📘 HTML Notes – Table of Contents (Basic to Intermediate)

Ye syllabus **complete HTML course** cover karta hai — basic se le kar forms, tables aur semantic tags tak.

📚 UNIT 1: Introduction to HTML

🧱 UNIT 2: Basic Structure of an HTML Document

🔤 UNIT 3: Text Formatting Tags

🔗 UNIT 4: Hyperlinks

🖼️ UNIT 5: Images

📋 UNIT 6: Lists

20. Ordered list (`<ol>`)
21. Unordered list (`<ul>`)
22. List items (`<li>`)
23. Nested lists

📊 UNIT 7: Tables

24. Table structure: `<table>`, `<tr>`, `<td>`, `<th>`
25. Table attributes: `border`, `colspan`, `rowspan`
26. Basic table styling (inline style)

📑 UNIT 8: Forms and Inputs

27. Form tag `<form>`
28. Input types: text, password, radio, checkbox, submit
29. `<label>`, `<textarea>`, `<select>`, `<option>`
30. Action aur method attributes

🧱 UNIT 9: Semantic HTML

31. Semantic vs Non-Semantic tags
32. `<header>`, `<footer>`, `<nav>`, `<section>`, `<article>`, `<aside>`

🎨 UNIT 10: Inline Styling & Attributes

33. `style`, `id`, `class` attributes
34. `title`, `lang`, `dir` attributes

🎬 UNIT 11: Multimedia in HTML

35. Video tag (`<video>`)
36. Audio tag (`<audio>`)
37. Embedding YouTube videos (`<iframe>`)

🔁 UNIT 12: Practice Projects

38. Simple personal website
39. Contact form page
40. Resume layout
41. Image gallery page

📄 Appendix (Optional Topics)

- Meta tags
- HTML entities
- Validation tools
- Accessibility basics (alt, labels)

📘 UNIT 1: Introduction to HTML

🔷 1. HTML kya hai?

HTML ka full form hai: **HyperText Markup Language**.

- Ye ek **markup language** hai, programming language nahi.
- Iska kaam hota hai **web pages ka structure** bananā.
- Har website ke basic structure me HTML ka use hota hai.
- Browser is HTML code ko read karke hume design dikhata hai.

🧠 *Easy Example:*

Jaise ek building ka **naqsha (structure)** hota hai — waise hi HTML website ka naqsha banata hai.
Paint, decoration (CSS), aur movement (JavaScript) baad me aata hai.

🔷 2. HTML ki History (Thoda Background)

Year	Event
1991	Tim Berners-Lee ne HTML banayi
1995	HTML 2.0 aayi
1999	HTML 4.01 standard bana
2014	HTML5 officially launch hui

Current version: HTML5 (Isme multimedia, video, audio waghera ka support hai)

🔷 3. Browser aur Editor ka Role

- **Browser**: HTML code ko render karta hai (show karta hai)
  - Common browsers: Chrome, Firefox, Edge, Safari
- **Text Editor**: Jisme HTML code likha jata hai
  - Simple: Notepad
  - Advance: VS Code, Sublime Text

🔷 4. HTML File Kaise Banti Hai?

1. Notepad ya VS Code open karein
2. Niche wala code likhein
3. Save karein as: `index.html`
4. Browser me open karein (double click ya drag-n-drop)

🧪 *Example Code:*

```html
CopyEdit
<!DOCTYPE html>
<html>
  <head>
    <title>Meri Pehli Website</title>
  </head>
  <body>
    <h1>Welcome</h1>
    <p>Yeh mera pehla web page hai.</p>
  </body>
</html>
```

🎯 Teacher Tip / Activity Idea

- Students se yeh code likhwaayein aur browser me run karwaayein
- Phir unse ye sawal puchhein:
  - `<title>` me kya likha hai?
  - Heading aur paragraph me kya farq hai?
  - Agar `<h1>` ko `<h3>` me badlein to kya farq aata hai?

✅ Unit 1 ka Quick Review (Revision Questions):

1. HTML ka full form kya hai?
2. HTML aur CSS me kya farq hai?
3. Browser ka kya kaam hai?
4. Kaunse editor use kar sakte hain HTML likhne ke liye?
5. HTML ka current version kya hai?

🧱 UNIT 2: Basic Structure of an HTML Document

Is unit me students ko batayenge:

- Ek HTML page ka **complete structure** kaisa hota hai
- Har important **tag ka kaam**
- Browser kis part ko **render karta hai**, aur kya background me rehta hai

---

🔷 1. HTML Document ka Skeleton (Yaad karne layak)

Har HTML file ka structure **yeh hota hai**:

```
Html CopyEdit
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <h1>Heading</h1>
    <p>Yeh ek paragraph hai.</p>
  </body>
</html>
```

🔷 2. Har Tag ka Explanation

Tag	Kaam kya karta hai?
`<!DOCTYPE html>`	Batata hai ke ye HTML5 document hai
`<html>`	Ye root element hai — sab HTML isi ke andar hoti hai
`<head>`	Hidden info jaise title, links, meta data hoti hai
`<title>`	Page ka title (browser tab me dikhai deta hai)
`<body>`	Jo kuch user ko page pe dikhai deta hai (text, images etc.)
`<h1>`	Heading – sabse badi heading
`<p>`	Paragraph – normal text ke liye

🔎 3. Visual Explanation

Browser me dikhai deta hai:

- `<h1>Heading</h1>`
- `<p>Paragraph</p>`

Background me rehta hai:

- `<title>` (sirf tab pe dikhai deta hai)
- `<head>` ke andar ka data

💡 Tips for Students:

- Har HTML page `<!DOCTYPE html>` se shuru hota hai
- `<head>` ka data browser ko zaruri hota hai, magar user ko nahi dikhai deta
- `<body>` ke andar ka sab kuch **screen pe** dikhai deta hai

🧪 Class Activity Idea

1. Students ko yeh code likhwaayein
2. File save karwaayein as `structure.html`
3. Browser me open karwaayein
4. Phir changes karwakar puchhein:
   - `<title>` me apna naam likho — kya browser tab badla?
   - Ek aur `<p>` add karo — kya naya text dikh raha hai?

🧠 Questions for Review

1. `<html>` tag kis kaam ka hota hai?
2. `<head>` aur `<body>` me kya farq hai?
3. `<title>` ka content kahan nazar aata hai?
4. Agar `<body>` na ho to kya browser kuch dikhayega?

🔤 UNIT 3: Text Formatting Tags

Is unit ka maqsad hai students ko sikhaana:

- Web page par text kaise likhte hain
- Us text ko kaise style (bold, italic, underline) karte hain
- Line break aur horizontal line ka use kaise hota hai

◆ 1. Headings in HTML

- HTML me **6 headings** hoti hain:
  - `<h1>` se le kar `<h6>` tak
- `<h1>` sabse **bari heading** hoti hai
- `<h6>` sabse **choti heading**

🧪 *Example:*

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

📌 **Tip**: Heading ka size automatically browser set karta hai

---

◆ 2. Paragraphs

- Normal text likhne ke liye use hota hai: `<p>`
- Har paragraph browser me **neeche se new line** me dikhai deta hai

🧪 *Example:*

```html
CopyEdit
<p>Yeh mera pehla paragraph hai.</p>
<p>Yeh doosra paragraph hai.</p>
```

◆ 3. Text Formatting Tags

Tag	Use
`<b>`	Bold text
`<strong>`	Bold with importance
`<i>`	Italic text

Tag	Use
`<em>`	Emphasized (italic with meaning)
`<u>`	Underlined text
`<mark>`	Highlighted text
`<small>`	Chhota text
`<sub>`	Subscript (H$_2$O)
`<sup>`	Superscript (x^2)

🧪 *Example:*

```html
CopyEdit
<p><b>Bold</b>, <i>Italic</i>, <u>Underline</u></p>
<p>H<sub>2</sub>O and x<sup>2</sup></p>
```

🔷 4. Line Break and Horizontal Line

- **Line Break**: `<br>` — text ko new line me le aata hai (without new paragraph)
- **Horizontal Line**: `<hr>` — ek seedhi line lagata hai

🧪 *Example:*

```html
CopyEdit
<p>This is line 1.<br>This is line 2.</p>
<hr>
<p>Line after horizontal rule.</p>
```

🧠 Teacher Tips / Activities

1. Students se kahen heading tags `<h1>` to `<h6>` use kar ke demo banayein
2. Unse kahen aik resume jesa paragraph likhein aur usme `<b>`, `<i>`, `<u>` ka use karein
3. `<br>` aur `<hr>` ka output compare karwaayein

✅ Quick Review / Test Questions

1. HTML me sabse choti aur badi heading kaunsi hoti hai?
2. `<strong>` aur `<b>` me kya farq hai?
3. Line break ke liye kaunsa tag use hota hai?
4. Subscript aur superscript ka use kaise hota hai?

🔗 UNIT 4: Hyperlinks in HTML

◆ 1. Anchor Tag `<a>` ka Use

- Links banane ke liye HTML me `<a>` (anchor) tag use hota hai.
- Yeh kisi bhi text ya image ko **clickable** banata hai.
- Usme `href` attribute diya jata hai — jahan link le jaye.

🧪 *Basic Example:*

```html
CopyEdit
<a href="https://www.google.com">Google jao</a>
```

📌 Is example me:
"Google jao" ek **clickable text** hai. Click karne par Google khulta hai.

◆ 2. Internal vs External Links

Type	Href ka path	Example
External Link	Kisi dusri website ka URL	`href="https://www.google.com"`
Internal Link	Apni website ke kisi page ka naam	`href="about.html"`

◆ 3. `target` Attribute

- `target="_blank"` ka matlab hota hai:
  "Link nayi tab me khule"

🧪 *Example:*

```html
CopyEdit
<a href="https://www.google.com" target="_blank">Google (new tab)</a>
```

◆ 4. Anchor as Page Navigation (Optional)

- Page ke kisi part pe jump karne ke liye:
  - Pehle target element ko `id` den
  - Phir link me `#id` use karen

🧪 *Example:*

```html
CopyEdit
<a href="#contact">Go to Contact Section</a>

<!-- Niche kahin: -->
<h2 id="contact">Contact Us</h2>
```

🧠 Teacher Tips / Activities

1. Students se kahen:
    - Aik link Google ka banayein
    - Dusra link apne next HTML page ka (`about.html`)
    - Ek link me `target="_blank"` use karein
2. Group activity: 2 HTML files banwaayein (`home.html`, `about.html`) aur dono ko aapas me link karwaayein

---

✅ Quick Review / Test Questions

1. Hyperlink kaunsa tag banata hai?
2. `href` attribute kis cheez ke liye use hota hai?
3. `target="_blank"` ka kya matlab hai?
4. Internal aur external link me kya farq hota hai?

🖼️ UNIT 5: Images in HTML

🔷 1. Image Tag: `<img>`

- Tasveer (image) dikhane ke liye `<img>` tag use hota hai.
- Ye **self-closing** tag hai — iska koi closing tag nahi hota.
- Required attribute: `src` (source) aur `alt` (alternate text)

🧪 *Basic Example:*

```html
CopyEdit
<img src="pic.jpg" alt="Meri tasveer">
```

📌 Ye image file `pic.jpg` ko page par dikhayega
Aur agar image load na ho to "Meri tasveer" likha aayega

◆ **2. Important Attributes**

Attribute	Kaam
`src`	Image ka file path (source)
`alt`	Agar image na aaye to ye text dikhai deta hai
`width`	Image ki chorai (pixels ya %)
`height`	Image ki lambai

🧪 *Example with size:*

```html
CopyEdit
<img src="flower.jpg" alt="Flower" width="200" height="150">
```

◆ **3. Image Paths (File Location)**

Type	Path Example	Meaning
Relative	`images/photo.jpg`	Apni website ke folder me
Absolute	`https://example.com/pic.jpg`	Web pe kisi aur jagah se

◆ **4. Image as a Link (Bonus)**

```html
CopyEdit
<a href="https://google.com">
  <img src="google.png" alt="Google" width="100">
</a>
```

📌 Is example me image pe click karne se Google khulta hai

🧠 **Teacher Tips / Class Activities**

1. Students ko kahen ke:
   - Ek image insert karein (local file ya online link)
   - `alt`, `width`, `height` use karein
2. Ek image ko link banayen (image ke through Google open ho)

✅ **Quick Review / Questions**

1. `<img>` tag kaisa tag hai — self-closing ya paired?
2. Agar image file galat ho to kya dikhai deta hai?
3. Image ka size kaise set karte hain?
4. Relative aur absolute path me kya farq hai?

📋 UNIT 6: Lists in HTML

🔷 **1. Types of Lists in HTML**

HTML me 3 types ki lists hoti hain:

List Type	Tag	Kya Dikhata Hai?
Ordered List	`<ol>`	Numbered list (1, 2, 3…)
Unordered List	`<ul>`	Bulleted list (•, o)
Description List	`<dl>`	Term aur uski detail

◆ 2. Ordered List (`<ol>`)

- Numbers wali list
- Items define hote hain `<li>` (list item) se

🧪 *Example:*
```html
CopyEdit
<ol>
  <li>HTML</li>
  <li>CSS</li>
  <li>JavaScript</li>
</ol>
```

◆ 3. Unordered List (`<ul>`)

- Bullets wali list

🧪 *Example:*
```html
CopyEdit
<ul>
  <li>Tea</li>
  <li>Coffee</li>
  <li>Juice</li>
</ul>
```

◆ 4. Nested Lists (List ke andar List)

- List item ke andar doosri list bana sakte hain

🧪 *Example:*
```html
CopyEdit
<ul>
  <li>Fruits
    <ul>
      <li>Apple</li>
```

```
    <li>Mango</li>
  </ul>
</li>
<li>Vegetables</li>
</ul>
```

◆ 5. Description List (`<dl>`) (Optional)

- Definition/description type structure ke liye

🧪 *Example:*
```
html
CopyEdit
<dl>
  <dt>HTML</dt>
  <dd>HyperText Markup Language</dd>
</dl>
```

🧠 Teacher Tips / Class Activities

1. Students se kahen:
    - Apna **Favorite Foods** ka ordered list banayein
    - Ek **Shopping List** unordered style me banayein
    - Ek nested list banayein jisme ek category ke andar sub-items hoon
2. Group activity:
   Ek "Course Syllabus" structure banayein ordered aur nested list se

---

✅ Quick Review / Test Questions

1. Ordered aur unordered list me kya farq hai?
2. List items ke liye kaunsa tag use hota hai?
3. Nested list ka kya matlab hota hai?
4. `<dl>`, `<dt>`, aur `<dd>` ka use kya hai?

📊 UNIT 7: Tables in HTML

◆ 1. Table ka Basic Structure

Table banane ke liye kuch important tags use hote hain:

Tag	Kaam
`<table>`	Table shuru karta hai
`<tr>`	Table Row banata hai
`<td>`	Table Data (cell) banata hai
`<th>`	Table Heading cell banata hai (bold & centered by default)

◆ 2. Basic Table Example

```html
CopyEdit
<table border="1">
  <tr>
    <th>Naam</th>
    <th>Umar</th>
  </tr>
  <tr>
    <td>Ali</td>
    <td>20</td>
  </tr>
  <tr>
    <td>Sara</td>
    <td>22</td>
  </tr>
</table>
```

📌 Is example me:

- Pehli row headings ke liye hai (`<th>`)
- Baaki rows data ke liye hain (`<td>`)

◆ 3. Table Attributes

Attribute	Kaam
`border`	Table ke gird line (1, 2, etc.)
`cellpadding`	Cell ke andar ka spacing
`cellspacing`	Do cells ke darmiyan ka faasla

Attribute	Kaam

`width` / `height` Table size set karta hai

```html
CopyEdit
<table border="1" cellpadding="10" cellspacing="5" width="300">
  ...
</table>
```

🔷 4. Merging Cells: `colspan` aur `rowspan`

- `colspan`: aik cell ko **multiple columns** me le jata hai
- `rowspan`: aik cell ko **multiple rows** me le jata hai

🧪 `colspan` *Example:*
```html
CopyEdit
<tr>
  <td colspan="2">Yeh 2 columns ko join kar raha hai</td>
</tr>
```

🧪 `rowspan` *Example:*
```html
CopyEdit
<tr>
  <td rowspan="2">Yeh 2 rows me extend ho raha hai</td>
  <td>Row 1</td>
</tr>
<tr>
  <td>Row 2</td>
</tr>
```

🧠 Teacher Tips / Class Activities

1. Students ko kahen:
   - Aik **simple table** banayein jisme naam, umar, aur class ho
   - `border`, `cellpadding`, `cellspacing` ka use karein
2. Ek **timetable table** banwaayein jisme `colspan` aur `rowspan` ka use ho

---

✅ Quick Review / Questions

1. Table banane ke liye kaunsa main tag use hota hai?
2. `<td>` aur `<th>` me kya farq hai?
3. `colspan` aur `rowspan` ka kaam kya hai?
4. Table me spacing kaise control ki jaati hai?

📑 UNIT 8: Forms and Inputs in HTML

🔷 1. Form Tag: `<form>`

- HTML me user se data lene ke liye **form** ka use hota hai
- Sab input elements (`<input>`, `<textarea>`, `<button>`, etc.) **form ke andar** hote hain

Example:

```html
CopyEdit
<form action="submit.html" method="post">
  <!-- Inputs yahan aate hain -->
</form>
```

Attribute	Kaam
`action`	Form submit hone ke baad kahan jaye
`method`	Data send karne ka tareeqa (`get` ya `post`)

◆ 2. Input Types in HTML

Input Type	Tag Example
Text Field	`<input type="text">`
Password	`<input type="password">`
Email	`<input type="email">`
Radio Button	`<input type="radio">`
Checkbox	`<input type="checkbox">`
Submit Button	`<input type="submit">`
Reset Button	`<input type="reset">`
Button	`<button>Click</button>`

◆ 3. Labels

- Har input field ke sath label use karna achha practice hota hai
- Accessibility ke liye bhi zaroori hota hai

Example:

```html
CopyEdit
<label for="name">Name:</label>
<input type="text" id="name" name="username">
```

◆ 4. Textarea (Lamba Text Input)

```html
CopyEdit
<label for="msg">Message:</label><br>
<textarea id="msg" name="message" rows="4" cols="30"></textarea>
```

◆ 5. Select / Dropdown

```html
CopyEdit
<label for="city">Select your city:</label>
<select id="city" name="city">
  <option value="karachi">Karachi</option>
  <option value="lahore">Lahore</option>
  <option value="islamabad">Islamabad</option>
</select>
```

◆ 6. Complete Basic Form Example

```html
CopyEdit
<form action="submit.html" method="post">
  <label for="fname">First Name:</label>
  <input type="text" id="fname" name="fname"><br><br>

  <label for="email">Email:</label>
  <input type="email" id="email" name="email"><br><br>

  <label>Gender:</label>
  <input type="radio" name="gender" value="male"> Male
  <input type="radio" name="gender" value="female"> Female<br><br>

  <label>Hobbies:</label>
  <input type="checkbox" name="hobby" value="reading"> Reading
  <input type="checkbox" name="hobby" value="sports"> Sports<br><br>

  <input type="submit" value="Submit">
</form>
```

🧠 Teacher Tips / Activities

1. Students ko kahen ek **Contact Form** banayein jisme:
   - Name, Email, Message (textarea), Gender (radio), City (dropdown)
2. Group activity: Login Form design karwana with Username & Password

---

✅ Quick Review / Test Questions

1. Form ka purpose kya hai HTML me?
2. `action` aur `method` attributes ka kya role hai?

3. Radio aur checkbox me kya farq hai?
4. `<textarea>` aur `<input type="text">` me kya farq hai?

🧱 UNIT 9: Semantic HTML Tags

◆ 1. Semantic HTML Kya Hota Hai?

- **Semantic tags** wo hote hain jo **apne naam se hi apna kaam clear karte hain**
- Ye tags HTML5 me introduce huay taake web pages ka structure clear ho jaye
- Ye **developers, browsers, aur screen readers** ke liye page ko samajhna asaan banate hain

🔁 *Non-Semantic vs Semantic:*

Non-Semantic Tag	Semantic Tag	Kaam
`<div>`	`<header>`	Page ka top section
`<div>`	`<nav>`	Navigation links
`<div>`	`<main>`	Page ka main content
`<div>`	`<section>`	Content sections
`<div>`	`<article>`	Blog post ya news item
`<div>`	`<footer>`	Page ka bottom info

◆ 2. Common Semantic Tags & Unka Use

Tag	Use
`<header>`	Website ka top section (logo, title)
`<nav>`	Navigation bar (menu links)
`<main>`	Page ka primary content
`<section>`	Content ka ek group ya block
`<article>`	Independent content like blog post
`<aside>`	Side content like ads, tips
`<footer>`	Page ka end section (copyright, links)

◆ 3. Example: Semantic Page Structure

```
html
CopyEdit
<!DOCTYPE html>
<html>
  <head>
    <title>Semantic Page</title>
  </head>
  <body>
```

```
<header>
  <h1>My Website</h1>
</header>

<nav>
  <a href="#">Home</a>
  <a href="#">About</a>
</nav>

<main>
  <section>
    <h2>Welcome</h2>
    <p>This is a semantic HTML example.</p>
  </section>

  <article>
    <h3>Blog Post</h3>
    <p>This is a blog article.</p>
  </article>
</main>

<aside>
  <p>Ad goes here</p>
</aside>

<footer>
  <p>Copyright © 2025</p>
</footer>
  </body>
</html>
```

🧠 Teacher Tips / Activities

1. Students se kahen:
   o Ek basic website banayein jisme: `<header>`, `<nav>`, `<main>`, `<footer>` ho
   o Old `<div>` based layout ko semantic tags me convert karen
2. Discussion karaayein: Semantic tags ka SEO aur accessibility me kya faida hai?

✅ Quick Review / Test Questions

1. Semantic aur non-semantic tags me kya farq hai?
2. `<article>` aur `<section>` ka use kab hota hai?
3. `<aside>` tag ka content kya hota hai?
4. Page ke top aur bottom kaunse semantic tags handle karte hain?

🎨 UNIT 10: Inline Styling & HTML Attributes

🔷 1. Attributes in HTML

- **Attributes** kisi bhi HTML tag ke **andar likhe jaate hain** aur wo element ke baare me **additional information** dete hain.
- Har attribute ka hota hai: `name="value"` format

🧪 *Example:*

```html
CopyEdit
<p style="color:blue;">Blue Text</p>
```

🔷 2. `style` Attribute (Inline CSS)

- `style` attribute se aap kisi element ka **design ya appearance** change kar sakte hain
- Ye directly tag ke andar use hota hai

CSS Property	Kaam
`color`	Text ka color
`background-color`	Background ka color
`font-size`	Text ka size
`text-align`	Text alignment
`border`	Border add karna

🧪 *Example:*

```html
CopyEdit
<h1 style="color:red; text-align:center;">Welcome</h1>
<p style="font-size:18px; background-color:yellow;">Styled paragraph</p>
```

🔷 3. `id` Attribute

- `id` kisi element ka **unique naam** hota hai
- Ye CSS ya JavaScript se uss element ko target karne ke liye use hota hai

```html
CopyEdit
<p id="intro">Yeh paragraph important hai.</p>
```

🔷 4. `class` Attribute

- `class` attribute se hum **group of elements** ko style de sakte hain
- Multiple elements same class use kar sakte hain

```
html
CopyEdit
<p class="highlight">First paragraph</p>
<p class="highlight">Second paragraph</p>
```

◆ 5. `title` Attribute

- Jab user mouse le kar kisi element par jata hai, to ek **tooltip** show hota hai

```
html
CopyEdit
<p title="This is a tooltip">Hover over me</p>
```

◆ 6. `lang`, `dir`, aur other global attributes

Attribute	Kaam
`lang="en"`	Document ki language batata hai
`dir="rtl"`	Right-to-left (Arabic, Urdu) text direction
`hidden`	Element ko chhupa deta hai
`contenteditable`	User element ko edit kar sakta hai

🧪 *Example:*
```
html
CopyEdit
<p lang="ur" dir="rtl">یہ اردو میں ہے</p>
```

🧠 Teacher Tips / Activities

1. Students ko kahen:
   - Ek heading aur paragraph likhein jisme `style`, `id`, `class` use ho
   - `title` attribute laga kar tooltip banayein
2. Group activity:
   - Ek colored & centered paragraph banana using only inline `style`

✅ Quick Review / Test Questions

1. Inline styling kaunse attribute se hoti hai?
2. `id` aur `class` me kya farq hai?
3. Tooltip dikhane ke liye kaunsa attribute use hota hai?
4. `lang` aur `dir` attribute kab use kiye jaate hain?

🎬 **UNIT 11: Multimedia in HTML (Video, Audio, YouTube)**

◆ 1. Video in HTML

HTML5 me `<video>` tag use hota hai videos embed karne ke liye.

🧪 Basic Example:

```html
CopyEdit
<video width="320" height="240" controls>
  <source src="movie.mp4" type="video/mp4">
  Your browser does not support the video tag.
</video>
```

Attribute	Kaam
`controls`	Play, pause, volume etc. buttons show karta hai
`autoplay`	Video automatically start hoti hai
`loop`	Video repeat hoti hai
`muted`	Video mute hokar start hoti hai

📌 *Always provide `controls` so the user can play/pause.*

◆ 2. Audio in HTML

Same tarah `<audio>` tag se hum web page me sound/audio file insert karte hain.

🧪 Example:

```html
CopyEdit
<audio controls>
  <source src="audio.mp3" type="audio/mp3">
  Your browser does not support the audio tag.
</audio>
```

Format Supported

MP3

OGG

WAV

◆ 3. Embed YouTube Videos

YouTube videos ko HTML me embed karne ke liye `<iframe>` use hota hai.

🧪 *Example:*

```html
html
CopyEdit
<iframe width="560" height="315"
  src="https://www.youtube.com/embed/dQw4w9WgXcQ"
  title="YouTube video"
  frameborder="0"
  allowfullscreen>
</iframe>
```

Attribute	Kaam
`src`	YouTube video ka link (embed format me)
`allowfullscreen`	Fullscreen enable karta hai

🔷 4. Multimedia Tips

- Multimedia content ko use karne se website **interactive aur engaging** ban jaati hai
- Hamesha alternate message likhein ("Your browser does not support...") for fallback

---

🧠 Teacher Tips / Activities

1. Students se kahen:
   o Ek video file page me lagayein with controls
   o Ek audio file embed karein
   o Ek YouTube video ka embed code use karein
2. Discussion karayein:
   o Autoplay aur loop kab use karna chahiye?
   o Audio/video files ko compress karne ki importance

✅ Quick Review / Test Questions

1. HTML me video embed karne ke liye kaunsa tag use hota hai?
2. YouTube video embed karne ke liye kaunsa tag use hota hai?
3. `controls` attribute kya karta hai?
4. `<video>` aur `<audio>` me kya similarities hain?

🛠️ UNIT 12: Practice Projects in HTML

🎯 Maqsad (Objectives):

- Sabhi pichle units ke concepts ka use karna
- Apni basic HTML website banana
- Apne projects ko browser me test aur debug karna seekhna

🧑‍💻 Project 1: Personal Profile Page

✔️ Must-Have Elements:

- `<h1>` – Apna naam
- `<img>` – Apni tasveer (ya koi placeholder)
- `<p>` – Introduction
- `<ul>` – Hobbies ya skills
- `<a>` – Social media links

🧪 Example Structure:

```html
CopyEdit
<h1>Ali Raza</h1>
<img src="ali.jpg" alt="Ali's Photo" width="150">
<p>Hello! I am a student of Web Development.</p>
<ul>
  <li>Reading</li>
  <li>Coding</li>
  <li>Football</li>
</ul>
<a href="https://linkedin.com">LinkedIn Profile</a>
```

📄 Project 2: Resume / CV Page

✔️ Must-Have Elements:

- `<header>` – Name & profession
- `<section>` – Education, Experience, Skills
- `<ul>` or `<table>` – Skills ya education table
- `<footer>` – Contact info

Optional: `style` attribute for basic formatting

✉️ Project 3: Contact Form Page

✔️ Must-Have Elements:

- `<form>` with:

- Name, Email, Message fields
- Radio buttons (e.g. Gender)
- Checkboxes (e.g. Contact method)
- Dropdown (`<select>`)
- Submit button

🖼️ Project 4: Image Gallery Page

✅ *Must-Have Elements:*

- `<h1>` heading
- Multiple `<img>` tags in grid layout
- `alt`, `width`, and `title` attributes

📽️ Project 5: Video & Audio Player Page

✅ *Must-Have Elements:*

- Embed one video and one audio file
- Use of `controls`, `autoplay`, and `loop`
- One embedded YouTube video using `<iframe>`

🧠 Teacher Tips / Suggestions

- Har student ko kam az kam **2 projects** complete karna chahiye
- Encourage students to:
    - Apne projects ko **browser me khud test** karein
    - File names aur folder structure ka dhyan rakhein
- Ye projects students ke **portfolio** ka part ban sakte hain

---

✅ Wrap-Up Questions

1. Aapne kin HTML tags ka sabse zyada use kiya?
2. Kis project me aapko sabse zyada maza aaya?
3. Kya aap apne project ko kisi aur ko explain kar sakte hain?