HTML

- → HTML stands for Hyper Text Markup Language, which is the most widely used language on Web to develop web pages.
- → It is used to create a web pages.
- → It is also defined as the skeleton of the web pages.
- → It is not a programming language, we just say it is a markup language.

TAGS

Heading Tags

- → Any document starts with a heading. You can use different sizes for your headings.
- → HTML also has six levels of headings, which use the elements<h1>, <h2>, <h3>, <h4>, <h5>, and <h6>.
- → While displaying any heading, browser adds one line before and one line after that heading.

Paragraph Tag

- → Thetag offers a way to structure your text into different paragraphs.
- → Each paragraph of text should go in between an opening and a closing tag.

Line Break Tag

→ Whenever you use the

br />element, anything following it starts from the next line.

Horizontal Line Tag

→ <hr>

HTML ATTRIBUTES

- → The name is the property you want to set. For example, the paragraph element in the example carries an attribute whose name is align, which you can use to indicate the alignment of paragraph on the page. •
- → The value is what you want the value of the property to be set and always put within quotations. The below example shows three possible values of align attribute: left, center and right.

The four core attributes that can be used on the majority of HTML elements (although not all) are:

- ∙ld
- Title
- Class
- Style

Bold Text

→ Anything that appears within...element.

Italic Text

→ Anything that appears within<i>>...</i>/i>element is displayed in italicized.

Underlined Text

→ Anything that appears within<u>...</u>element, is displayed with underline.

Strong Text

→ Anything that appears within...element is displayed as important text.

HTML META TAGS

→ The<meta>tag is used to provide such additional information. This tag is an empty element and so does not have a closing tag but it carries information within its attributes.

HTML -COMMENTS

→ HTML comments are placed in between<!--... -->tags. So,any content placed with-in <!--... --> tags will be treated as comment and will be completely ignored by the browser.

<u>HTML –IMAGES</u>

→ The tag is an empty tag, which means that,it can contain only list of attributes and it has no closing tag.

HTML-TABLES

- → The HTML tables allow web authors to arrange data like text, images, links, other tables, etc. into rows and columns of cells.
- → The HTML tables are created using thetag in which thetag is used to create table rows andtag is used to create data cells.

The three elements for separating the head, body, and foot of a table are:

- <thead> -to create a separate table header.
- -to indicate the main body of the table.
- <tfoot> -to create a separate table footer.

HTML -LISTS

- → HTML offers web authors three ways for specifying lists of information. All lists must contain one or more list elements. Lists may contain:
- •-An unordered list. This will list items using plain bullets.
- •-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.

HTML Unordered Lists

- → An unordered list is a collection of related items that have no special order or sequence. This list is created by using HTMLtag.
- → Each item in the list is marked with a bullet.

HTML Ordered Lists

→ If you are required to put your items in a numbered list instead of bulleted, then HTML ordered list will be used. This list is created by usingtag. The numbering starts at one and is incremented by one for each successive ordered list element tagged with .

HTML Definition Lists

- → HTML and XHTML supports a list style which is called definition lists where entries are listed like in a dictionary or encyclopedia. The definition list is the ideal way to present a glossary, list of terms, or other name/value list.Definition List makes use of following three tags.
- •<dl> -Defines the start of the list
- dt> -A term
- •<dd> -Term definition
- •</dl> -Defines the end of the list

HTML -TEXT LINKS

→ Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images. Thus you can create hyperlinks using text or images available on a webpage.

The tag

- → The HTML is an inline element and it can be used to group inline-elements in an HTML document.
- → This tag also does not provide any visual change on the block but has more meaning when it is used with CSS.
- → The difference between the tag and the <div> tag is that the tag is used with inline elements where as the <div> tag is used with block-level elements.

<u>HTML -BACKGROUNDS</u>

- → The bg color attribute is used to control the background of an HTML element, specifically page body and table backgrounds.
- → Following is the syntax to use bg color attribute with any HTML tag.

HTML -COLORS

There are following three different methods to set colors in your web page:

- •Color names -You can specify color names directly like green, blue or red.
- •Hex codes -A six-digit code representing the amount of red, green, and blue that makes up the color.
- •Color decimal or percentage values -This value is specified using the rgb() property.

HTML -FONTS

- → Fonts play a very important role in making a website more user friendly and increasing content readability.
- → Font face and color depends entirely on the computer and browser that is being used to view your page but you can use HTMLtag to add style, size, and color to the text on your website.
- → You can use a
basefont>tag to set all of your text to the same size, face, and color.

HTML -FORMS

- → 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

-

HTML -STYLE SHEET

- → Cascading Style Sheets (CSS) describe how documents are presented on screens, in print, or perhaps how they are pronounced.
- → W3C has actively promoted the use of style sheets on the Web since the consortium was founded in 1994.
- → 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 (;).

You can use CSSin three ways in your HTML document:

- •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.

CSS(Cascading Stylesheet)

- → Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.
- → CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, as well as a variety of other effects.
- → CSS is easy to learn and understand but it provides a powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

2. SYNTAX

- → A CSS comprises of style rules that are interpreted by the browser and then applied to the corresponding elements in your document. A style rule is made of three parts:
- Selector: A selector is an HTML tag at which a style will be applied. This could be any tag like
- 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 the value either red or #F1F1F1 etc.

CODE (HTML AND CSS)

```
<!DOCTYPE html>
    <html lang="en">
       <meta charset="UTF-8">
       <meta http-equiv="X-UA-Compatible" content="IE=edge">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>Elements, Attributes, Headings and Paragraph</title>
    <!-- Elements -->
<!-- Here in the below code, Elements contains starting tag"<h1>" contain and
ending tag"</h1>"" -->
    <h1>This is my first heading</h1>
    <h2>This is my second heading</h2>
    <h3>This is my third heading</h3>
    <!-- An style is an attributes contain property and value that means
'property:value;"(style is an attributes and color is property) -->
    Lorem, ipsum dolor sit amet consectetur adipisicing
elit. Fugit modi voluptatibus facere eaque dolorem facilis illum debitis est
perferendis. Modi, itaque suscipit debitis totam quod esse et aliquid commodi
aperiam.
    <a href="www.google.com">Google link</a>
    <br>
    <!-- Some tag doesn't contain end tag.Such as <br> <hr> -->
    <!-- <br > tag means break the line of code and <hr>> tag means horizontal
    <img src="img1.gif.jpeg" height="300px" width="250px" alt="This is Rajan</pre>
Image">
```

```
<!-- In the above code,Alt attributes can be define as "This is the
alternate way represent the text" and widht and height is also represent
attributes-->

<!-- Paragraph -->

This is my first paragraph
This is my second paragraph
<body>
</body>
</html>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Block and Inline Elements</title>
</head>
   <!-- Block element (Generally <div> and  tag are in block
element(ul,ol,address etc...are also block element <div>
<form>
<header>
<footer>
<section>))-->
       <!-- Block element are always start from new line and contain all the
width -->
<h1>Block element</h1>
This my paragraph
<div style="background-color:black; color:white; padding:20px;">
<h1>Lorem</h1>
Lorem, ipsum dolor sit amet consectetur adipisicing elit. Doloremque
reprehenderit esse ea laborum distinctio modi aliquam repellendus! Quod saepe
tempore dolores, explicabo, eligendi, sapiente ratione incidunt ad dicta ullam
expedita?
</div>
<!-- Inline Elements (Generally span tag is used inline elements) -->
```

```
<!-- Inline elements are not always start from new line and contain the width
as much it require.
<span>
<a>
<img> -->

<span>Lorem ipsum dolor sit amet consectetur, adipisicing elit. Nam eum, magni
nisi ducimus fugiat eligendi unde deleniti architecto? Reprehenderit qui
necessitatibus laborum facilis unde culpa possimus similique neque molestias
itaque.</span>
Lorem <span style="color:blue;">Rajan</span> dolor sit amet consectetur
adipisicing elit. Eos porro temporibus dolorem ut tempora eveniet itaque
accusantium officiis reprehenderit exercitationem sint ullam, at recusandae
consequuntur sunt? Praesentium iste ipsum commodi?
</body>
```

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Background color,Font,Text Alignment,Text size,Text color</title>
</head>
<!-- background-color add in the body tag -->
<body style="background-color:aqua ;">
   <h1>This is my first Headings</h1>
   Lorem ipsum dolor sit amet consectetur, adipisicing
elit. Error, impedit quod quidem consequatur vero facilis aspernatur excepturi
sequi consequuntur temporibus. Quae, quisquam. Vero consectetur sit aut
necessitatibus! Ratione, corporis animi.
   <!-- font-size -->
   This is my second paragraph
   <!-- text Alignment -->
   This is my third paragraph
```

```
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Text
formatting(bold, italic, mark, emphasize, del, strong, inserted, subscripted, superscr
ipted)</title>
    <link rel="icon" href="img1.gif.jpeg">
</head>
<body>
    <h1>This is my first heading</h1>
    <b>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quo
architecto, dolore modi commodi animi eligendi tempore deserunt aperiam
perferendis quod dicta delectus quasi totam tenetur unde voluptate deleniti
laudantium facilis?</b>
    <i>This is my third paragraph</i>
    <!-- strong tag -->
    <strong>God</strong> helps those people who help themselves.
    Without<em> education</em> a man is like a corpse.
    This is color whose name is <del>red</del> blue
    He is a <del>good </del><ins> bad</ins> boy
    <!-- subscripted tag -->
    Molecular formula of water is H<sub>2</sub>0
```

```
<!-- superscripted tag -->
  Mentors Eduserv <sup>TM</sup>
<!-- mark tag -->
  <mark>Rajan</mark> is a good boy
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Table topics</title>
</head>
<style>
  th,td{
     border-radius: 10px;
     border-color: rgb(245, 68, 9);
     padding: 8px;
     margin: 10px;
     width: 50px;
</style>
   Code 
           Name 
           Roll no.
           Branch 
          Village
        001
          Rajan
          01
          CSE
          Muzaffarpur
```

```
001
       Rajan
       01
       CSE
       Muzaffarpur
     001
       <!-- rowspan tag (apply in row) -->
       Rajan
       01
       CSE
       Muzaffarpur
     001
       01
       CSE
       Muzaffarpur
     <!-- colspan tag (apply in column)-->
       Thankyou
     </body>
```

```
<h4>Ordered List</h4>
   Coffee
   Tea
   Green tea
   Chocalate
   Ice Cream
type="A">
   Coffee
   Tea
   Milk
 <h4>Unordered List</h4>
<!-- 2.Unordered List -->
   Rajan
   Komal
   Kumar
   Raj
   Poddar
Coffee
   Tea
   Milk
 <h4>Decription List</h4>
<!-- 3.Discription List -->
   <dt>Coffee</dt>
   <dd>- black hot drink</dd>
   <dt>Milk</dt>
   <dd>- white cold drink</dd>
 </dl>
```

```
</body>
```

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Navigation Menu</title>
   <style>
       li a {
           text-decoration: none;
           display: block;
           width: 80px;
           padding: 10px;
           text-align:center;
           color: white;
           margin: 1px 10px;
       ul {
           border: 2px solid red;
           width: 550px;
           height: 40px;
           margin: 20px;
           background-color: black;
           list-style-type:none;
           border-radius: 10px;
       li{
           float: left;
       li a:hover{
           color: rgb(255, 72, 0);
           background-color: aqua;
   </style>
</head>
   <h1>Navigation Menu</h1>
   In this navigation menu, it contain Menu, Home, contact, services
       <a href="">Home</a>
       <a href="">Menu</a>
       <a href="">Contact</a>
```

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Class Attribute</title>
   <style>
only be used by one HTML element within the page: */
        .city{
           border: 2px solid red;
           background-color: aqua;
           padding: 20px;
           margin: 8px;
           border-radius: 15px;
       #myHeader {
  background-color: lightblue;
  color: black;
  padding: 40px;
  text-align: center;
   </style>
</head>
   <div class="city">
       <h2>London</h2>
       London is the capital of England
        </div>
     <div class="city">
       <h2>Paris</h2>
       Paris is the capital of France
     </div>
     <div class="city">
       <h2>Tokyo</h2>
```

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Semantic tag</title>
   <style>
        .tag{
           background-color: aquamarine;
           padding: 10x;
           margin: 3px;
           font-size: 20px;
           color: brown;
           border: 2px solid blueviolet;
           border-radius: 5px;
        .tag1{
           background-color: aquamarine;
           padding: 10x;
           margin: 3px;
           font-size: 20px;
           color: brown;
           border: 2px solid blueviolet;
           border-radius: 5px;
   </style>
 <div class="tag">
```

```
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Html Form</title>
   <style>
        .container{
            background-color: aqua;
           border: 3px solid ;
           padding: 20px;
           margin: 3px 8px;
   </style>
    <form action="/action page.php">
    <div class="container">
        <div class="form">
            <h2>Input type in Form</h2>
            <label>Enter Your Name</label>
        <input type="text" name="name" id="name"><br>
        <br>
            <!-- input type "email" -->
        <label>Enter your email</label>
        <input type="email" placeholder="example@gmail.com"><br>
        <br>
```

```
<!-- input type "Password" -->
            <label>Enter your Password</label>
            <input type="password" name="password" placeholder="********"</pre>
minlength="8" maxlength="10"><br>
            <br>
            <label>Date</label>
            <input type="Date">
            <!-- input type "time" -->
            <label>Time</label>
            <input type="time"><br>
            <label>Time</label>
            <input type="datetime-local"><br>
            <label>Select your favourite color</label>
            <input type="color"><br>
            <br>
             <label>Choose file</label>
             <input type="file"><br>
             <br>
             <label>choose your image</label>
             <input type="image"><br>
             <br>
             <input type="submit" value="Login!!">
              <input type="reset" value="Reset">
        </div>
    </div>
</form>
</body>
```

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>CSS selector</title>
</head>
<style>
    .center
        text-align: center;
        color: red;
   #para1 {
       text-align: center;
        color: blue;
   /* Universal Selector */
        text-align: center;
        color:blue;
   /* Grouping Selector */
   h1 {
        text-align: center;
        color: blue;
   p{
       text-align: center;
       color: blue;
   h1,p{
        text-align: center;
        color: blue;
```

```
span{
    color: brown;
    text-align: center;
    border: 5px solid red;
    padding: 10px;
    text-transform: capitalize;
    display: block;
    /* width: 400px; */
    max-width: 400px;
    margin: auto;
    background-color: aquamarine;
    text-shadow: 1px 1px ;
p {
    color:blue;
    font-size: large;
    border: 4px solid black;
    padding: 20px;
    border-radius: 10px;
    margin: 5px;
    outline: 3px solid red;
    outline-offset: 3px;
    line-height: 25px;
a:link {
    color:blue;
    text-align: center;
    text-decoration: none;
    border: 2px solid red;
    padding: 8px;
    width: 200px;
    display: block;
    margin: auto;
    font-size: 40px;
    border-radius: 10px;
    background-color: rgb(253, 210, 244);
  a:hover
    color: red;
    background-color: aqua;
   a:visited{
    color: blue;
   a:active{
```

```
color: darkmagenta;
    }
    </style>
</head>
<body>
    <h1><span>Outline in CSS</span></h1>
    This paragraph has an outline of 15px outside thw border edge.Lorem ipsum dolor sit amet consectetur adipisicing elit. Esse veniam deleniti expedita animi neque sequi nesciunt quia rem error ipsum aperiam inventore quae dolor, labore quos repellat molestias quaerat quas.

</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Position</title>
   <style>
        body{
            background-image: url("img1.gif.jpeg");
           background-repeat: no-repeat;
            /* opacity: 0.5; */
        .container1{
            border: 2px solid red;
           padding:20px 8px;
           border-radius: 10px;
           width: 200px;
           text-align: center;
           margin: 10px;
           box-sizing: border-box;
           float: left;
           /* position:absolute; */
        .container2{
            border: 2px solid red;
           padding:20px 8px;
```

```
border-radius: 10px;
           width: 200px;
           text-align: center;
           margin: 10px;
           box-sizing: border-box;
           float: left;
        .container3{
           border: 2px solid red;
           padding:20px 8px;
           border-radius: 10px;
           width: 200px;
           text-align: center;
           margin: 10px;
           box-sizing: border-box;
           float: left;
    </style>
</head>
    <div class="container1">
       <h2>Box first</h2>
        Lorem ipsum, dolor sit amet consectetur adipisicing
elit. Mollitia eveniet ex autem velit voluptates. Beatae magnam voluptates
magni, perspiciatis eos maiores eligendi, impedit accusantium in praesentium
facilis numquam, obcaecati repellat?
    </div>
    <div class="container2">
       <h2>Box second</h2>
        Lorem ipsum dolor sit amet, consectetur adipisicing
elit. Expedita quidem modi ex obcaecati sequi doloremque soluta similique nam!
Eos, hic repudiandae. In, quam modi illum vero vitae explicabo eius ex.
    </div>
    <div class="container3">
       <h2>Box third</h2>
        Lorem ipsum dolor, sit amet consectetur adipisicing
elit. Natus necessitatibus exercitationem asperiores reprehenderit nulla harum
minus tenetur voluptatem dolore, impedit totam beatae saepe quasi, odit
facilis! Nobis tempore placeat dignissimos?
    </div>
</body>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
```

```
<meta charset="UTF-8">
   <meta http-equiv="X-UA-Compatible" content="IE=edge">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>CSS Search bar</title>
   <style>
        input[type=text] {
 width: 100%;
 box-sizing: border-box;
 border: 2px solid #ccc;
 border-radius: 4px;
 font-size: 16px;
 background-color: white;
 background-image: url('search-icon-png-2.png');
 background-size: 20px 30px;;
 background-position: 8px 5px;
 background-repeat: no-repeat;
 padding: 12px 20px 12px 40px;
   </style>
</head>
   <h2>Input field with an icon inside</h2>
<form>
 <input type="text" name="search" placeholder="Search..">
</form>
</body>
```