

Basic Structure Tags

Tag	Description
<!DOCTYPE html>	Declares the document type (HTML5).
<html>	Root element of the HTML document.
<head>	Contains metadata and title of the document.
<title>	Sets the title shown in the browser tab.
<body>	Contains the visible content of the page.

Text Formatting Tags

Tag	Description
<h1> to <h6>	Headings (largest to smallest).
<p>	Paragraph.
 	Line break (no closing tag).
<hr>	Horizontal line (no closing tag).
 or 	Bold text.
<i> or 	Italic text.
<u>	Underlined text.
<mark>	Highlighted text.
<small>	Smaller text.
<sub> / <sup>	Subscript / Superscript text.

List Tags

Tag	Description
	Unordered (bulleted) list.
	Ordered (numbered) list.
	List item (used in both and).
<dl>	Definition list.
<dt>	Definition term.
<dd>	Definition description.

<!DOCTYPE html> → Declares the document type as HTML5.

<html lang="en"> → Root element of the page; lang="en" sets the language to English.

<head> → Contains meta-information about the document (not visible on the page).

<title>RGM CET</title> → Title of the page (appears in the browser tab).

</head> → Closing head tag

<body> → Contains the content displayed on the web page.

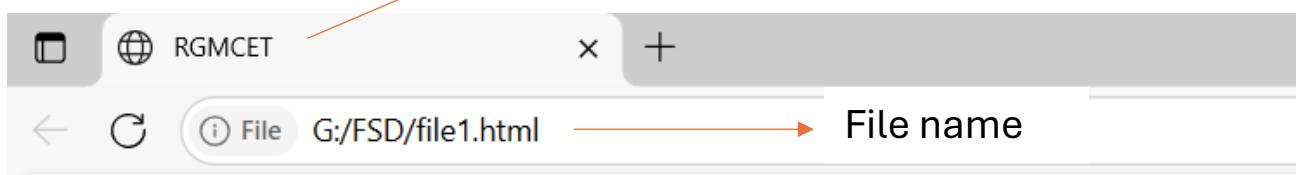
<h1>Welcome to My Website</h1> → heading<h1> tag

<p>This is a basic HTML structure example.</p> → paragraph tag

</body> → Close the body tag

</html> → close the html tag

- Save the above program with **.html** extension ex. file1.html
- Open that file in web browser only to see the output or page presentation. If you need any modification like add/delete/modify open the same file (file1.html) in text document.



Ex: 1. Lists, Links and Images

- a) Write a HTML program, to explain the working of lists.

Note: It should have an ordered list, unordered list, nested lists and ordered list in an unordered list and definition lists.

- **Ordered List ()**
- **Unordered List ()**
- **Nested Lists**
- **Ordered List inside an Unordered List**
- **Definition List (<dl>)**

Ordered List ():

An Ordered List in HTML is used to display a list of items in a specific sequence — usually numbered (1, 2, 3...) by default.

Syntax:

```
<ol>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 3</li>
</ol>
```

We change the numbering style using the type attribute:

```
<ol type="A"> -----→ Uppercase letters: A, B, C
<ol type="a"> -----→ Lowercase letters: a, b, c
<ol type="I"> -----→ Uppercase Roman: I, II, III
<ol type="i"> -----→ Lowercase Roman: i, ii, iii
```

Unordered List ():

An Unordered List displays items without any specific order — usually shown as bullets (●, ○, ■) by default.

```
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 3</li>
</ul>
```

Use the type attribute (in older HTML) or CSS to change bullet styles.

Type	Description
disc (default)	Solid circle ●
circle	Hollow circle ○
square	Solid square ■

```
<ul type="square">  
  <li>Item A</li>  
  <li>Item B</li>  
</ul>
```

Nested Lists

A **Nested List** is a list **within another list**. It can be a combination of:

- An **unordered list inside an ordered list**
- An **ordered list inside an unordered list**
- Or **lists of the same type** nested inside each other

Syntax:

```
<ul>  
  <li>Item 1  
    <ul>  
      <li>Subitem 1</li>  
      <li>Subitem 2</li>  
    </ul>  
  </li>  
  <li>Item 2</li>  
</ul>
```

Ordered List inside an Unordered List

An **Ordered List inside an Unordered List** is a type of **nested list**, where each unordered list item contains an ordered list as a sub-list. This is useful when you want to group items with steps or sequences under a general category.

```
<ul>  
  <li>Main Item  
    <ol>
```

```
<li>Step 1</li>
<li>Step 2</li>
</ol>
</li>
</ul>
```

Definition List (<dl>)

A **Definition List** is used to display terms and their descriptions — like a dictionary or glossary. It is different from ordered or unordered lists because it pairs a **term** with its **definition**.

Tag	Meaning
<dl>	Definition List container
<dt>	Definition Term (the word/concept)
<dd>	Definition Description (the explanation)

Syntax:

```
<dl>
  <dt>Term 1</dt>
  <dd>Description of Term 1</dd>
  <dt>Term 2</dt>
  <dd>Description of Term 2</dd>
</dl>
```

Main Program

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Exercise 1(a)</title>
</head>
<body>
    <h1>HTML Lists Demonstration</h1>
    <!-- Ordered List -->
    <h2>1. Ordered List</h2>
    <ol>
        <li>Introduction</li>
        <li>Body</li>
        <li>Conclusion</li>
    </ol>
    <!-- Unordered List -->
    <h2>2. Unordered List</h2>
    <ul>
        <li>Red</li>
        <li>Green</li>
        <li>Blue</li>
    </ul>

    <!-- Nested Lists -->
    <h2>3. Nested List</h2>
    <ul>
        <li>Programming Languages
            <ol>
                <li>Python</li>
                <li>Java</li>
                <li>C++</li>
            </ol>
        </li>
    </ul>
</body>
```

```
</ol>
</li>
<li>Web Technologies
<ol>
<li>HTML</li>
<li>CSS</li>
<li>JavaScript</li>
</ol>
</li>
</ul>

<!-- Ordered List inside Unordered List --&gt;
&lt;h2&gt;4. Ordered List in an Unordered List&lt;/h2&gt;
&lt;ul&gt;
&lt;li&gt;Steps to Start a Project
&lt;ol&gt;
&lt;li&gt;Plan&lt;/li&gt;
&lt;li&gt;Design&lt;/li&gt;
&lt;li&gt;Develop&lt;/li&gt;
&lt;li&gt;Test&lt;/li&gt;
&lt;/ol&gt;
&lt;/li&gt;
&lt;li&gt;Deployment&lt;/li&gt;
&lt;/ul&gt;
<!-- Definition List --&gt;
&lt;h2&gt;5. Definition List&lt;/h2&gt;
&lt;dl&gt;
&lt;dt&gt;HTML&lt;/dt&gt;
&lt;dd&gt;HyperText Markup Language, used to structure web pages.&lt;/dd&gt;
&lt;dt&gt;CSS&lt;/dt&gt;
&lt;dd&gt;Cascading Style Sheets, used to style web content.&lt;/dd&gt;</pre>
```

```

<dt>JS</dt>
<dd>JavaScript, used to make web pages interactive.</dd>
</dl>
</body>
</html>

```

b) Write a HTML program, to explain the working of hyperlinks using tag and href, target Attributes.

- **<a>**: The anchor tag is used to create hyperlinks.
- **href (Hypertext REference)**: Specifies the destination URL or link.
- **target**: Defines where to open the linked document.

Attribute	Description	Example
href	Link destination (URL or anchor)	href="https://rgmcet.edu.in"
target="_self"	Opens in the same tab (default) (can be omitted)	
target="_blank"	Opens in a new tab or window	

```

<!DOCTYPE html>
<html lang="en">
<head>
    <title>Hyperlink Demo</title>
</head>
<body>

    <h1>Hyperlink Demonstration</h1>

    <!-- Link opens in same tab -->
    <h2>1. Open in Same Tab (default)</h2>
    <p>
        <a href="https://www.rgmcet.edu.in">Visit RGM Website</a>
    </p>

    <!-- Link opens in new tab -->
    <h2>2. Open in New Tab using target="_blank"</h2>

```

```
<p>
  <a href="https://www.google.com" target="_blank">Visit Google</a>
</p>

<!-- Internal page link -->
<h2>3. Internal Link to Page Section</h2>
<p>
  <a href="#section2">Go to Section 2</a>
</p>

<!-- Email link -->
<h2>4. Email Link</h2>
<p>
  <a href="mailto:support@example.com">Email Us</a>
</p>

<!-- Target section for internal link -->
<h2 id="section2">Section 2</h2>
<p>This is the section linked internally using an anchor (#section2).</p>

</body>
</html>
```

- c) Create a HTML document that has your image and your friend's image with a specific height and width. Also when clicked on the images it should navigate to their respective profiles.

- **<a> — Anchor Tag**

The `<a>` tag is used to define a **hyperlink**. It creates a clickable link to another **document**, **webpage**, or **location**.

Example:

```
<a href="https://example.com">Visit Example</a>
```

This creates a link labeled “**Visit Example**” that takes the user to <https://example.com>.

- ◆ **href — Hypertext Reference**

`href` stands for **Hypertext REference**, and it's an attribute of the `<a>` tag that specifies the **destination URL** of the link.

Example:

```
<a href="https://example.com">Click Here</a>
```

Clicking this link will take you to <https://example.com>.

- ◆ **target — Where to Open the Link**

The `target` attribute specifies **where to open the linked document**. Common values include:

Value	Description
_self	Opens the link in the same tab (default)
_blank	Opens the link in a new tab or window
_parent	Opens in the parent frame (for framesets)
_top	Opens in the full body of the window
framename	Opens in a named iframe

Example:

```
<a href="https://example.com" target="_blank">Open in new tab</a>
```

◆ —Image Tag

The tag is used to **embed an image** into a web page. It is a **self-closing tag**, meaning it doesn't need a closing .

Example:

```

```

◆ **src — Source**

src stands for **source**. It specifies the **path or URL of the image file** you want to display.

- It can be a local file: src="images/pic.jpg"
- Or an external URL: src="https://example.com/pic.jpg"

◆ **alt — Alternative Text**

alt provides **alternative text** if the image fails to load. It's also **used by screen readers** for accessibility.

Example:

```

```

If dog.jpg doesn't load, users will see the alt text instead.

◆ **width — Image Width**

Specifies the **display width** of the image in pixels (or sometimes in % or other units).

Example:

```

```

This will render the image with a width of **300 pixels**.

◆ **height — Image Height**

Specifies the **display height** of the image in pixels (or %).

Example:

```

```

This sets the height of the image to **200 pixels**.

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Profile Images</title>
</head>
<body>

    <h2>My Profile</h2>
    <a href="pdf file or linkedin profile page" target="_blank">
        
    </a>

    <h2>Friend's Profile</h2>
    <a href="pdf file or linkedin profile page " target="_blank">
        
    </a>

</body>
</html>
```

- d) Write a HTML program, in such a way that, rather than placing large images on a page, the preferred technique is to use thumbnails by setting the height and width parameters to something like to 100*100 pixels. Each thumbnail image is also a link to a full sized version of the image. Create an image gallery using this technique

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Thumbnail Image Gallery</title>
</head>
<body>

    <h1>Image Gallery</h1>

    <p>Click on a thumbnail to view the full-size image:</p>

    <!-- Thumbnail 1 -->
    <a href="images/fullsize1.jpg" target="_blank">
        
    </a>
```

```
</a>

<!-- Thumbnail 2 -->
<a href="images/fullsize2.jpg" target="_blank">
    
</a>

<!-- Thumbnail 3 -->
<a href="images/fullsize3.jpg" target="_blank">
    
</a>

<!-- Thumbnail 4 -->
<a href="images/fullsize4.jpg" target="_blank">
    
</a>

</body>
</html>
```