(1.) What is CSS and why use it ?

Ans. CSS stands for Cascading Style Sheets.

=> CSS describes how HTML elements are to be displayed on screen, paper, or in other media.

=> CSS saves a lot of work. It can control the layout of multiple web pages all at once.

=> It is a language used to describe the presentation of a document written in a markup language like HTML.

=> CSS is used to apply styles such as colors, fonts, and layouts to HTML elements.

=> This allows developers to separate the presentation of a website from its structure and content, making it easier to maintain and update the look and feel of a website.

=> By using CSS, developers can create visually appealing websites with a consistent design, and make changes to the design without having to make changes to the underlying HTML code.

=> CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.

(2.) What are the different ways to bring CSS into an HTML file?

Ans. There are three main ways to bring CSS into an HTML file:

(i) Inline CSS: Styles are applied directly to the HTML elements using the "style" attribute.

=> This method is useful for applying styles to a single element, but can become difficult to manage as the number of elements increases.

(ii) Internal CSS: Styles are defined in a "style" tag within the "head" section of the HTML document.

=> This method allows for styles to be reused throughout the document, but the styles are only applied to the elements within the same HTML document.

(iii) External CSS: Styles are defined in a separate CSS file, which is then linked to the HTML document using the "link" tag in the "head" section of the HTML document.

=> This method allows for the styles to be reused across multiple HTML documents, and makes it easy to update the styles in one place, which will be reflected in all the HTML pages linked to the CSS file.

(3.) What do you mean by specificity in CSS?

Ans. Specificity in CSS refers to the weight that is given to a particular CSS rule when determining which styles should be applied to an element.

=> It is a way to determine which CSS rule should be applied to an element when multiple rules match the same element.

=> In other words, it is a way to determine which CSS rule will take precedence when multiple rules apply to the same element.

=> CSS specificity is determined by the number of each type of selector in the CSS rule.

=> For example, an id selector has a higher specificity than a class selector, and a class selector has a higher specificity than a type selector.

=> **The specificity calculation is based on four distinct parts:**

- **(i) Inline styles:** the highest specificity, an inline style is an HTML attribute that is applied directly to an element.
- **(ii) ID selectors:** specificity is 100, an element that is selected by an ID selector.
- **(iii)** Class selectors, attribute selectors, and pseudo-classes: specificity is 10, an element that is selected by a class selector, attribute selector, or pseudo-class.
- **(iv)** Type selectors and pseudo-elements: specificity is 1, an element that is selected by a type selector or pseudo-element.

=> For example, if you have an element with an ID of "header" and a class of "navbar", the CSS rule that targets the ID will be applied to the element, because an ID selector has a higher specificity than a class selector.

=> In case of specificity tie, the last rule defined wins.

=> CSS Specificity is a complex topic and it's important to understand it correctly to make sure that your styles are being applied correctly to the elements.

The table below shows some examples on how to calculate specificity values:

Selector	Specificity Value	Calculation
p	1	1
p.test	11	1 + 10
p#demo	101	1 + 100
<p style="color: pink;">	1000	1000
#demo	100	100
.test	10	10
p.test1.test2	21	1 + 10 + 10
#navbar p#demo	201	100 + 1 + 100
*	0	0 (the universal selector is ignored)

The selector with the highest specificity value will win and take effect!