

Q.1 <!DOCTYPE html> is it a tag of html? If not, what is it and why do we use it?

Ans - <!DOCTYPE html> is not a tag in HTML; it is called a document type declaration (DTD) or a doctype declaration. It is used at the beginning of an HTML document to specify the version of HTML being used. The <!DOCTYPE html> declaration is used for HTML5, which is the latest version of HTML.

Q.2 Explain Semantic tags in html? And why do we need it?

Semantic tags in HTML are specific HTML elements that provide meaning and structure to the content they surround. Unlike non-semantic tags (such as <div> and), semantic tags convey information about the type of content they contain. Semantic tags improve the accessibility and search engine optimization (SEO) of a webpage by allowing browsers, search engines, and assistive technologies to understand the purpose and structure of the content more accurately.

Some commonly used semantic tags in HTML5 include:

- <header>: Represents the introductory content or a container for a group of introductory content.
- <nav>: Defines a section of navigation links.
- <article>: Represents a self-contained composition in a document, such as a blog post, news story, or forum post.
- <section>: Defines a generic section of a document or application.
- <aside>: Represents content that is tangentially related to the surrounding content.
- <footer>: Defines a footer for a document or section.

Semantic tags help to structure the HTML document in a more meaningful and organized way, making it easier to understand and maintain.

Q.3 Differentiate between HTML Tags and Elements?

Ans - Q.3 HTML tags and elements are closely related but have different meanings:

- HTML Tags: Tags are used to mark up the structure and elements of an HTML document. They are enclosed in angle brackets (<>). For example, <h1>, <p>, <div>, , etc., are HTML tags. Tags define the purpose or function of an element and are used to create the structure and layout of a webpage.
- HTML Elements: Elements consist of a start tag, content, and an end tag. They are formed by combining HTML tags and the content they surround. For example,

`<h1>This is a heading</h1>` is an HTML element where `<h1>` is the start tag, "This is a heading" is the content, and `</h1>` is the end tag. Elements are the building blocks that make up the actual content of a webpage.

Q.4 Build Your Resume using HTML only?

Ans - `<!DOCTYPE html>`

`<html>`

`<head>`

`<title>Resume</title>`

`<style>`

`/* CSS styles can be added here to customize the resume's appearance */`

`</style>`

`</head>`

`<body>`

`<h1>John Doe</h1>`

`<p>Address: 123 Main Street, City, State</p>`

`<p>Email: john@example.com</p>`

`<p>Phone: (123) 456-7890</p>`

`<h2>Education</h2>`

``

`Bachelor of Science, Computer Science - XYZ University, Year`

``

```
<h2>Experience</h2>
```

```
<ul>
```

```
  <li>Job Title - Company, Date</li>
```

```
  <li>Responsibilities and achievements</li>
```

```
</ul>
```

```
<h2>Skills</h2>
```

```
<ul>
```

```
  <li>Skill 1</li>
```

```
  <li>Skill 2</li>
```

```
  <li>Skill 3</li>
```

```
</ul>
```

```
<h2>References</h2>
```

```
<p>Available upon request</p>
```

```
</body>
```

```
</html>
```

Q.5 Write HTML code so that it looks like the below image

```
<!DOCTYPE html>

<html>

<head>

  <title>Image Example</title>

</head>

<body>

  <h1>Displaying an Image</h1>

  

</body>

</html>
```

Q.6 What are some of the advantages of HTML5 over its previous versions?

New Semantics: HTML5 introduces new semantic elements like `<header>`, `<nav>`, `<article>`, `<section>`, etc., which provide clearer structure and meaning to the content, making it more accessible and SEO-friendly.

Improved Multimedia Support: HTML5 includes native support for audio and video elements (`<audio>` and `<video>`), eliminating the need for third-party plugins like Flash. This allows for easier embedding and customization of multimedia content.

Canvas Element: HTML5 introduces the `<canvas>` element, which provides a drawing surface for rendering graphics, animations, and interactive content directly within the browser, without the need for plugins.

Enhanced Form Controls: HTML5 introduces new form input types (`<input type="date">`, `<input type="email">`, `<input type="range">`, etc.) and attributes (such as `required`, `pattern`, `placeholder`, etc.), making form handling and validation more powerful and user-friendly.

Q.7 Create a simple Music player using html only

```
<!DOCTYPE html>

<html>

<head>

  <title>Music Player</title>

</head>

<body>

  <h1>Music Player</h1>

  <audio controls>

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

    Your browser does not support the audio element.

  </audio>

</body>

</html>
```

Q.8 What is the difference between <figure> tag and tag?

`<figure>` tag: It represents self-contained content, such as an image, diagram, illustration, or code snippet, that is referenced in the main content. It can be used to group the content and provide a caption using the `<figcaption>` tag. It is often used when the content requires additional context or explanation.

`` tag: It is a standalone tag used specifically for embedding images in HTML documents. It represents an image within the document and does not provide additional context or a caption.

Q.9 What's the difference between html tag and attribute and give example of some global attributes?

- **HTML Tag:** An HTML tag is used to define an element in an HTML document. Tags are enclosed in angle brackets (`<>`) and consist of a tag name. For example, `<h1>`, `<p>`, `<div>`, etc., are HTML tags. Tags define the purpose or function of an element and contribute to the structure and layout of a webpage.
- **HTML Attribute:** An HTML attribute provides additional information or modifies the behavior of an HTML element. Attributes are added within the opening tag of an element and consist of a name and a value. For example, in ``, the `href` attribute specifies the hyperlink destination. Attributes can affect the appearance, behavior, or functionality of an element.