



HTML5: Beginners

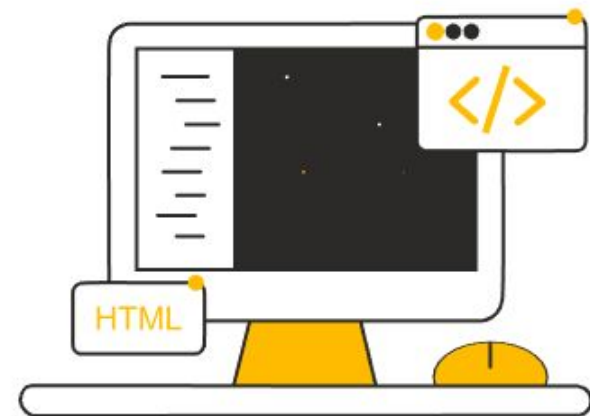
“Champions Are Brilliant At The Basics.”

- JOHN WOODEN

What is HTML??

What is HTML

- HTML (HyperText Markup Language) is the markup language used to turn text documents into web pages and applications.
- What you see when you view a page on the Internet is your browser's interpretation of HTML.
- HTML5 is the latest version



What is Markup Language?

bold

italic

~~strikethrough~~

10:45 ✓✓

+ *bold*

← * for bold

italic

← _ for italics

+ ~strikethrough~

← ~ for strikethrough



////

q

w

e

r

t

y

u

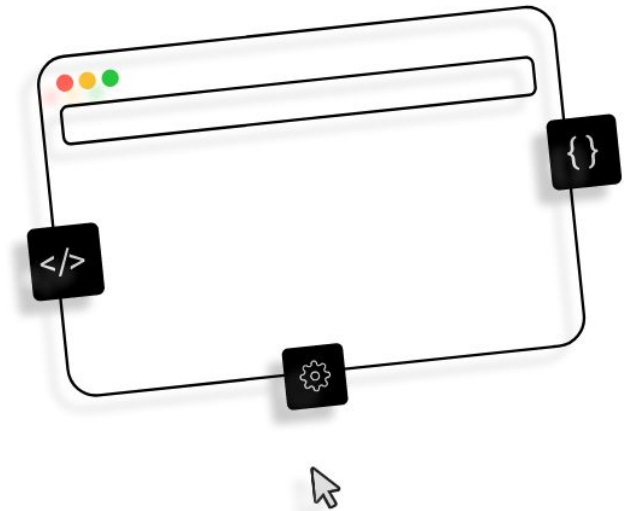
i

o

p

What is Markup Language?

- Markup Language is a language which uses tags
 - These tags are enclosed within angle braces
`<Tag Name>`
- They are used to format the content of a web page



What is Markup?



Joining Date
Student ID

Paste Your Photo Here

Admission Form

(Only Form Should Be Filled In Capital Letter With Blank Ink /Ball Pen)

Student Name : DOB
Date Month Year

Father Name : Occupation:.....

Mother Name : Occupation:.....

Gender :- ☐ Male ☐ Female

Address :-
.....
..... Pin
Phone (With STD Code)..... Mobile

Name of School where Studying /Last attended

Class Name where Studying

Class of Coaching

Dated (Authorised Signatory) (Signature of Student)

Basic Tags

Basic Structure of HTML page

□ <!DOCTYPE> element

- This tag defines the document type and HTML version.

□ <html> element

- This tag encloses the complete HTML document and mainly comprises of document header which is represented by **<head>...</head>** and document body which is represented by **<body>...</body>** tags.

Basic Structure of HTML page

□ <head> element

- It is the 1st tag inside <html> tag
- It contains information about the page, rather than the content that is shown on the browser.
- The <title> and <meta> elements are written inside the <head> element.

□ <title> element

- <title> tag gives the title to the Web Page
- The contents of the <title> element are shown on top of the browser, at the tab of that page.

□ <body> element

- Everything inside this element is displayed in the browser.

Example

```
<html>
  <head>
    <title> My First Website </title>
  </head>

  <body>

    <h1>Main Heading</h1>

    <p>Para below the main heading, this will be
enclosed in the paragraph tag.</p>

  </body>
</html>
```



Note: Don't forget to save it with either .htm or .html file extension.

Tools required?



Notepad
(for Windows)



Text Editor
(for MacOS)



Browser

Heading Tags

- HTML has six 'levels' of headings.
 - `<h1>` is used for main headings.
 - `<h2>` for subheading,
 - `<h3>` and so on,

This is a main heading

This is a Level 2 heading

This is a Level 3 heading

This is a Level 4 heading

This is a Level 5 heading

This is a Level 6 heading

PARAGRAPHS

To create a paragraph, surround the words that make up the paragraph with an opening `<p>` tag and closing `</p>` tag.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Lorem Ipsum Generator: <https://loremipsum.io/>

Self Closing Tags

</with no closing tags>

LINE BREAK

`
` : It generates a new line

HORIZONTAL RULE

`<hr>` : It generates a Horizontal Rule

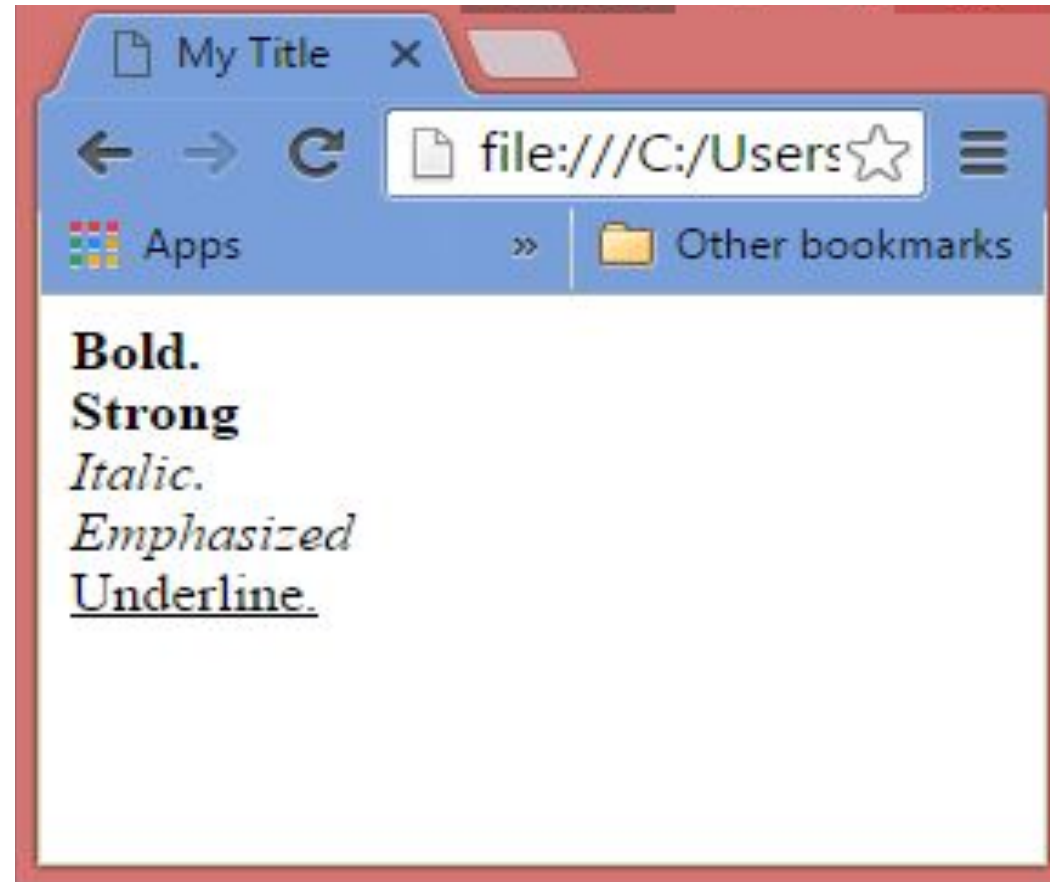
Formatting Tags

BOLD, ITALIC, UNDERLINE, STRONG & EMPHASIS

- ``: To make characters appear **bold** enclose it within `` tag.
- `<i>`: To make characters appear *italicized* enclose within `<i></i>` tag.
- ``: Same as `` tag, enclose it within `` tag. [HTML5]
- ``: Same as `<i>` tag, enclose within `` tag. [HTML5]
- `<u>`: The content inside is displayed with an underline, enclosed within `<u> </u>`.

Example

```
<html>
<head>
  <title> My Title </title>
</head>
<body>
  <b>Bold.</b><br>
  <strong>Strong</strong><br>
  <i>Italic.</i><br>
  <em>Emphasized</em><br>
  <u>Underline.</u><br>
</body>
</html>
```

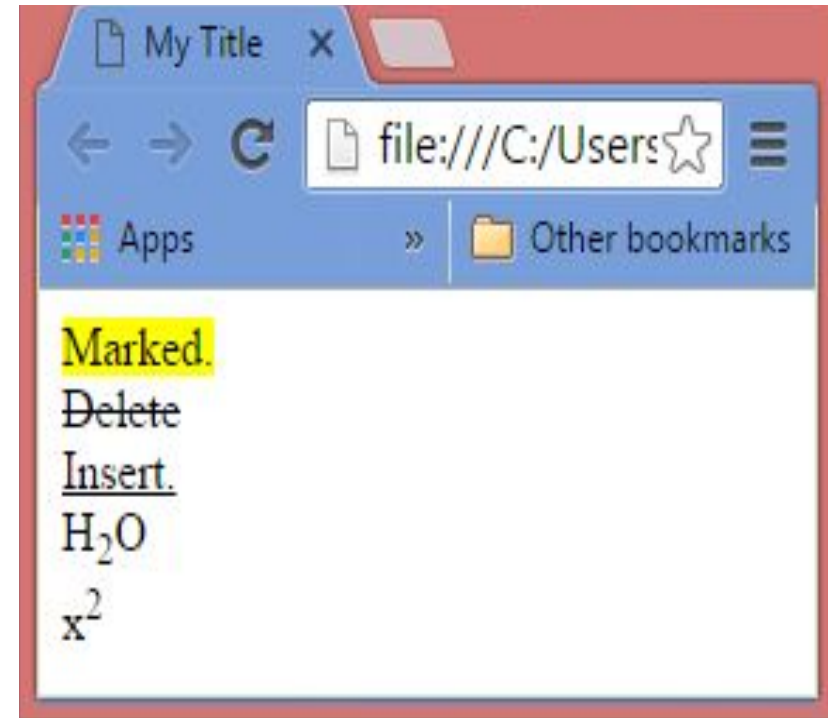


INSERT, DELETE, MARKED, SUPERSCRIP, SUBSCRIPT

- ❑ **<ins>**: Same as <u> tag, enclose within <ins></ins> tag.
- ❑ ****: It will strike through the content enclose within tag.
- ❑ **<mark>**: The <mark> tag defines text that should be marked or highlighted.
- ❑ **<sup>**: To contain characters that should be superscript such as raising a number 2²
- ❑ **<sub>**: To contain characters that should be subscript e.g. chemical formulas such as H₂O

Example

```
<html>
<head>
  <title> My Title </title>
</head>
<body>
  <mark>Marked.</mark><br>
  <del>Delete</del><br>
  <ins>Insert.</ins><br>
  H<sub>2</sub>O<br>
  x<sup>2</sup><br>
</body>
</html>
```



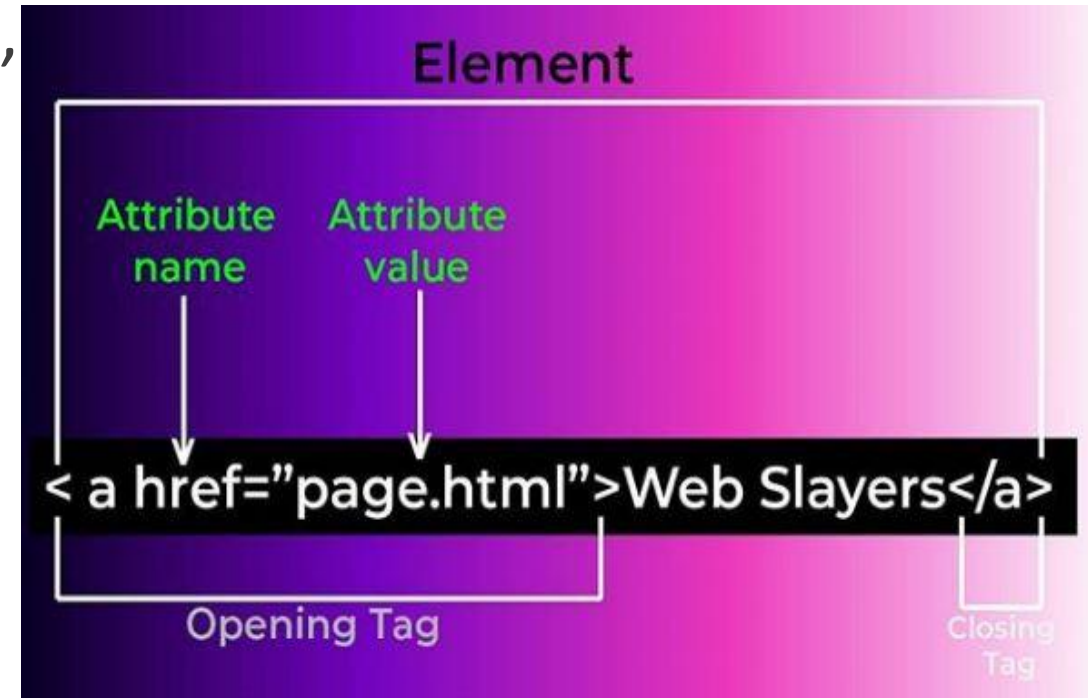
What are Attributes?

- Attributes tell us more about the elements
- They appear on the opening tag of the element.
- They are made of two parts: a name and a value
- Syntax:
 - `attributeName = "Value"`

Anchor Tag <a>

Links are the defining feature of the web, they allow you to move from one webpage to another.

- They are made of two parts: a name and a value
 - Links are created using the <a> element.
 - We specify where we want to go inside the *href* attribute.



OPENING LINKS IN A NEW WINDOW

target

- ☐ It is used to open link in a new window.
- ☐ Set the value of **target** attribute to *blank*

EMAIL LINKS

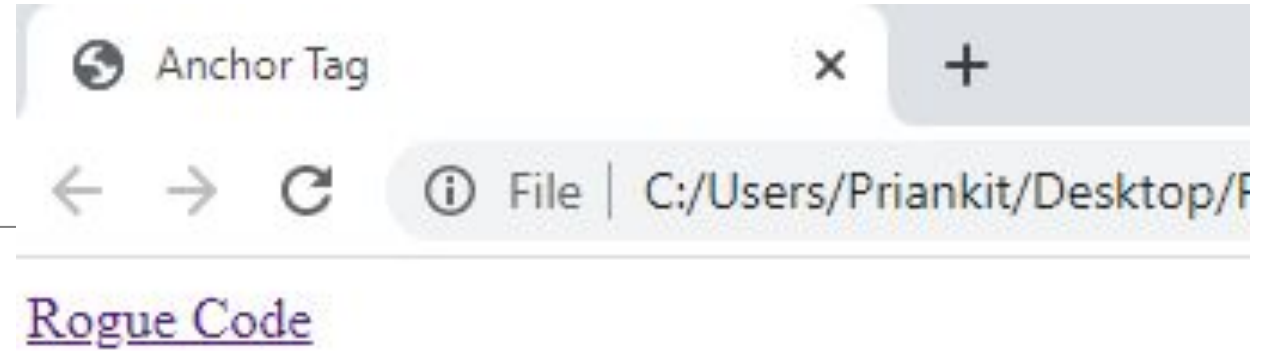
mailto:

- ☐ It opens up the user's email program
- ☐ Set the value of **href** to `mailto:<email-address>`

If mailto: doesn't work: <https://stackoverflow.com/questions/34129707/href-mailto-is-not-working-on-any-of-the-browsers>

Example

```
<html>
<head>
  <title> Anchor Tag </title>
</head>
<body>
<a href =
  "http://www.roguecode.in/" target
  = "_blank"> Rogue Code</a>
</body>
</html>
```



IMAGE

Concepts to learn:

- ☐ Include an image in your web pages using HTML.
- ☐ Pick which image format to use.
- ☐ Show an image at the right size
- ☐ Optimize an image for use on the web to make pages load faster.

ADDING IMAGES

- **** element
 - This is an empty element (which means there is no closing tag)
- **src** attribute
 - Mentions the source of the image file.
 - It can be a link to a image online, or a image stored locally as well.
- **alt** attribute
 - This provides a text description of the image which describes the image if you cannot see it. (Used mostly by screen readers)

HEIGHT & WIDTH OF IMAGES

Images often take longer to load than the HTML code that makes up the rest of the page. It is therefore, a good idea to specify the size of the image so that the browser can render the rest of the text on the page while leaving the right amount of space for the image that is still loading.

- **height**
- **width**

SOME MORE ATTRIBUTES IN

img also has following attributes:

- a. **hspace** – specifies the amount of space to left and right of image.
- b. **vspace** – Specifies the amount of space to top and bottom of an image.
- c. **border** – Specifies border around an image.
- d. **align** – Defines the alignment of image.

Example:-

```

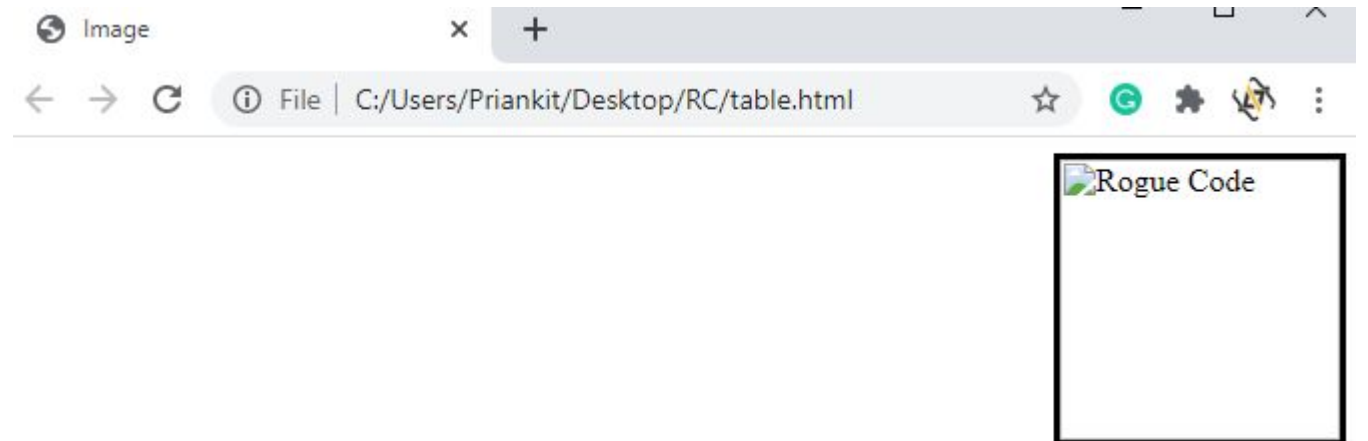
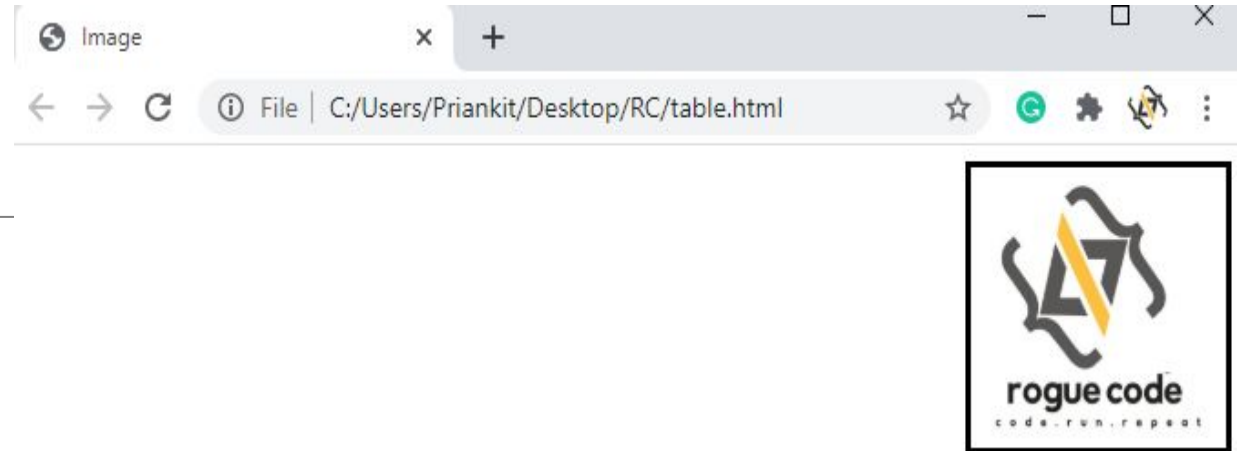
```



Example

```
<html>
<head><title> Image </title>
</head><body>

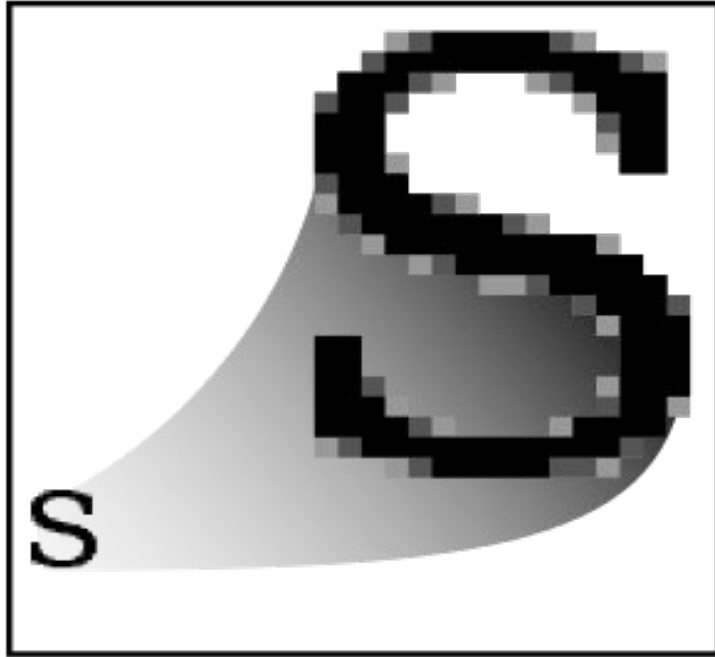
</body>
</html>
```



VECTOR IMAGES

- Vector images differ from bitmap images and are resolution-independent.
- Vector images are commonly created in programs such as Adobe Illustrator.
- The advantage of creating line drawings in vector format is that you can increase the dimensions of the image without affecting the quality of it.

VECTOR IMAGES



Raster
.jpeg .gif .png



Vector
.svg

LISTS

There are three different kinds of lists in HTML:-

- Ordered Lists
 - This is the list in which items are numbered. 1,2,3, so on...
- Unordered Lists
 - Bulleted lists, no particular order needed.
- Definition Lists
 - They are made up of a set of terms along with definitions.

ORDERED LISTS

- The ordered list is created with the `` element

- Each item in the list is placed between an opening `` tag and a closing `` tag.
- li stands for list item.

<html>

<head>

</head>

<body>

Apple

Android one

Windows

Android 6

</body>

</html>

<ol type="1"> - Default-Case Numerals.

<ol type="I"> - Upper-Case Numerals.

<ol type="i"> - Lower-Case Numerals.

<ol type="a"> - Lower-Case Letters.

<ol type="A"> - Upper-Case Letters.

1. Apple
2. Andriod one
3. Windows
4. Android 6

- i. Apple
- ii. Andriod one
- iii. Windows
- iv. Android 6

- A. Apple
- B. Andriod one
- C. Windows
- D. Android 6

- I. Apple
- II. Andriod one
- III. Windows
- IV. Android 6

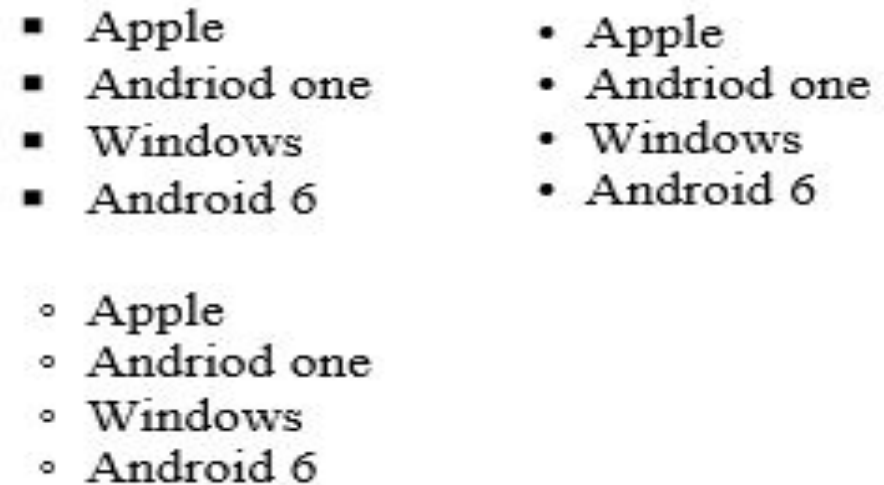
- a. Apple
- b. Andriod one
- c. Windows
- d. Android 6

UNORDERED LISTS

- The unordered list is created with the element

- Each item in the list is placed between an opening tag and a closing tag.
- li stands for list item.

```
<html>
<head>
</head>
<body>
<ul>
  <li>Apple</li>
  <li>Andriod one</li>
  <li>Windows</li>
  <li>Android 6</li>
</ul>
</body>
</html>
```

- 
- Apple
 - Andriod one
 - Windows
 - Android 6
-
- Apple
 - Andriod one
 - Windows
 - Android 6
-
- Apple
 - Andriod one
 - Windows
 - Android 6

DEFINITION LISTS

<dl>

- The definition list is created with the <dl> element and usually consists of a series of terms and their definitions.
- Inside the <dl> element you will usually see pairs of <dt> and <dd> elements.

<dt>

- This is used to contain the term being defined (the definition term)

<dd>

- This is used to contain the definition.

CODE

<dl>

<dt>Pav Bhaji**</dt>**

<dd>

onions, tomatoes, cheese, pav

</dd>

<dt>Sev Puri**</dt>**

<dd>puri, sev, dahi**</dd>**

</dl>

Pav Bhaji

onions, tomatoes, cheese, pav

Sev Puri

puri, sev, dahi

TABLES

Concepts to learn:

- ☐ How to create tables?
- ☐ Which kind of data to represent in tables?

Basic Table Structure

`<table>`

`<tr>`

`<th>Language</th>`

`</tr>`



Row Number 1
(heading)

`<tr>`

`<td>HTML</td>`

`</tr>`

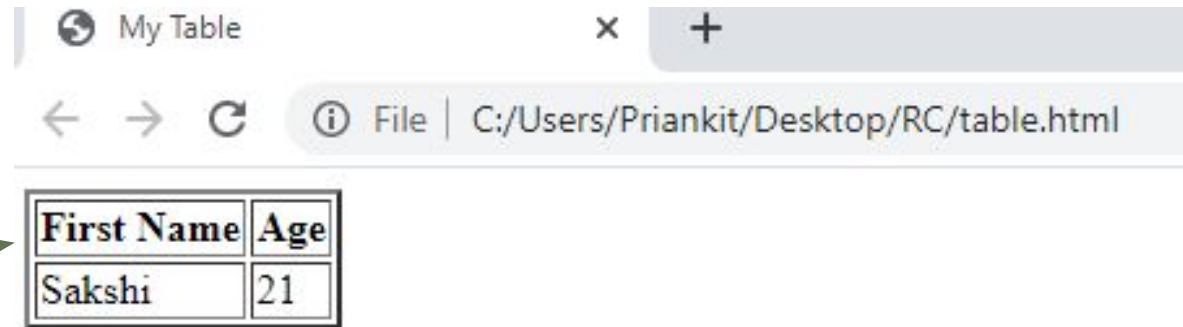


Row number 2 (data)

`</table>`

Example

```
<html>
<head>
  <title> My Table </title>
</head>
<body><table border=2>
  <tr>
    <th>First Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Sakshi</td>
    <td>21</td>
  </tr>
</table>
</body>
</html>
```



Example using colspan

```
<table border="1px">
  <tr>
    <th colspan="2">Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>43</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>57</td>
  </tr>
</table>
```

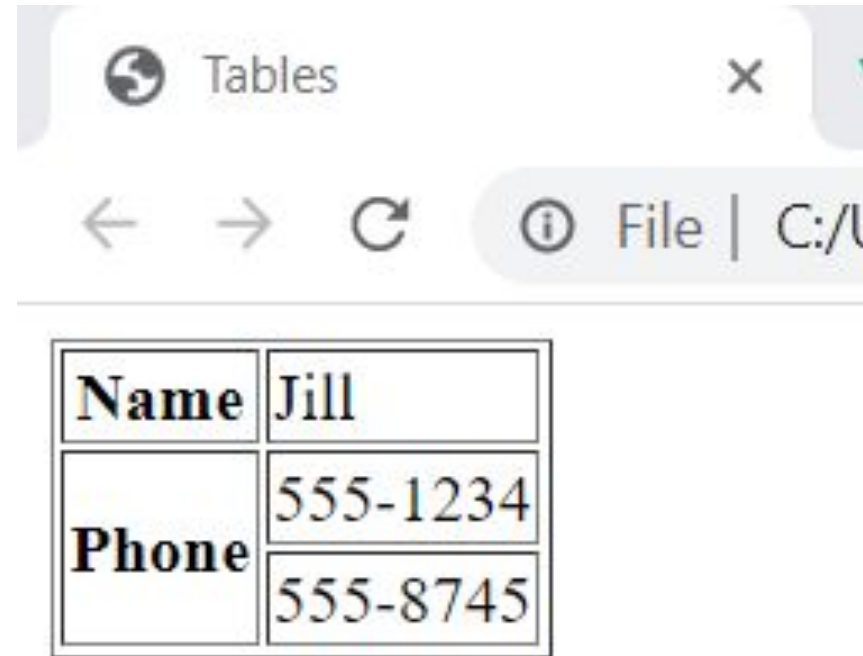


The screenshot shows a web browser window with a tab titled 'Tables'. The address bar shows 'File | C:/'. Below the browser interface, a table is displayed with the following structure:

Name		Age
Jill	Smith	43
Eve	Jackson	57

Example using rowspan

```
<table>
  <tr>
    <th>Name</th>
    <td>Jill</td>
  </tr>
  <tr>
    <th rowspan="2">Phone</th>
    <td>555-1234</td>
  </tr>
  <tr>
    <td>555-8745</td>
  </tr>
</table>
```

A screenshot of a web browser window. The browser's address bar shows "Tables" and "File | C:/U". Below the address bar, a table is displayed. The table has two columns. The first column contains the text "Name" in the first row and "Phone" in the second row. The second column contains the text "Jill" in the first row, "555-1234" in the second row, and "555-8745" in the third row. The "Phone" header in the second row spans two rows, as indicated by the "555-1234" and "555-8745" entries in the second column.

Name	Jill
Phone	555-1234
	555-8745

SEMANTIC MARKUP

There are some text elements that are not intended to affect the structure of your web pages, but they add extra information to the pages - they are known as semantic markup.

The reason for using these elements is that other programs, such as screen readers or search engines, can use this extra information.

HTML5: Video Tag

- HTML5 <video> element is a very recent addition and is only supported by recent browsers.
- Not all browsers support the same video formats. Therefore, you need to supply your video in more than one format.
- To reach as many browsers as possible, you should provide the video in the following formats:
 - H264: IE and Safari
 - WebM: Android, Chrome, Firefox, Opera

Video: Controls

- The browser supplies its own controls for the player, and these can vary from browser to browser.
- You can control the appearance of these controls using Javascript.

Adding Video To Your Pages

- `<video>`
 - Wrap your content around video element

- `src`
 - Specifies the path to the video
- `poster`
 - Specify an image to show while the video is downloading or until the user tells the video to play
- `width, height`
- `controls`
 - When used, this attribute indicates that the browser should supply its own controls for playback
- `autoplay`
 - This attribute specifies that the file should play automatically
- `loop`
 - Start playing again once it has ended

Adding Video To Your Pages

- ☐ `<video src="videos/play.mp4"`
- ☐ `poster="images/pokemon.png"`
- ☐ `width="400" height="300"`
- ☐ `preload`
- ☐ `controls`
- ☐ `loop >`
- ☐ `</video>`



HTML5: Audio Tag

- HTML5 <audio> element is a very recent addition and is only supported by recent browsers.
- Not all browsers support the same audio formats. Therefore, you need to supply your audio in more than one format.
- Audio formats supported:
 - MP3: IE and Safari
 - OGG: Android, Chrome, Firefox, Opera

Adding HTML5 Audio To Your Pages

- src
 - Specify the path of the audio file.
 - controls
 - autoplay
 - preload
 - loop
- Same as Video Tag

Adding HTML5 Audio To Your Pages

- `<audio src="audios/play.mp3"`
- `controls`
- `autoplay>`
- `</audio>`

THANK YOU!



Follow And Support Us On:-



[@rogue.code](https://www.instagram.com/rogue.code)



<https://github.com/Rogue-Code>