

# Chapter 2

## ❖ Basics of HTML

- ✓ HTML stands for **Hyper Text Markup Language**
- ✓ It is used to design the web pages.
- ✓ With the help of HTML, you can create a complete website structure.
- ✓ HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages and markup language defines the text document within the tag that define the structure of web pages.
- ✓ HTML consists of a series of elements
- ✓ HTML elements tell the browser how to display the content

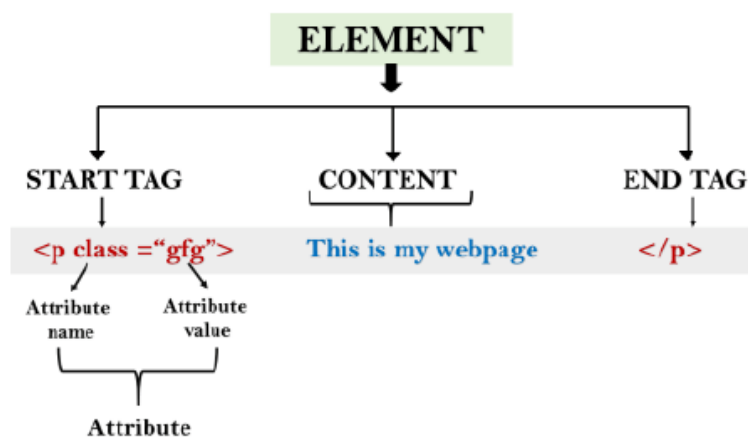
**HTML Tags:** Tags are the starting and ending parts of an HTML element. They begin with < symbol and end with > symbol. Whatever written inside < and > are called tags.

**HTML elements:** Elements enclose the contents in between the tags. They consist of some kind of structure or expression. It generally consists of a start tag, content and an end tag.

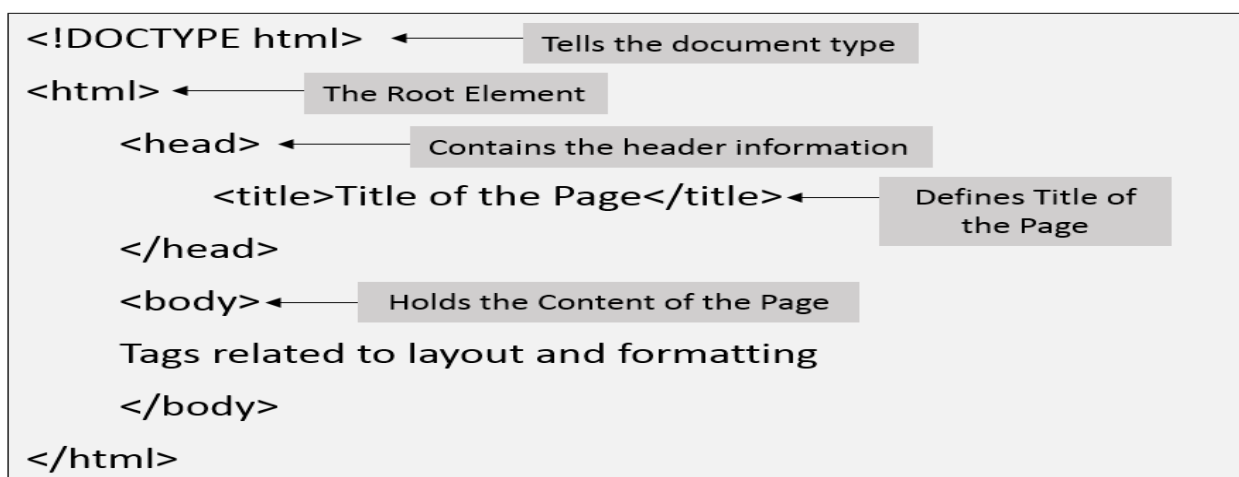
**Example:** **<b>This is the content.</b>**

Where, **<b>** is the starting tag and **</b>** is the ending tag.

**HTML Attributes:** It is used to define the character of an HTML element. It always placed in the opening tag of an element. It generally provides additional styling (attribute) to the element.

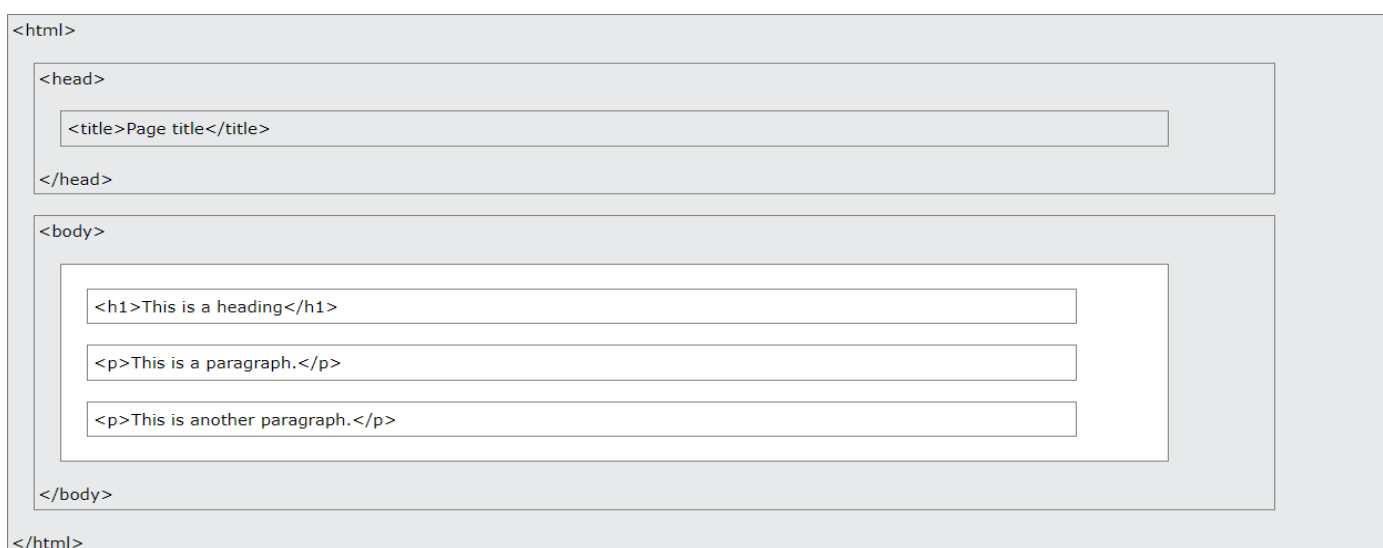


## ❖ Page Structure



## ❖ Building Blocks of HTML

1. **<!DOCTYPE html>** – A doctype or document type declaration is an instruction that tells the web browser about the markup language in which the current page is written. It is not an element or tag. The doctype declaration is not case-sensitive.
2. **<html>** – This tag is used to define the root element of HTML document. This tag tells the browser that it is an HTML document.
3. **<head>** – This tag is used to define the head portion of the HTML document that contains information related to the document. Elements within the head tag are not visible on the front-end of a webpage.
4. **<title>** -- This element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
5. **<body>** – The body tag is used to enclose all the visible content of a webpage. In other words, the body content is what the browser will show on the front end. For example, headings, paragraphs, images, hyperlinks, tables, lists, etc.



## ❖ Editors

Web pages can be created and modified by using editors (sublime,notepad++,vs code etc).



However, for learning HTML it is recommended to use simple text editor like Notepad/TextEdit (Mac). It is good way to learn HTML.

### 1. Open Notepad

### 2. Write HTML

```
<!DOCTYPE html>
<html>
<body>
<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```

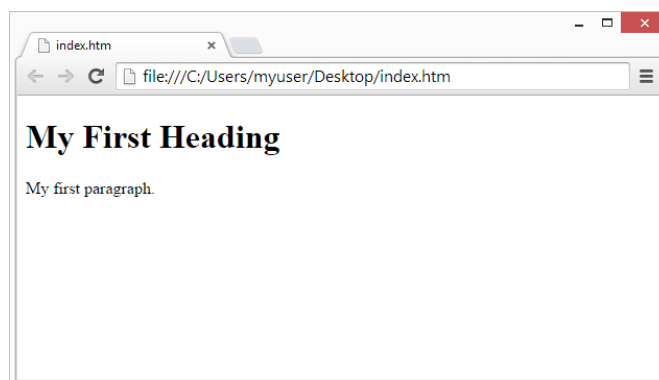
### 3. Save the HTML Page

Save the file on your computer. Select **File > Save as** in the Notepad menu. Name the file **"index.html" or "index.htm"**

### 4. View the HTML Page in Your Browser

Open the saved HTML file in your favorite browser (double click on the file, or right-click - and choose "Open with").

The result will look much like this:



## ❖ HTML <!DOCTYPE> Declaration

All HTML documents must start with a <!DOCTYPE> declaration.

The declaration is not an HTML tag. It is an "information" to the browser about what document type to expect.

In HTML 5, the declaration is simple:

```
<!DOCTYPE html>
```

In older documents (HTML 4 or XHTML), the declaration is more complicated because the declaration must refer to a DTD (Document Type Definition).

HTML 4.01:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

## ❖ <meta><title> and <link> tags

The <meta>, <title>, and <link> tags are all part of the <head> element of an HTML document. They are used to provide metadata, external resources, and other information that is critical to the browser or search engines but is not directly rendered on the page.

### 1. <meta> Tag

- ✓ The <meta> tag defines metadata about an HTML document. Metadata is data (information) about data.
- ✓ <meta> tags are placed inside the <head> element and are typically used to specify the character set, page description, keywords, author of the document, and viewport settings.
- ✓ Metadata will not be displayed on the page but is machine-readable and machine-parsable.
- ✓ Metadata is used by:
  - Browsers: to determine how to display content or reload the page.
  - Search engines: to understand keywords and content.
  - Other web services.
- ✓ Web designers can use the <meta> tag to control the viewport, which defines the user's visible area of a web page.

### *Attributes of the <meta> Tag*

1. **content:** Specifies the value associated with the http-equiv or name attribute.
2. **name:** Specifies a name for the metadata.

- Define keywords for search engines:

```
<meta name="keywords" content="HTML, CSS, JavaScript">
```

- Define a description of your web page:

```
<meta name="description" content="Web tutorials for HTML">
```

- Define the author of a page:

```
<meta name="author" content="LJU">
```

- Set the viewport to make your website responsive and look good on all devices:

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

### Setting the Viewport

- The viewport is the user's visible area of a web page, which varies depending on the device (smaller on a mobile phone than on a computer screen).
- The viewport meta tag gives the browser instructions on how to control the page's dimensions and scaling.

3. **http-equiv**: Provides an HTTP header for the information/value of the content attribute.

Examples:

- **Content Security Policy**: Specifies a content policy for the document.

```
<meta http-equiv="content-security-policy" content="default-src 'self'">
```

- **Content Type**: Specifies the character encoding for the document (e.g., UTF-8).

```
<meta http-equiv="content-type" content="text/html; charset=UTF-8">
```

**UTF-8**: UTF-8 is an encoding system for Unicode that translates any Unicode character to a binary string and back. "UTF" stands for "Unicode Transformation Format."

- **Default Style**: Specifies the preferred style sheet to use.

```
<meta http-equiv="default-style" content="the document's preferred stylesheet">
```

*Note*: The value of the content attribute must match the title attribute of a <link> or <style> element in the same document.

- **Refresh**: Defines a time interval for the document to refresh itself.

```
<meta http-equiv="refresh" content="300">
```

## 2. <link> Tag

- The <link> tag defines the relationship between the current document and an external resource.
- It is most commonly used to link to external stylesheets or add a favicon to a website.
- The <link> element is an empty element that only contains attributes.

### Example of linking to an external stylesheet:

```
<head><link rel="stylesheet" href="styles.css"></head>
```

- To add a favicon (the small icon displayed in the browser tab next to the page title), use the <link> tag:

```
<head><link rel="icon" type="image/x-icon" href="favicon.ico"></head>
```

**Supported extensions:** ICO, PNG, GIF, JPEG, SVG, etc.

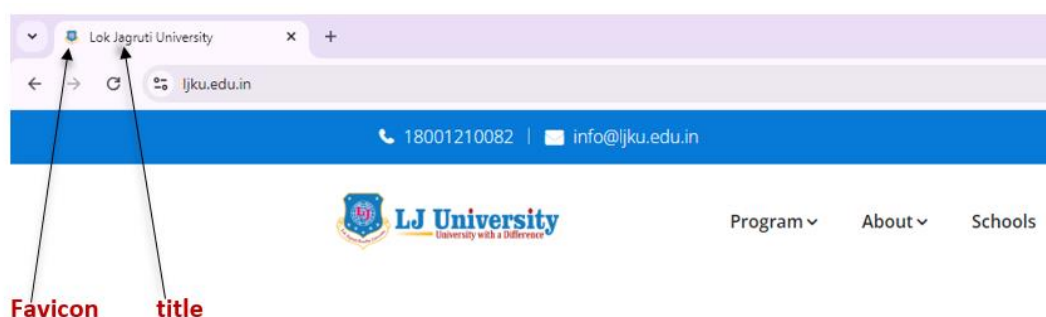
*Note:* A common name for a favicon image is "favicon.ico".

## 3. <title> Tag

- Every web page should have a title to describe the content or purpose of the page.
- The <title> element defines the title of the web page, which appears in the browser's title bar or tab.

### Example:

```
<head>
<title>HTML Tutorial</title>
</head>
```



## ❖ HTML Comments

HTML comments are used to add notes or explanations within the HTML source code. These comments are not rendered or displayed by the browser, making them useful for documenting the code for developers.

You can add comments to your HTML source by using the following syntax:

**<!-- Write your comments here -->**

## ❖ <body> Tag in HTML

- The <body> tag defines the main content of an HTML document. Everything inside the <body> tag is what the user sees and interacts with on the web page (e.g., text, images, links, videos, etc.).
- All the content that is meant to be displayed in the browser goes inside the <body> tag.
- You can include various types of HTML elements inside the <body> tag, such as headings, paragraphs, lists, tables, forms, images, etc.

**Note:** All Below tags are part of **body** tag which will be visible to the users.

## ❖ HTML Headings

HTML headings are titles or subtitles that you want to display on a webpage.

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

HTML headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading. <h6> defines the least important heading.

**Heading 1**

**Heading 2**

**Heading 3**

**Heading 4**

Heading 5

Heading 6

## ❖ HTML Paragraphs (<p> tag)

A paragraph always starts on a new line, and is usually a block of text. The HTML <p> element defines a paragraph.

A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph.

```
<body>
<p>
This paragraph
contains    a lot of spaces and lines
in the source  code,
but the  browser
ignores it.
</p>
```

```
<p>
Hello
Hello
Hello
</p>
```

```
</body>
```

### Output:

This paragraph contains a lot of spaces and lines in the source code, but the browser ignores it.

Hello Hello Hello

## ❖ The HTML <pre> tag

The HTML <pre> element defines **preformatted text**.

The text inside a <pre> element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:

```
<!DOCTYPE html>
<html>
<body>
<p>The pre tag preserves both spaces and line breaks:</p>
<pre>
```



```

Hello
Hello
Hello
</pre>
</body>
</html>

```

The pre tag preserves both spaces and line breaks:

```

Hello
Hello
Hello

```

### <pre> (Preformatted Text):

- Preserves **whitespace**, **line breaks**, and **indentation** as they appear in the HTML code.
- Displays text in a **monospace font** by default.
- Ideal for displaying code snippets or text that needs to retain its original formatting.

### <p> (Paragraph):

- Treats multiple spaces, tabs, and line breaks as a **single space**.
- Used for defining a paragraph of text with **automatic line wrapping**.
- Does not preserve the whitespace or line breaks in the source code.

## Example

```

<!-- Example with <pre> -->
<pre>
This is    preformatted
text, with line breaks
and    extra spaces retained.
</pre>

<!-- Example with <p> -->
<p>
This is    paragraph text,
with line breaks and extra spaces
ignored.
</p>

```

### Output:

```

This is    preformatted
text, with line breaks
and    extra spaces retained.

```

This is paragraph text, with line breaks and extra spaces ignored.

## ❖ Data Formatting tags

### 1. **<b>**: Defines bold text

```
<body>
<p>This text is normal.</p>
<p><b>This text is bold.</b></p>
```

#### Output:

This text is normal.

**This text is bold.**

### 2. **<strong>**: The HTML <strong> element defines text with strong importance. The content inside is typically displayed in bold.

```
<body>
<p>This text is normal.</p>
<p><strong>This text is important!</strong></p>
</body>
```

#### Output:

This text is normal.

**This text is important!**

In summary, use <b> for purely stylistic bolding and <strong> when the text has more importance or needs to be semantically emphasized.

### 3. **<i>**: The content inside is displayed in *italic*.

```
<!DOCTYPE html>
<html>
<body>
<p>This text is normal.</p>
<p><i>This text is italic.</i></p>
</body>
</html>
```

#### Output:

This text is normal.

*This text is italic.*

### 4. **<em>**: It is also one of the element of HTML used in formatting texts. It is used to define emphasized text or statements. The content inside is displayed in *italic*.

```
<body>
  <em>This sentence has emphasized meaning.</em>
</body>
```

**Output:**

*This sentence has emphasized meaning.*

**Note:**

Despite the fact that both `<em>` and `<i>` tags give the same visual effect, i.e. italic text, search engine robots pay more attention to the first one. That's why it is recommended to use the **`<em>`** tag for **website optimization**. `<em>` tag informs Google crawlers that the selected content is particularly important and deserves attention.

Same for the **`<strong>`** and **`<b>`** tags. Both tags give the same visual effect, but **`<strong>`** tag informs Google crawlers that the selected content is particularly important and deserves attention.

5. **`<font>`**: The `<font>` tag in HTML plays an important role in the web page to create an attractive and readable web page. The font tag is used to change the color, size, and style of a text. The base font tag is used to set all the text to the same size, color and face.

**Default size = 3, Range of size = 1 to 7**

Syntax:

```
<font attribute = "value"> Content </font>
```

```
<body>
  <font size="5" face="Comic sans MS" color="green"> Welcome to LJU </font>
</body>
```

**Output:** Welcome to LJU

6. **`<u>`**: If you write anything within `<u>.....</u>` element, is shown in underlined text.

```
<body>
<p> <u>Write Your First Paragraph in underlined text.</u></p>
</body>
```

**Output:**

Write Your First Paragraph in underlined text

7. **`<ins>`**: The `<ins>` tag defines a text that has been inserted into a document. Browsers will usually underline inserted text.

8. **<del>**: The `<del>` tag defines text that has been deleted from a document. Browsers will usually strike a line through deleted text.

**Example:**

```
<h1>My favorite color is <del>blue</del> <ins>red</ins>!</h1>
```

**Output:**

**My favorite color is blue red!**

**Note:** `<u>` is purely for **visual underlining** without meaning. `<ins>` is for **indicating added or inserted content**, with underlining being the default style. In modern web development, it's generally better to use semantic tags like `<ins>` when conveying meaning and `<u>` only when you want underlining purely for design.

9. **<hr>**: **Horizontal Rule**. The `<hr>` element is most often displayed as a horizontal rule that is used to separate content in an HTML page.

Attribute	Value	Description
align	left center right	Used to specify the alignment of the horizontal rule. Default is center.
noshade	noshade	Used to specify the bar without shading effect.
size	pixels	Used to specify the height of the horizontal rule.
width	Pixels/percentage	Used to specify the width of the horizontal rule.

```
<h3>Textt1</h3>
<hr size="10" width="40%">
<h3>Textt2</h3>
<hr size="20" width="50%" noshade align="right">
<h3>Textt3</h3>
<hr size="2">
```

**Output:**

Textt1



Textt2



Textt3



**10.<br>:**

- The **<br>** tag inserts a single line break.
- It is useful for writing addresses or poems.
- This tag is an empty tag which means that it has no end tag.

```
<body>
<p>This is sample example</p>
<p>This is <br> sample example</p>
</body>
```

**Output:**

This is sample example

This is  
sample example

**11.<center>: Not Supported in HTML5.** The <center> tag was used in HTML4 to align text in center.

```
<p>Hello</p>
<p><center>Hello! This text is in center.</center></p>
```

**Output:**

Hello

Hello! This text is in center.

**12.<sup>:** The <sup> tag is used to add a superscript text to the HTML document. The <sup> tag defines the superscript text. Superscript text appears half a character above the normal line and is sometimes rendered in a smaller font.

```
<h3>logx<sup>2</sup></h3>
<h3>2<sup>2</sup> + 5<sup>2</sup> = 29</h3>
```

**Output:**

$\log x^2$

$2^2 + 5^2 = 29$

13. **<sub>**:
- The `<sub>` tag is used to add a subscript text to the HTML document. The `<sub>` tag defines the subscript text. Subscript text appears half a character below the normal line and is sometimes rendered in a smaller font. Subscript text can be used for chemical formulas, like H2O to be written as H<sub>2</sub>O.

```
<h4>CH<sub>3</sub></h4>
<h4>H<sub>2</sub>SO<sub>4</sub></h4>
```

**Output:**

CH<sub>3</sub>

H<sub>2</sub>SO<sub>4</sub>

14. **<mark>**:
- The `<mark>` tag defines text that should be marked or highlighted.

```
<h1>This is <mark>Highlighted text!!</mark></h1>
```

**Output:**

This is **Highlighted text!!**

15. **<small>**:
- The `<small>` tag defines smaller text (like copyright and other side-comments).

**Tip:** This tag is not deprecated, but it is possible to achieve richer (or the same) effect with CSS.

16. **<big>**: **Not Supported in HTML5.** The `<big>` tag was used to define bigger text.

**Example:**

```
<p>This is a normal paragraph.</p>
<p><small>This is a normal paragraph.</small></p>
<p><big>This is a normal paragraph.</big></p>
```

**Output:**

This is a normal paragraph.

This is a normal paragraph.

This is a normal paragraph.

## ❖ HTML Link: Anchor tag (<a>)

Defines a hyperlink, which is used to link from one page to another. The most important attribute of the <a> element is the href attribute, which indicates the link's destination.

### Attributes:

- ✓ **href:** Specifies the URL of the page the link goes to
- ✓ **target:** Specifies where to open the linked document

```
<a href="url" target="_blank | _self | _parent | _top " name="a_link">Test</a>
```

```
_blank = Opens the linked document in a new window or tab
_self = Opens the linked document in the same frame as it was clicked (this is default)
_parent = Opens the linked document in the parent frame
_top = Opens the linked document in the full body of the window
```

- ✓ **name:** is used to specify the name for an <a> element. It is used to reference the form data after submitting the form or to reference the element in a JavaScript.

### Example:

```
<a href="https://www.example.com" target="_blank">Click here</a>
```

- ✓ When rendered in a browser, it would look like this: [Click here](https://www.example.com)
- ✓ If you click it, it will open <https://www.example.com> in a new tab.
- ✓ When target="\_blank" is used, it tells the browser to open the link in a **new browser tab** or window (depending on browser settings).
- ✓ This is helpful when you want to keep the current page open while navigating to another site.

### Example:

```
<html>
<body>
  <a name="test"></a>
  <h1>
    <pre>
      a
      b
      c
```

```
d
e
f
g
h
i
j
k
l
m
n
o
p
q
r
s
t
u
v
w
x
y
z
a
b
c
d
e
f
g
h
i
j
</pre>
</h1>
<a href="#test">Scroll to top</a>
</body>
</html>
```



**1. <a name="test"></a>**

This creates a **named anchor** at the top of the page, marking a point in the document. This doesn't display anything visually, but you can use it to jump back to this specific point when a link references it.

**2. <a href="#test">Scroll to top</a>**

This creates a hyperlink that, when clicked, will scroll the user back to the point in the page where the named anchor (<a name="test"></a>) is located. The #test in the **href** attribute references the **anchor name** ("test").

**Note:**

**name:** Used in older versions of HTML for named anchors, but mostly for form elements now. It's deprecated for anchor elements in HTML5.

**3. id:** A unique identifier used to reference or target elements. It is the preferred method in modern HTML. In the example provided, the functionality would remain the same if you replaced **name="test"** with **id="test"**, but using id is more current and widely supported. `<a id="test"></a>`

## ❖ Images: <img> tag

The <img> tag is used to embed an image in an HTML page. Images are not technically inserted into a web page; images are linked to web pages. The <img> tag creates a holding space for the referenced image.

### Attributes:

- ✓ **src:** Specifies the path to the image
- ✓ **alt:** Specifies an alternate text for the image, if the image for some reason cannot be displayed
- ✓ **height:** It is used to specify the height of the image.
- ✓ **width:** It is used to specify the width of the image.
- ✓ **border:** It is used to specify the border width around the image. The default value of <img> border attribute is 0.
- ✓ **align:** It is used to *set the alignment of an image*.
  - **left:** It sets the alignment of the image to the left.
  - **right:** It sets the alignment of the image to the right.
  - **middle:** It sets the alignment of the image to the middle (vertically).
  - **top:** It sets the alignment of the image to the top.
  - **bottom:** It sets the alignment of the image to the bottom.

```

```

### Absolute File Paths

An absolute file path is the full URL to a file:

```

```

### Relative File Paths

A relative file path points to a file relative to the current page.

In the following example, the file path points to a file in the images folder located at the root of the current web:

```

```

## ❖ HTML Lists:

A list is a record of short pieces of related information or used to display the data or any information on web pages in the ordered or unordered form. For instance, to purchase the items, we need to prepare a list that can either be ordered or unordered list which helps us to organize the data & easy to find the item.

There are two types of lists:

- 1) **Unordered list:** An unordered list starts with the `<ul>` tag. Each list item starts with the `<li>` tag. The list items will be marked with disc (small black circles) by default.

### Attribute:

**type:** type = " disc/square/circle/none"

```
<ul>
  <li>Test 1</li>
  <li>Test 2</li>
  <ul type="square">
    <li>Test 3</li>
    <li>Test 4</li>
  </ul>
</ul>
```

### Output:

- Test 1
- Test 2
  - Test 3
  - Test 4

### type="disc":

Items are marked with **filled circles** as bullet points. This is default.

- Item 1
- Item 2
- Item 3

### type="square":

Items are marked with **squares**.

- Item 1
- Item 2
- Item 3

**type="circle":**

Items are marked with **hollow circles**.

- ☐ Item 1
  - ☐ Item 2
  - ☐ Item 3
- 

**type="none":**

No bullet points are shown for the list items.

- Item 1
- Item 2
- Item 3

2) **Ordered list:** An ordered list starts with the <ol> tag. Each list item starts with the <li> tag. The list items will be marked with numbers by default:

### Attribute:

**type:** type=" 1/ i/ l/ a/ A"

**start:** Specifies the start value of an ordered list

**reversed:** Specifies that the list order should be reversed (9,8,7...)

```
<ol start="5">
  <li>Test 1</li>
  <li>Test 2</li>
  <li>Test 3</li>
  <ol type="A">
    <li>Test 4</li>
    <li>Test 5</li>
    <ol reversed type="i">
      <li>Test 6</li>
      <li>Test 6</li>
    </ol>
  </ol>
</ol>
```

### Output:

```
5. Test 1
6. Test 2
7. Test 3
  A. Test 4
  B. Test 5
    ii. Test 6
    i. Test 6
```

For type 'a' 27,28,29.. letters are aa,ab,ac... respectively.

## ❖ Nested List Example:

```

<html>
  <head><title>Nested
List</title></head>
  <body>
    <ol type="A" start="4">
      <li>List1</li>
      <li>List2</li>
      <ul type="square">
        <li>list2.1</li>
        <li>list2.2</li>
        <ol type="I" reversed >
          <li>list 2.2.1</li>
          <li>list 2.2.1</li>
          <li>list 2.2.1</li>
        </ol>
      </ul>
      <li>List3</li>
      <ul type="none">
        <li>list 3.1</li>
        <li>list 3.2</li>
      </ul>
      <li>list4</li>
      <ol type="a">
        <li>list 4.1</li>
        <ul type="circle">
          <li>list 4.1.1</li>
          <li>list 4.1.2</li>
        </ul>
        <li>list 4.1</li>
      </ol>
    </ol>
  </body>
</html>

```

D. List1

E. List2

■ list2.1

■ list2.2

III. list 2.2.1

II. list 2.2.1

I. list 2.2.1

F. List3

list 3.1

list 3.2

G. list4

a. list 4.1

○ list 4.1.1

○ list 4.1.2

b. list 4.1

## ❖ HTML Definition List:

The <dl> tag defines a definition list. The <dl> tag is used in conjunction with <dt> (defines terms/names/title) and <dd> (describes each term/name/data).

<dl> : definition list

<dt> : definition term

<dd> : definition detail

```
<dl>
  <dt>Html</dt>
  <dd>Lorem Ipsum is simply dummy text of the printing and typesetting industry.
  Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an
  unknown printer took a galley of type and scrambled it to make a type specimen
  book.</dd>
  <dt>CSS</dt>
  <dd>Lorem Ipsum is simply dummy text of the printing and typesetting industry.
  Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an
  unknown printer took a galley of type and scrambled it to make a type specimen
  book.</dd>
</dl>
```

### Output:

Html

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.

CSS

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## ❖ HTML Table:

- ✓ The <table> tag defines an HTML table.
- ✓ An HTML table consists of one <table> element and one or more <tr>, <th>, and <td> elements.
- ✓ The <tr> element defines a table row, the <th> element defines a table header, and the <td> element defines a table cell.
- ✓ An HTML table may also include <caption>, <thead>, <tfoot>, and <tbody> elements.

### HTML tags for table:

<caption>	<p>The &lt;caption&gt; tag defines a table caption.</p> <p>The &lt;caption&gt; tag must be inserted immediately after the <u>&lt;table&gt;</u> tag.</p> <p><b>Tip:</b> By default, a table caption will be center-aligned above a table. However, the CSS properties <u>text-align</u> and <u>caption-side</u> can be used to align and place the caption.</p>
<table>	Defines a table.
<th>	Defines a header cell in a table
<tr>	Defines a row in a table
<td>	Defines a cell in a table
<thead>	Groups the header content in a table
<tbody>	Groups the body content in a table
<tfoot>	Groups the footer content in a table

### HTML <table> tag attribute:

Attribute	Value	Description
align	right left center justify char	Deprecated – Visual alignment.



bgcolor	rgb(x,x,x) #hexcode colorname	Deprecated – Specifies the backgroundcolor of the table.
border	pixels	Deprecated – Specifies the border width.A value of "0" means no border.
cellpadding	pixels or %	Deprecated – Specifies the space between the cell borders and their contents.
cellspacing	pixels or %	Deprecated – Specifies the space between cells.
rules	none groups rows cols all	<p>Deprecated – The <b>HTML &lt;table&gt; rules Attribute</b> is used to <i>specify which parts of the inside borders that should be visible.</i></p> <p><b>Syntax:</b> &lt;table rules="value"&gt;</p> <p><b>Attribute Values:</b></p> <ul style="list-style-type: none"> <li>• <b>none:</b> It does not create any lines.</li> <li>• <b>groups:</b> It create lines between row and column groups.</li> <li>• <b>rows:</b> It creates line between the rows.</li> <li>• <b>cols:</b> It creates line between the columns.</li> <li>• <b>all:</b> It creates line between the rows and columns.</li> </ul> <p><b>Note:</b> The &lt;table&gt; rules Attribute is not supported by HTML 5.</p>
width	pixels or %	Deprecated – Specifies the width of the table.

### <td><th><tr> attributes:

Attribute	Value	Description
align	right left center justify	Deprecated – Visual alignment.

	char	
bgcolor	rgb(x,x,x) #hexcode colorname	Deprecated – Specifies the backgroundcolor of the cell.
colspan	Number of columns to merge	Number of columns a header cell shouldspan
rowspan	Number of rows to merge	Set the number of rows a header cell shouldspan.

**Example 1:**

```

<table border="4" cellpadding="10" rules="all" bgcolor="pink" width="50%"
align="center">
  <caption>Table</caption>
  <thead>
    <tr>
      <th>Name</th>
      <th>Cost</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>A</td>
      <td>20</td>
    </tr>
    <tr>
      <td>B</td>
      <td>30</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <th>Total</th>
      <td>50</td>
    </tr>
  </tfoot>

```

&lt;/table&gt;

Table

Name	Cost
A	20
B	30
<b>Total</b>	50

**Example:**

```
<table border="2" cellspacing="4" cellpadding="30">
  <tr>
    <td rowspan="2">C</td>
    <td>A</td>
  </tr>
  <tr>
    <td>b</td>
  </tr>
</table>
```

C	A
	b

**Example:**

```
<table border="2" rules="rows" cellpadding="30">
  <tr>
    <td colspan="2" align="center">A</td>
  </tr>
  <tr>
    <td>B</td>
    <td>C</td>
  </tr>
</table>
```

A	
B	C

**Example**

```

<html>
  <head>
    <title> Table </title>
  </head>
  <body align='center'>
    <table border='3px' width='50%' align="center" cellpadding='15' cellspacing="5">
      <caption><strong><font size="6"> Table</font></strong></caption>
      <tr>
        <td rowspan='2' bgcolor="yellow"> A</td>
        <td bgcolor="lightgreen"> <b>B</b> </td>
        <td rowspan='3' bgcolor="yellow"> D </td>
        <td colspan='2' bgcolor="pink"> E </td>
        <td bgcolor="lightblue"> F </td>
      </tr>
      <tr>
        <td bgcolor="lightblue"> C </td>
        <td rowspan='2' bgcolor="lightblue"> G </td>
        <td rowspan='2' bgcolor="lightgreen"> <b>H</b> </td>
        <td rowspan='2' bgcolor="yellow"> I </td>
      </tr>
      <tr>
        <td colspan='2' bgcolor="pink"> J </td>
      </tr>
      <tr>
        <td colspan='3' bgcolor="lightgreen"> <b>K</b> </td>
        <td bgcolor="yellow"> L </td>
        <td colspan='2' bgcolor="pink"> M </td>
      </tr>
    </table>
  </body>
</html>

```

**Table**

A	B	D	E		F
	C		G	H	I
J					
K			L	M	

**Example:**

```

<html>
  <body>
    <table width="50%" align="center" border="1" rules="all" cellpadding="10px">
      <caption>Table </caption>
      <tr><th>I</th><th>II</th><th>III</th><th>IV</th><th>V</th><th>VI</th><th>VII</th>
    </tr>
    <tr><td bgcolor="lightgreen">H</td>
      <td>&nbsp;</td>
      <td valign="top" colspan="3" rowspan="3">Periodic Table<br/>of Elements</td>
      <td>&nbsp;</td>
      <td bgcolor="gold">He</td>
    </tr>
    <tr><td>Li</td>
      <td>Be</td>
      <td>B</td>
      <td bgcolor="gold">Ne</td>
    </tr>
    <tr><td>Na</td>
      <td>Mg</td>
      <td>Al</td>
      <td bgcolor="gold">Ar</td>
    </tr>
    <tr><td>K</td>
      <td>Ca</td>
      <td>Sc</td>
      <td>Ti</td>
      <td>V</td>
      <td>Ga</td>
      <td bgcolor="gold">Kr</td>
    </tr>
  </table>
</body>
</html>

```

Table

I	II	III	IV	V	VI	VII
H		Periodic Table of Elements				He
Li	Be				B	Ne
Na	Mg				Al	Ar
K	Ca	Sc	Ti	V	Ga	Kr

**Example:**

```

<html>
  <head>
    <title> Table </title>
  </head>
  <body align='center'>
    <table border='7' bgcolor='cyan' width='40%' rules='all' cellpadding='5'>
      <caption> Employee Information </caption>
      <thead>
        <tr>
          <th> Position </th>
          <th> Name </th>
          <th> City </th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td> Sales <br/> Manager </td>
          <td> <ol type='I'> <li>ABC </li> <li>XYZ </li></ol></td>
          <td> <ol type='A'> <li>India</li> <li>USA </li></ol></td>
        </tr>
      </tbody>
    </table>
  </body>
</html>

```

Employee Information

Position	Name	City
Sales Manager	I. ABC II. XYZ	A. India B. USA


**Example:**

```

<html><body align="center">
  <table border='5' width="50%" rules="all" align='center' cellpadding='10'>
    <caption > Table </caption>
    <tr>
      <td rowspan='2'>  </td>
      <th colspan='4'> <h2> Camelid comparison</h2> <br/>Approximate as of
6/2007</th>
    </tr>
    <tr>
      <th> # of Humps </th>
      <th> Indigenenous <br/> region </th>
      <th> Spits? </th>
      <th> Product <br/> Wool? </th>
    </tr>
    <tr>
      <th> Camels(bactrian) </th>
      <td>2</td>
      <td>Africa/Asia</td>
      <td>Yes</td>
      <td>Yes</td>
    </tr>
    <tr>
      <th> Liams </th>
      <td>1</td>
      <td>Andes Mountains</td>
      <td>Yes</td>
      <td>Yes</td>
    </tr>
  </table>
</body></html>

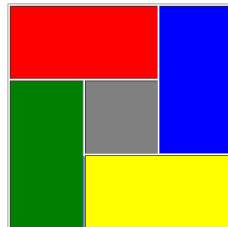
```

Table

	Camelid comparison			
	Approximate as of 6/2007			
	# of Humps	Indigenenous region	Spits?	Product Wool?
<b>Camels(bactrian)</b>	2	Africa/Asia	Yes	Yes
<b>Liams</b>	1	Andes Mountains	Yes	Yes

**Example:**

```
<table border="1" width="300" height="300">
  <tr>
    <td colspan="2" bgcolor="red"></td>
    <td rowspan="2" bgcolor="blue"></td>
  </tr>
  <tr>
    <td rowspan="2" bgcolor="green"></td>
    <td bgcolor="gray"></td>
  </tr>
  <tr>
    <td colspan="2" bgcolor="yellow"></td>
  </tr>
</table>
```

**Example:**


```
<table border="2" cellpadding="10" rules="all" bgcolor="yellow" align="center"
width="50%">
  <tr bgcolor="white">
    <th colspan="2">5<sup>th </sup>Monthly Sales Report</th>
    <th></th>
  </tr>
  <tr bgcolor="pink">
    <th>Region</th>
    <th>Product</th>
    <th>Sales</th>
  </tr>
  <tr>
    <td rowspan="3" bgcolor="cyan"><font size="5" color="blue">North
India</font></td>
    <td>Product A</td>
    <td>5000</td>
  </tr>
  <tr>
```



```

    <td>Product B</td>
    <td>3000</td>
</tr>
<tr>
    <td>Product C</td>
    <td>4000</td>
</tr>
<tr>
    <td rowspan="2" bgcolor="lightgreen"><font size="5" color="blue"><i>South
India</i></font></td>
    <td>Product A</td>
    <td>6000</td>
</tr>
<tr>
    <td>Product B</td>
    <td><del>3500</del> <u>3550</u></td>
</tr>
<tr>
    <td colspan="2" bgcolor="lightgrey"><b>Total Sales</b></td>
    <td bgcolor="grey"><b>21550</b></td>
</tr>
</table>

```

5 <sup>th</sup> Monthly Sales Report		
Region	Product	Sales
North India	Product A	5000
	Product B	3000
	Product C	4000
South India	Product A	6000
	Product B	<del>3500</del> <u>3550</u>
Total Sales		21500