📘 HTML Notes

1. What is HTML?

- HTML = HyperText Markup Language
- It is used to **structure** a web page.

2. Basic Structure of HTML

```
<!DOCTYPE html>
<html>
 <head>
  <title>Page Title</title>
 </head>
 <body>
  <h1>Hello, World! </h1>
  <p>This is a paragraph. </p>
 </body>
</html>
```

3. HTML Tags (Elements)

✅ Tags are written in < >
✅ Most tags have opening & closing: <p> ... </p>

4. Common HTML Tags

Tag	Use
<h1> to <h6>	Headings (biggest to smallest)
<p>	Paragraph
 	Line Break
<hr>	Horizontal Line
<a href="">	Hyperlink
<img src="">	Image
, ,	Lists
<div>	Division (container)
<span>	Inline container

5. Text Formatting Tags

Tag	Use
<b> or <strong>	Bold text
<i> or <em>	Italic text
<u>	Underline
<small>	Small text
<mark>	Highlighted text
<del>	Deleted text
<ins>	Inserted text

6. Links (Anchor Tag)

Visit

- href = URL
- target="_blank" = opens in new tab

7. Images

<img src="image.jpg" alt="Image description" width="300" height="200">

8. Lists

Unordered List:

```
<ul>
  <li>Apple</li>
  <li>Banana</li>
</ul>
```

Ordered List:

```
<ol>
  <li>First</li>
  <li>Second</li>
</ol>
```

9. Tables

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>John</td>
    <td>25</td>
  </tr>
</table>
```

10. Forms

```
<form>

 <label>Name:</label>

 <input type="text" name="name"><br>

 <label>Password:</label>

 <input type="password" name="pass"><br>

 <input type="submit" value="Submit">

</form>
```

11. Input Types

- text, password, email, number, checkbox, radio, submit, button, date, file

12. Semantic Elements

Tag	Meaning
<header>	Top section
<nav>	Navigation links
<main>	Main content
<section>	Section of content
<article>	Independent content
<aside>	Side content
<footer>	Bottom info

13. Media Tags

```
<video controls width="300">

 <source src="video.mp4" type="video/mp4">

</video>
```

```
<audio controls>
  <source src="audio.mp3" type="audio/mpeg">
</audio>
```

14. Iframe (Embed another site)

```
<iframe src="https://example.com" width="400" height="300"></iframe>
```

15. Meta Tags (in <head>)

```
<meta charset="UTF-8">
<meta name="description" content="Free HTML Notes">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

16. Inline vs Block Elements

Inline Elements	Block Elements
<span>, <a>, <img>	<div>, <p>, <h1>

17. Comments in HTML

```
<!-- This is a comment -->
```

18. HTML5 Doctype

```
<!DOCTYPE html>
```

19. HTML Entities

-   = space
- < = <
- > = >
- & = &
- " = "
- © = ©

20. Best Practices

- Always close your tags
- Use lowercase for tags
- Use semantic tags
- Use alt attributes for images
- Keep structure clean and readable

INTERVIEW QUESTIONS

◆ **Basic HTML**

1. **What is HTML?**
   → HTML stands for HyperText Markup Language.

2. **What is the purpose of HTML?**
   → It structures web page content.

3. **What does mean?**
   → It defines the HTML version (HTML5 here).

4. **What is a tag in HTML?**
   → A keyword used to define elements, e.g., <p>.

5. **What is an element?**
   → A complete HTML tag with content.

6. **What is the difference between HTML and HTML5?**
   → HTML5 supports audio, video, and semantic elements.

7. **What are void elements?**
   → Elements that don't have a closing tag, e.g., <br>.

8. **Is HTML case-sensitive?**
   → No, tags are not case-sensitive.

9. **How do you comment in HTML?**
   → <!-- This is a comment -->

10. **Can we write inline CSS in HTML?**
    → Yes, using the style attribute.

◆ **Common Tags**

11. **Tag for paragraph?**
    → <p>

12. **Tag for largest heading?**
    → <h1>

13. **Tag to insert image?**
    → <img src="img.jpg" alt="desc">

14. **Tag to create a link?**
    → Link

15. **Tag to make text bold?**
    → <b> or <strong>

16. **Tag for italic text?**
    → <i> or <em>

17. **Tag to create a line break?**
    →

18. **Tag for horizontal line?**
    → <hr>

19. **Tag for creating a table?**
    → <table>

20. **Tag to add a table row?**
    → <tr>

- ◆ **Lists & Forms**

21. **Unordered list tag?**
    → \<ul\>

22. **Ordered list tag?**
    → \<ol\>

23. **List item tag?**
    → \<li\>

24. **Form tag?**
    → \<form\>

25. **Text input tag?**
    → \<input type="text"\>

26. **Password input tag?**
    → \<input type="password"\>

27. **Submit button tag?**
    → \<input type="submit"\>

28. **Textarea tag?**
    → \<textarea\>\</textarea\>

29. **Dropdown/select tag?**
    → \<select\>\<option\>\</option\>\</select\>

30. **Checkbox input tag?**
    → \<input type="checkbox"\>

- ◆ **Advanced HTML**

  31. **What is semantic HTML?**
      → Tags that describe meaning, like <article>, <nav>.

  32. **What is the use of <div>?**
      → A block-level container.

  33. **What is <span>?**
      → An inline container.

  34. **What is <iframe> used for?**
      → Embeds another page in the current page.

  35. **How to open a link in a new tab?**
      → Add target="_blank" in <a>.

  36. **How to add metadata in HTML?**
      → Using <meta> tag in <head>.

  37. **What is the <head> tag?**
      → Contains meta info like title, links, styles.

  38. **What is the <title> tag?**
      → Sets the browser tab name.

  39. **What is <script> used for?**
      → To add JavaScript to a page.

  40. **What is the <style> tag?**
      → To write internal CSS.

- ◆ **Multimedia & Entities**

  41. **How to embed a video?**
      → <video controls><source src="video.mp4"></video>

  42. **How to embed audio?**
      → <audio controls><source src="audio.mp3"></audio>

  43. **What is an entity in HTML?**
      → A special character code (e.g., < for <)

  44. **How to add a favicon?**
      → <link rel="icon" href="favicon.ico">

  45. **What is alt in <img>?**
      → Describes the image if it can't load.

◆ **HTML5 Features**

46. **New form input types in HTML5?**
    → email, date, range, color, etc.

47. **New semantic tags in HTML5?**
    → <header>, <footer>, <section>, <article>

48. **What is localStorage?**
    → Stores data in browser permanently.

49. **What is sessionStorage?**
    → Stores data until the browser is closed.

50. **What tool to validate HTML?**
    → W3C Validator (https://validator.w3.org)