1. **What is Doctype?**

* The declaration or instruction to web browser about version of “HTML” for HTML 5 declaration is !DOCTYPE

**Doctype:** The <!DOCTYPE html> declaration is an instruction to the web browser about what version of HTML the page is written in. It helps the browser to render the page correctly. For HTML5, the doctype declaration is <!DOCTYPE html>, which is simple and ensures that the browser uses the HTML5 standards for rendering the document.

1. **What is HTML?**

* HyperText Markup Language is standard language used to create and design web pages. It provides structure of web page by using various elements and tags to define content, such as headings, paragraphs, links, images and other multimedia elements.

HTML: HyperText Markup Language (HTML) is the standard language used to create and design web pages. It provides the structure of a web page by using various elements and tags to define the content, such as headings, paragraphs, links, images, and other multimedia elements.

1. **What is the difference between HTML4 and HTML5?**

* Released in 1997, HTML4 included features for web forms, scripting and styling via CSS. But it did not support video and audio, LATER IN 2014 HTML5 was introduced with new features it supports offline web application and provides API for complex web application with semantic elements which describes its meaning to both the browser and the developer.

HTML4 vs. HTML5:

HTML4&HTML5: Released in 1997, HTML4 included features for web forms, scripting and styling via CSS. But it did not support video and audio embedding. So in 2014 HTML5 was introduced what supported semantic clements

HTML4: Released in 1997, HTML4 includes features for web forms, scripting, and styling via CSS. It does not natively support video and audio embedding.

HTML5: Released in 2014, HTML5 introduces new features such as semantic elements (<article>, <section>, <nav>, <header>, <footer>), multimedia support (<audio>, <video>), graphics (<canvas>, <svg>), and enhanced form controls (<date>, <email>, <range>). It also supports offline web applications and provides APIs for complex web applications.

1. **What is the root element in HTML?**

* Root element encompasses all other elements on the page including head and body. The html tag indicates the beginning of the document.

Root Element: The <html> tag is the root element of an HTML document. It encompasses all other elements on the page, including the <head> and <body> elements. The <html> tag indicates the beginning of an HTML document.

1. **What is the meta tag and metadata?**

* Meta tag is character set that gives information on author of the document, keywords and view port settings for a responsive design and Meta data specifies the character encoding and ensure proper scaling on different devices basically for SEO and for different browser compatibility.

Meta Tag: The <meta> tag provides metadata about the HTML document. Metadata is data about the data, which can include information such as the character set, author of the document, keywords, and viewport settings for responsive design.

Metadata: Examples include <meta charset="UTF-8"> (specifies the character encoding), <meta name="viewport" content="width=device-width, initial-scale=1.0"> (ensures proper scaling on mobile devices), and other tags that help with SEO and browser compatibility.

1. **What is the first line of responsive design?**

The first responsive design comes in meta viewport tag it is essential for responsive web design as it typically explains adaptive screen size for various devices and browsers. First line in head section. Eg. < meta name = "viewport" content = "width = device-width , initial-scale = 1.0 ">

First Line of Responsive Design: The meta viewport tag is essential for responsive web design. It is typically the first line in the <head> section that helps a web page adjust to different screen sizes. Example:

html

Copy code

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

1. **What is the difference between tags and elements?**

* Tags are enclosed in angle brackets they are in pair, recognized as opening tag<p> closing tag </p> or self closing like<img/>. Where else elements consist of tags and content within them. It includes opening tag, the content and the closing tag. Like “<p>this is paragraph </p>” is a paragraph element

Tags vs. Elements:

Tags: Tags are the basic building blocks of HTML, used to define elements. Tags are enclosed in angle brackets, like <p>, <div>, etc. Tags come in pairs: an opening tag (<p>) and a closing tag (</p>), or self-closing like <img />.

Elements: Elements consist of tags and the content within them. An element includes the opening tag, the content, and the closing tag. For example, <p>This is a paragraph.</p> is a paragraph element.

1. **What is an attribute?**

* Attribute basically modifies behavior of an element, and provides more control over the element behaves or is styled. Examples include href in < a href= "url" >, src in < img src = "image.jpg" >, and class in < div class = "container" > etc..

Attribute: Attributes provide additional information about HTML elements. They are always included in the opening tag and usually come in name/value pairs like name="value". Examples include href in <a href="url">, src in <img src="image.jpg">, and class in <div class="container">. Attributes modify the default behavior of an element and provide more control over how the element behaves or is styled.