1. Explain the structure of an HTML document and the purpose of DOCTYPE.

* An HTML document is structured in a hierarchical format with specific tags that define

Different parts of the webpage.

* HTML structure is given to below.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

</head>

<body>

<!-- Page content goes here -->

</body>

</html>

* <!DOCTYPE html>:
* Declares that this is an HTML5 document.
* Helps browsers render the page correctly.
* <html lang="en">:
* Starts the HTML document.
* lang="en" sets the document language to English for accessibility and SEO.
* <head> section:
* The <head> section of an HTML document contains metadata (data about the data).
* It is placed before the <body>, and does not display anything directly on the webpage.
* <meta charset="UTF-8">
* Sets the character encoding to UTF-8, which supports most characters from all written languages.
* <meta name="viewport" content="width=device-width, initial-scale=1.0">
* This line is a meta tag placed in the <head> section of your HTML. It tells the browser how to control the page's dimensions and scaling, especially on mobile devices.
* meta
* This is an HTML tag used to define metadata — information about the document, not shown on the page itself.
* name="viewport"
* This tells the browser that you're defining settings for the viewport.
* The viewport is the visible area of a web page on a screen — it’s especially important on mobile devices where the screen size varies.
* content="width=device-width, initial-scale=1.0"
* Inside the content attribute, we define how the page should behave on different screen sizes.
* width=device-width: Sets the width of the viewport to match the device’s screen width.
* On a phone, it means the layout will scale to the screen's width (not stay zoomed out).
* initial-scale=1.0: Sets the initial zoom level when the page is loaded.1.0 means the page is shown at 100% scale (no zoom in or out by default).
* In short, Make the page fit the screen size of the device and show it at normal zoom.
* <title>Document</title>
* Sets the page title (shown on the browser tab).
* <body> </body>
* This is where all visible content (like text, images, buttons) goes.
* The <body> tag defines the main content of an HTML document. All the elements you want the user to see—text, images, videos, links, tables, buttons, and more—are placed inside the <body> tag.

1. List and explain at least five common HTML tags used in website design.

* **List of tags**

1. <h1></h1> to <h6></h6>
2. <br>
3. <hr>
4. <p></p>
5. <span></span>
6. <b></b>
7. <strong></strong>
8. <i></i>
9. <em></em>
10. <cite></cite>
11. <del></del>
12. <strike></strike>
13. <marquee></marquee>
14. List tag :- <ol>,<ul>,<dl>
15. Anchor tag:- <a hef=””></a>
16. Image tag :- <img>

* **Explain Five tags:-**
* **<h1></h1> TO <h6></h6> :-**Heading tag are used to define headings on a web page. These tags range from <h1> to <h6>.
* <h1>:Define the largest and bold heading on a web page.
* <h2>:Define the smallest heading on a web page.
* **<p></p>:-**This tag is inline element on a web page.HTML is used to define paragraph of text. Browsers automatically add space before and after each to paragraphs.
* **<br> :-** This tag is used to insert a line break within text in HTML. It tells the browser to start a new line without starting a new paragraph.
* **Anchor tag [ <a>/<a>] :-** This tag in HTML is used to create hyperlink, which allow users to click and navigate to another page, a file, an email address, or another location within the same page.
* Syntax: <a href=>    </a>
* **<hr>:-** The <hr> tag in HTML stands for Horizontal Rule. It is used to create a thematic break (a horizontal line) between sections of content.

1. Describe the difference between block-level and inline element in HTML.

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| --- | --- | --- |
| Topic | Block-Level | Inline |
| Display Behavior | start on a new line | Does not start on a new line |
| Width | Takes full width of the parent container by default | Takes only as much width as the content needs |
| Height | Can be set using CSS | Cannot usually be changed directly |
| Contains | Can contain block-level and inline element | Can contain only text and inline elements |
| Common Use | Structural layout | Text formatting and small elements |
| Examples | <div>,<p>,<h1>to<h6>,<section>,  <article>,<ul> | <span>,<a>,<strong>,<em>,<img> |