**10 oct Assignment:**

1. **Explain types of basic, attribute, combination and adjacent css selectors with examples.**
2. **Basic CSS Selectors:**
3. **Element Selector or Tag Selector:**

* **The element selector targets all HTML elements with a specific tag.**
* **Example: To select all h1 elements and change their text color to red.**

**h1 {**

**color: red:**

**}**

1. **Class Selector:**

* **The class selector targets elements with a specific class attribute.**
* **Example: To select all elements with the class "heading" and make their text color blue.**

**.heading {**

**color: blue;**

**}**

1. **ID Selector:**

* **The ID selector targets a single element with a unique id attribute.**
* **Example: To select an element with the id "header" and set its background color to grey.**

**#header {**

**background-color: grey;**

**}**

1. **Universal Selector:**

* **The universal selector targets all HTML elements on the page.**
* **Example: To set red color for all elements on the page.**

**\* {**

**Color: red**

**}**

1. **Grouping Selector:**

**A grouping CSS selector allows you to apply the same set of styles to multiple selectors in a single rule. This can make your CSS code more concise and organized. To create a grouping selector, you list multiple selectors separated by commas and then define the common styles that you want to apply to all of those selectors.**

**Suppose you want to apply the same text color to both <h1> (heading 1) elements and all elements with the class "highlight." Instead of writing separate rules for each selector, you can use a grouping selector:**

**h1, .highlight {**

**color: blue;**

**}**

1. **Attribute Selector:**

**An attribute selector in CSS allows you to select HTML elements based on the presence of specific attributes or the values of those attributes.**

1. **Attribute Existence Selector:**

* **Selects elements that have a specific attribute, regardless of its value.**
* **Example: To select all elements with a "data-tooltip" attribute.**

**[data-tooltip] {**

**border-bottom: 1px dotted #000;**

**}**

1. **Attribute Equality Selector:**

* **Selects elements with a specific attribute and a specific attribute value.**
* **Example: To select all elements with target="\_blank".**

**[target="\_blank"] {**

**background-color: yellow;**

**}**

1. **Attribute Prefix Selector:**

* **Selects elements whose attribute value starts with a specified string.**
* **Example: To select all elements with a href attribute that starts with "https://".**

**[href^="https://"] {**

**color: green;**

**}**

1. **Attribute Substring Selector:**

* **Selects elements whose attribute value contains a specific substring.**
* **Example: To select all elements with a title attribute containing "video".**

**[title\*="video"] {**

**font-weight: bold;**

**}**

1. **Attribute Suffix Selector:**

* **Selects elements whose attribute value ends with a specified string.**
* **Example: To select all elements with a src attribute ending in ".jpg".**

**[src$=".jpg"] {**

**border: 2px solid red;**

**}**

**2. Combination Selector:**

**A combination selector, also known as a compound selector, is a CSS selector that combines multiple selectors to create a more specific or refined selection.**

**div.container p {**

**color: blue;**

**}**

**In this example:**

* **div.container selects all div elements with the class "container."**
* **p selects all p elements that are descendants (inside) of the selected div.container elements.**

**<div class="container">**

**<p>This paragraph is blue.</p>**

**</div>**

**<div class="container">**

**<p>Another blue paragraph.</p>**

**</div>**

**<p>This paragraph is not blue.</p>**

**In this case, only the p elements inside a div with the class "container" will have their text color set to blue. The last p element is not affected because it's not inside a div with the "container" class.**

**3. Adjacent Selector:**

**An adjacent selector in CSS is used to select an element that is immediately preceded by another specific element. It allows you to style an element that comes right after another specific element within the same parent element. The adjacent selector is represented by the + symbol.**

**Suppose you want to style the p element that directly follows an h1 element by making the text bold. You can use the adjacent selector like this:**

**h1 + p {**

**font-weight: bold;**

**}**

**In this code:**

* **h1 selects all <h1> elements.**
* **+ is the adjacent selector, which specifies that you want to target a p element that immediately follows an h1 element.**

**<h1>This is a heading</h1>**

**<p>This paragraph is bold because it follows an h1.</p>**

**<p>This paragraph is not bold.</p>**

**<h1>Another heading</h1>**

**<p>Another bold paragraph.</p>**

**In this example, the first p element directly following an h1 element has its font weight set to bold, but the second p element is not affected because it does not immediately follow an h1 element.**

**B. Containing a value followed by a value for Attribute selector.**

**Attribute selectors can be used to select elements based on the presence of an attribute and its value. You can use different operators within attribute selectors to specify various conditions. To select an element containing a specific value followed by another value for an attribute, you can use the | (hyphen) and the \* (asterisk) operators.**

1. **Attribute Value Starts with a Specific Value (| operator):**

* **The | operator is used to select elements where the attribute value starts with a specified string followed by a hyphen.**
* **Example: To select all elements with a lang attribute starting with "en" (e.g., "en-US", "en-GB").**

**[lang|="en"] {**

**color: blue;**

**}**

**<p lang="en-US">This is in English (US).</p>**

**<p lang="en-GB">This is in English (UK).</p>**

**<p lang="fr-FR">This is in French.</p>**

**In this example, the CSS rule selects elements with a lang attribute that starts with "en" followed by a hyphen.**

1. **Attribute Value Contains a Specific Value (\* operator):**

* **The \* operator is used to select elements where the attribute value contains a specified substring.**
* **Example: To select all elements with a data-attribute containing the value "123".**

**[data-attribute\*="123"] {**

**background-color: yellow;**

**}**

**<div data-attribute="12345">This has data attribute containing "123".</div>**

**<div data-attribute="98765">This does not have "123".</div>**

**In both cases, the attribute selectors allow you to target elements that meet the specified criteria for the attribute value. The | and \* operators provide flexibility in selecting elements based on attribute values.**