1. **[Are <div> and <span> tags similar?](https://www.geeksforgeeks.org/difference-between-div-and-span-tag-in-html/" \t "_blank)**

Both the tags ([**<div>**](https://www.geeksforgeeks.org/div-tag-html/) and [**<span>**](https://www.geeksforgeeks.org/span-tag-html/)) are used to represent the part of the web page. The <div> tag is used as the block component, and the <span> tag is used as an inline component.

### [****What is the difference between classes and id?****](https://www.geeksforgeeks.org/difference-between-an-id-and-class-in-html/)

[**id Attribute**](https://www.geeksforgeeks.org/html-id-attributes/)**:** The id attribute is a unique identifier that is used to specify the document. It is used by CSS and JavaScript to perform a certain task for a unique element. In CSS, the id attribute is written using the # symbol followed by id.

[**class Attribute**](https://www.geeksforgeeks.org/html-class-attribute/)**:** The class attribute is used to specify one or more class names for an HTML element. The class attribute can be used on any HTML element. The class name can be used by CSS and JavaScript to perform certain tasks for elements with the specified class name. The class name can be represented by using the **“.”** symbol.

### [****What are the tags that can be used inside the <head> tag?****](https://www.geeksforgeeks.org/elements-that-are-used-in-head-section-of-html-page/)

The <head> element is like a container for metadata

### [****What is SVG?****](https://www.geeksforgeeks.org/html-svg-basics/)

SVG stands for Scalable Vector Graphics. It basically defines vector-based graphics in XML format. SVG graphics do NOT lose any quality if they are zoomed or resized. Every element and every attribute in SVG files can be animated.

1. **What are block-level elements in HTML?**

**Answer:** Block-level elements start on a new line and take up the full width available (stretching out to the left and right as far as possible). They typically contain other block or inline elements.

**Examples:** <div>, <p>, <h1> to <h6>, <section>, <article>, <footer>

<div>, <p>, <header>, <footer>, <h1>-<h6>, <section>, <article>, <ul>, <ol>, <li>

1. **What are inline-level elements in HTML?**

**Answer:** Inline-level elements do not start on a new line and only take up as much width as necessary. They are typically contained within block-level elements.

**Examples:** <span>, <a>, <strong>, <em>, <img>

<span>, <a>, <strong>, <em>, <img>, <br>, <input>

1. **What is !DOCTYPE?**

A **doctype**or **document-type** declaration is an instruction that tells the web browser about the markup language in which the current page is written. The doctype is not an element or tag, it lets the browser know about the version of or standard of HTML or any other markup language that is being used in the document. The DOCTYPE for HTML5 is case-insensitive and can be written as shown below:

<!DOCTYPE html>

1. What is Tag and Elements?

**Tag:**

* A **tag** is a part of the HTML code that marks the start or end of an element.
* Tags are written within angle brackets (< >).
* Tags can be opening tags (<p>) or closing tags (</p>).

**Element:**

* An **element** refers to the entire structure, which includes the opening tag, the content inside, and the closing tag (if required).
* An element defines the structure and content on the web page.
* Some elements are self-closing (e.g., <img />, <br />).

1. What is the Attributes ?

An attribute is used to provide extra or additional information about an element.

* All HTML elements can have attributes. Attributes provide additional information about an element.
* It takes 2 parameters ie., **name and value.** These define the properties of the element and are placed inside the opening tag of the element. The name parameter takes the name of the property we would like to assign to the element and the value takes the property value or extent of the property names that can be aligned over the element.
* Every name has some value that must be written within quotes.

**Attributes** in HTML provide additional information about HTML elements. They are always included in the opening tag and usually come in **key-value** pairs, separated by an equal sign (=). Attributes help modify the behavior, style, or content of elements.

1. **What is the use of the target attribute in the <link> tag?**

The [HTML <link> target Attribute](https://www.geeksforgeeks.org/html-link-target-attribute) is used to specify the window or a frame where the linked document is loaded. It is not supported by HTML 5.

The \*\*target\*\* attribute in an HTML <a> (anchor) tag specifies where to open the linked document. It controls how the browser behaves when the user clicks a hyperlink.

**Syntax:**

<link target="\_blank|\_self|\_parent|\_top|framename">

**Attribute Values:**

* **\_blank:** It opens the link in a new window.
* **\_self:** It opens the linked document in the same frame. (Default)
* **\_parent:** It opens the linked document in the parent frameset.
* **\_top:** It opens the linked document in the full body of the window.
* **framename:** It opens the linked document in the named frame.

**11.**[**What is the difference between classes and id?**](https://www.geeksforgeeks.org/difference-between-an-id-and-class-in-html/)

[**id Attribute**](https://www.geeksforgeeks.org/html-id-attributes/)**:** The id attribute is a unique identifier that is used to specify the document. It is used by CSS and JavaScript to perform a certain task for a unique element. In CSS, the id attribute is written using the # symbol followed by id.

**Syntax:**

<element id="id\_name">  
  
In CSS Stylesheet:  
#id\_name {  
 // CSS Property  
}

[**class Attribute**](https://www.geeksforgeeks.org/html-class-attribute/)**:** The class attribute is used to specify one or more class names for an HTML element. The class attribute can be used on any HTML element. The class name can be used by CSS and JavaScript to perform certain tasks for elements with the specified class name. The class name can be represented by using the **“.”** symbol.

**Syntax:**

<element class="class\_name>  
  
In CSS Stylesheet:  
.class {  
 // CSS Property  
}

* **Difference between id and class attribute:** The only difference between them is that “id” is unique on a page and can only apply to at most one element, while the “class” selector can apply to multiple elements.

12) **4.**[**How can we create a** **nested webpage in HTML?**](https://www.geeksforgeeks.org/how-to-create-a-nested-webpage-in-html/)

When the content of one completely different webpage is embedded into another webpage, it is called a nested webpage. The nested webpage can be created using the following 2 methods:

* **<iframe> tag**: The[iframe](https://www.geeksforgeeks.org/html-iframes/) in HTML stands for Inline Frame. The “iframe” tag defines a rectangular region within the document in which the browser can display a separate document, including scrollbars and borders.
* **<embed> tag**: The [<embed> tag](https://www.geeksforgeeks.org/html-embed-tag/) in HTML is used for embedding external applications which are generally multimedia content like audio or video into an HTML document.

**13)**[**What are semantic elements?**](https://www.geeksforgeeks.org/html5-semantics/)

**Semantic Elements**have meaningful names which tell about the type of content. For instance header, footer, table, … etc. HTML5 introduces many semantic elements as mentioned below which make the code easier to write and understand for the developer as well as instruct the browser on how to treat them.

* **article:** It contains independent content which doesn’t require any other context.
* **aside:** It is used to place content in a sidebar i.e. aside from the existing content.
* **details:** It defines additional details that the user can hide or view.
* **figure & figcaption:** It is used to add an image to a web page with a small description.
* **footer:** It is located at the bottom of any article or document, they can contain contact details, copyright information, etc.
* **header:** It is used for the header of a section introductory of a page.
* **main**: It defines the main content of the document.
* **mark**: It is used to highlight the text.
* **nav**: It is used to define a set of navigation links in the form of a navigation bar or nav menu.
* **section**: A page can be split into sections like Introduction, Contact Information, Details, etc and each of these sections can be in a different section tag.

**14)**[**How can we add symbols in HTML?**](https://www.geeksforgeeks.org/html-symbols/)

* There are some characters in HTML that are reserved, & have special meaning when they are used in an HTML document. Like if you used less than or greater than sign in your HTML document then the browser will treat them differently. So we will use HTML entities to insert symbols in a webpage.

| **Special Symbols** | **Syntax** |
| --- | --- |
| ©:copyright | &copy; |
| ®:registered trademark | &reg; |
| ™:trade mark | &trade; |
| @: at | &commat; |
| ¶: paragraph | &para; |
| §: section | &sect; |
| ℂ: double-struck capital c | &copf; |
| ℅: care of | &incare; |

15) **What is the difference between Cellpadding and Cellspacing in HTML Table?**

[**Cellpadding**](https://www.geeksforgeeks.org/html-table-cellpadding-attribute): Cellpadding specifies the space between the border of a table cell and its contents (i.e) it defines the whitespace between the cell edge and the content of the cell.

**cell spacing** refers to the space between individual table cells.

16) Can block level element contain the inline element ?

Yes <div> <span> …… </span> </div>

17) Vise versa ?

No

18) How would you make webite responsive the website ?

**19) What is the use of defer Attribute in <script> Tags ?**

**1) The “defer” attribute in**[**<script> tags**](https://www.geeksforgeeks.org/html-script-tag/) are used to specify that the script should be executed after the [HTML](https://www.geeksforgeeks.org/html-introduction/) document has been parsed. This attribute is primarily used to improve page loading performance by deferring the execution of non-essential scripts until after the document has been fully loaded, allowing for faster rendering and improved user experience.

Other Optimization techniques ?

2) **LazyLoading**:  
Lazy loading is a technique that defers the loading of non-critical resources until they are actually needed. This optimizes the initial page load time. Let’s see an example of lazy loading images using the `loading=”lazy”` attribute in HTML:

**3)Minimizing Render-blocking CSS and JavaScript**:  
Render-blocking resources can delay the rendering of your web page. By optimizing the way CSS and JavaScript are loaded, you can improve the page’s performance. Here’s an example of asynchronously loading JavaScript using the `async` attribute:

4) Avoiding the inline css:

5) Cached resources can be quickly retrieved from local storage, reducing the need for round-trip requests to the server. This minimizes latency and improves page load times.

6)Compression reduces the size of HTML files, stylesheets, and scripts, reducing the amount of data transferred between the server and the client.

**What are void (self-closing) elements?**

* Elements that don’t have a closing tag (<br>, <hr>, <img>).

What is the role of the <meta> tag?

1. **What is ARIA in HTML?**

* Accessibility features: aria-label, aria-hidden, etc.

**What is the role of the <meta> tag?**

* The <meta> tag provides **metadata** about the HTML document. This metadata is not displayed on the page but is **used by browsers, search engines, and social platforms**.

**✅ Common Uses:**

1. **Character Encoding:**

<meta charset="UTF-8">

1. **Viewport Settings for Responsive Design:**

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

1. **SEO and Page Description:**

html

CopyEdit

<meta name="description" content="Learn HTML interview questions.">

1. **Author Info:**

html

CopyEdit

<meta name="author" content="John Doe">

1. **Robots Instructions (SEO):**

html

CopyEdit

<meta name="robots" content="index, follow">

What is the Reflow and Repaint ?

**Reflow (also called Layout)**

* **Definition:** Reflow is the process where the browser calculates the layout (position and size) of elements in the DOM.

**When it happens:**

* When you add, remove, or modify visible DOM elements.
* When styles that affect layout change (like width, height, margin, padding, display, etc.).
* When the window is resized or fonts are loaded.

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* When you add, remove, or modify visible DOM elements.
* When styles that affect layout change (like width, height, margin, padding, display, etc.).
* When the window is resized or fonts are loaded.

**Repaint**

* **Definition:** Repaint is when the browser redraws elements on the screen after changes that do **not** affect layout but **do** affect visibility or style.
* **When it happens:**
  + Changing background-color, visibility, box-shadow, color, etc.
  + Applying CSS changes that do **not** require reflow.

### What is the difference between “display: none” and “visibility: hidden”, when used as attributes to the HTML element.

When we use the attribute “visibility: hidden” for an HTML element then that element will be hidden from the webpage but still takes up space. Whereas, if we use the “display: none” attribute for an HTML element then the element will be hidden, and also it won’t take up any space on the webpage.