**HTML Link (<a>) Tag - Notes**

**1. What is the <a> Tag?**

The <a> tag in HTML is used to create **hyperlinks**, allowing users to navigate to other web pages, files, email addresses, or sections within the same page.

**Syntax:**

<a href="URL">Link Text</a>

**2. Types of Links in HTML**

**1. External Links (To Other Websites) 🌍**

Links that direct users to other websites on the internet.

<a href="https://www.google.com">Visit Google</a>

🔹 Clicking this will take the user to Google.

**2. Internal Links (Within Your Website) 🔄**

Links that connect different pages within the same website.

<a href="about.html">About Us</a>

🔹 This will navigate to **about.html**, assuming it is in the same folder.

**3. Email Links (mailto) 📧**

Opens the user’s email client to send an email.

<a href="mailto:example@gmail.com">Send Email</a>

🔹 Clicking this will open an email window.

**4. Phone Links (tel) 📱**

Allows users to make a call when clicked on a mobile device.

<a href="tel:+1234567890">Call Us</a>

🔹 Clicking this will open the dialer with the given number.

**5. Download Links 📂**

Allows users to download a file when clicked.

<a href="file.pdf" download>Download PDF</a>

🔹 This will download file.pdf when clicked.

**3. Target Attribute (Open in New Tab) 🆕**

By default, links open in the same tab. Use **target="\_blank"** to open a link in a new tab.

<a href="https://www.example.com" target="\_blank">Open in New Tab</a>

**4. Link to a Specific Section (Anchor Links) 🔗**

You can link to a specific section within the same page using **id attributes**.

<a href="#section2">Go to Section 2</a>

<h2 id="section2">Section 2</h2>

🔹 Clicking this will scroll down to **Section 2** on the same page.

**5. Styling Links with CSS 🎨**

Links can be styled using CSS.

a {

color: blue;

text-decoration: none; /\* Removes underline \*/

}

a:hover {

color: red; /\* Changes color on hover \*/

}

**6. Link States 🎨**

HTML links have different states that can be styled using CSS:

* **a:link** → Default state
* **a:visited** → When the link has been visited
* **a:hover** → When the user hovers over the link
* **a:active** → When the link is being clicked

Example:

a:link { color: blue; }

a:visited { color: purple; }

a:hover { color: green; }

a:active { color: red; }

**7. Button as a Link 🖱️**

You can also use a <button> to act like a link.

<button onclick="window.location.href='https://www.example.com'">Go to Website</button>

🔹 Clicking this button will take the user to the given website.

**8. Summary**

✅ <a> tag creates hyperlinks.  
✅ **href attribute** specifies the destination.  
✅ **Types of Links** → External, Internal, Email, Phone, Download.  
✅ **target="\_blank"** opens links in a new tab.  
✅ **Anchor links (#id)** allow navigation within the same page.  
✅ **CSS styles links (a:hover, a:visited, etc.)**.  
✅ **Buttons can be used as links with onclick.**