CSS Documentation

1.Difference between css 2.0 and css 3.0?

CSS	CSS3
Developed in 1996.	Released in 2005.
Capable of positioning texts and objects.	Capable of making web pages more attractive and takes less time to create. It is backward compatible with CSS.
Does not support responsive design.	Supports responsive design.
Cannot be split into modules.	Can be broken down into modules.
Cannot build 3D animation and transformation.	Supports animation and 3D transformations.
Slower compared to CSS3.	Faster than CSS.
Uses a set of standard colors and basic color schemes.	Has a good collection of HSL(Hue, Saturation, Lightness), RGBA(Red, Green, Blue, Alpha), HSLA(Hue, Saturation, Lightness, Alpha), and gradient colors.
Supports only single text blocks.	Supports multi-column text blocks.
Does not support media queries.	Supports media queries.
Not supported by all types of modern browsers.	Supported by all modern browsers.

CSS	CSS3
No special effects like shadowing text or text animation; requires jQuery and JavaScript for animations.	Supports text shadows, visual effects, and a wide range of font styles and colors.
Can add background colors to list items and lists, and set images for list items.	Lists have a special display property and list items have counter reset properties.
Memory intensive.	Consumes less memory compared to CSS.

2.Documentation on simple selectors?

Simple Selectors: It is used to select the HTML elements based on their element name, id, attributes, etc.
Types:
1.Element Selectors: The element selector selects HTML elements based on the element name (or tag) for example p, h1, div, span, etc.

Example:
```
h1 {

    color: red;

    font-size: 3rem;

}

p {

    color: white;

    background-color: gray;

}
```

2.Id Selectors: The id selector uses the id attribute of an HTML element to select a specific element. An id of the element is unique on a page to use the id selector. To use a id selector you must use (#) followed by id name in CSS.

Example:
```
#div-container{

    color: blue;

    background-color: gray;

}
```

3.Class Selectors: The class selector selects HTML elements with a specific class attribute. To use a class selector you must use (.) followed by class name in CSS.

Example:
```
.paragraph-class {

    color:white;

    font-family: monospace;

    background-color: purple;

}
```

4.Universal Selectors: The universal selector (*) in CSS is used to select all the elements in an HTML document. It also includes other elements which are inside under another element.

Example:

```css
* {
    color: white;
    background-color: black;
}
```

5.Group Selectors: The group selector is used to style all comma-separated elements with the same style. Suppose you want to apply common styles to different selectors, instead of writing rules separately you can write them in groups.

Example:

```css
#div-container, .paragraph-class, h1{
    color: white;
    background-color: purple;
    font-family: monospace;
}
```

6.Attribute Selectors: The attribute selector [attribute] is used to select the elements with a specified attribute or attribute value.

Example:

```css
[href] {
    background-color: lightgreen;
    color: black;
    font-family: monospace;
    font-size: 1rem;
}
```

```
}
```

7.Pseudo-Class Selectors: It is used to style a special type of state of any element. For example- It is used to style an element when a mouse cursor hovers over it. We use a single colon(:).

Syntax:
```
Selector:Pseudo-Class {

    Property: Value;

}
```

Example:
```
h1:hover{

    background-color: aqua;

}
```

8.Pseudo-Element Selectors: It is used to style any specific part of the element. For Example- It is used to style the first letter or the first line of any element. We use a double colon(::).

Syntax:
```
Selector:Pseudo-Element{

    Property:Value;

}
```

Example:
```
p::first-line{

    background-color: goldenrod;
```

}

3.   What are properties & values?

Properties are the characteristics or features that define the appearance or behavior of an HTML element. They represent what aspect of the element you want to style.

Example: Common CSS properties include color, font-size, background, margin, padding, etc.

Syntax:

```
property: value;
```

Examples of Properties:

- color: Specifies the text color.
- font-size: Specifies the size of the text.
- background-color: Specifies the background color of an element.
- margin: Specifies the space outside the element.

Values are the **specific settings** that are assigned to the properties. Each property has a set of valid values that determine how that property will affect the element.

Example: The value could be a color name, size in pixels, percentage, or keywords like auto or inherit.

Syntax:

```
property: value;
```

- **Examples of Values**:
    - red: A color value for the color property.
    - 16px: A size value for the font-size property.
    - 10px: A margin value for the margin property.
    - center: A keyword value for the text-align property.