-attachment	**Background-attachment:fixed**
Background-position	**Background-position:right**
Background-size	**Background-size:300px 200px or Background-size:300% 200%**
Background-repeat	Background-repeat:repeat-x/repeat/ no repeat
Background-image	Background-image: url('abc.jpg')

Short-hand property of background-styles;
Eg:- background:red url('abc.jpg') repeat-x fixed left-top ;

Border style:-

- Border-color to change border color
  eg:- border-color:red;
- Border-width to set border width
  eg:- border-width:2px
- Border-style
  eg:- border-style: solid/double/dotted/dashed/solid/group
- Border-left:2px solid green; to use modify particular border
- Border-top: solid red;
- Border-right: solid blue;
- Border-bottom: solid green;
- border-left/right/bottom/top-style: dotted;
- Border-radius
  eg:-border-radius:5px (rounded border)

Margin style:-

- Margin-top
- Margin-left

- Margin-right
- Margin-bottom

Eg:- margin-left:100px;

Margin short hand property;

Margin top right bottom left;

Eg:-

Margin:100px;

Margin: 100px 30px ;

Paddding style:-

- Padding -top
- Padding -left
- Padding -right
- Padding –bottom

Eg:- padding-left:100px;

Padding short hand property;

Padding:top right bottom left;

Eg:-

Padding:100px;

Padding:100px 50px;

Position Property:-

It is mainly used to set the position of element on web page according to requirement.

It has four values -

- Static
- relative
- fixed
- absolute

Direction of position

Left : 50px

Right : 100px

Top : 75px

Bottom : 10px

a) Static :- It is default position . in this case we cannot set position of element from its normal position.

Direction of position left , right etc does not work with static .

b) Relative: - In this case we can set the position of element in any direction a/c to requirement .

```
eg:-
      div
       {
       position : relative
       left : 100px
       top : 200px
       }
```

c) Fixed: - In this case we can set the position of element in any direction but it is fixed.

we can say that fixed element can not be scrolled.

```
div
{
 position : fixed
 left : 100px
 top : 200px  }
```

d) Absolute: - It work a/c to nearest ancestor . in this case we can set position of element in any direction.

Display property:-

It is used to display element in block level and inline level on web page.
In other words, it is specify how to display element on web page.

Value of display property:-

- **Inline-** It is used to create inline level tag element. In this case heigh and width cannot be defined.
- **Block-**It is used to display element in block level. In this case height and width can be defined**.**
- **Inline-block -** It is similar to inline but we can set height and width.
- **None-** In this case element cannot be displayed.

Layers in css/ z-index property:-

- z-index property is used to create layer like stack in program.
- It used with positional element.
- The value of z-index must be integer value.

Syntax:-
z-index:integer value
z-index:4

Visiblity in css:-

It is used to visible and invisible element on web page.

Visbility

- **Visible**
- **Hidden-** To hide element but can not be remove.
- **Collaspe-** It must be used with table tag.

Outline style:-

It is similar to the border but it must be defined in all direction of any particular on web page. While border can be defined with any direction.
Outline is not part of element while border is part of element.

Outline style

- Outline-style:solid/ dashed/ dotted;
- Outline-width:15px;
- Outline-color:red;

Shorthand property; outline:red solid 10px;

Box model in css:-

- **Box is shadow**
- **It is create like box.**

Syntax: box-shadow: Hshadow Vshadow blur
Eg; box-shadow 10px 10px 10px 10px red;

```
#shadow
{
Box-shadow:10px 10px 10px 10px red;
Width:100px;
}
 <h1 id=”shadow”> wisdom it solution </h1>
```

Border-image style:-

- It is used to set border for image.

Border-image-source:url(‘border.png’)
Border-image-slice:9;
Border-image-outset:10px;

Border-image-repeat:repeat(statch/);
Border-image-width:10px;

horthand property:
Border-image:source slice width outset repeat
Eg: border-image:url('border.jpg') 9 10px Vound;

Pseudo class:-

This class is used to perform special task / state of particular element on webpage . it must be started with colon(:) sign .

```
syn :-
    selector : pseudo class
    {
     property : value ;
     ----------------------
     ----------------------
     }
     eg :-
        a : hover
         {
           color : green ;
          }
```

Note :- Hover must come after link pseudo class and visited and active must come after hover in css1.

Anchor pseudo class

: link => unvisited
: active => active link / seleted link
: visited => visited link
: hover => mouse overlink

First-child selector :-

This pseudo class is used to select only the first specified child of its parent .

Last-child selector :- It is used to select the only last specified child of its parent .

Nth-child selector :- It is used to select every nth child element.

Checked selector :- This selector is used to style cheaked element as check box and radio button .

Enabled selector :- This selector is used to style all enabled elements.

Disabled selector :- This selector is used to style all disabled element.

Focus selector :- This selector is used to select the element that has focus or selection .

Required selector :- This selector selects form element which are required .

Optional selector :- It is used to select form element which are optional.

Read-only selector :- It is used to select element which are read only.

Read-write selector :- It is used top select form element which are readable .

Transform property:-

This property is used to the change the shape/size and position of any element on the web-page. There are some transform method.

1. Translate()
   This method is used to move any element frome one place to another place.
   Eg; transform:translate(x-axis, y-axis); Transform:translate(20px, 30px);

2. Rotate()
   This method is used to rotate any element clock wise or anti-clock wise according to the specified degree.

```
Eg; transform:rotete(angle);
    Transform:rotate(45deg);
```

3. Scale()
   This method is used to increased or decreased the size of element.

```
Transform:scale(width, height);
```

4. Skewx() and skewy()
   This method is used to increased or decreased the particular axis od element.

```
Eg; transform:skewx(30deg);
    Tranform:skewy(45deg);
```

Transition property:-

This property is used to change effects of any element smoothly according to specified duration.

1. Transition-timing-function.
   This property specified the speed curved of the transition effect.
   a. Ease.
   b. Leanear.
   c. Ease-in.
   d. Ease-out.
   e. Ease-in-out.
2. Transition-delay:30s;
3. Transition-duration:50s;