

## CSS SELECTORS:

**Question 1: What is a CSS selector? Provide examples of element, class, and ID selectors.**

**Ans :** A CSS selector is a pattern used to "select" HTML elements that you want to style.

It tells the browser which elements in the HTML should have the CSS rules applied to them.

Examples :

### 1) Element Selector

- Targets all HTML elements of a specific type.

```
p {  
    color: blue;  
}
```

### 2) Class Selector

- Targets elements with a specific class attribute.
- A dot (.) is used before the class name.

```
.highlight {  
    background-color: yellow;  
}
```

### 3) ID Selector

- Targets a single element with a unique id attribute.
- A hash (#) is used before the ID name.

```
#main-title {  
    font-size: 24px;  
}
```

## **Question 2: Explain the concept of CSS specificity. How do conflicts between multiple styles get resolved?**

**Ans :** CSS specificity is the set of rules that determine which CSS style is applied when there are multiple conflicting styles targeting the same element.

Order of Specificity (from lowest to highest):

1. Element selectors (e.g., p, h1)
2. Class selectors (e.g., .box, .active) and pseudo-classes (e.g., :hover)
3. ID selectors (e.g., #header)
4. Inline styles (e.g., <p style="color:red">)
5. !important → Overrides all normal rules (but should be avoided if possible).

## **Question 3: What is the difference between internal, external, and inline CSS? Discuss the advantages and disadvantages of each approach.**

**Ans :**

### **1. Inline CSS**

- Defined directly inside an HTML element using the style attribute.

```
<p style="color: red;">This is inline CSS</p>
```

#### **Advantages:**

- Fast to apply for a single element.
- Overrides most other CSS (high specificity).

## **Disadvantages:**

- Hard to maintain for large projects.
  - Mixing style with structure (bad practice).
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## **2. Internal CSS**

- Written inside `<style>` tags within the `<head>` section of the HTML file.

```
<head>
```

```
  <style>
    p { color: blue; }
  </style>
</head>
```

## **Advantages:**

- Styles apply to the whole page.
- Keeps CSS in one place (easier than inline).

## **Disadvantages:**

- CSS is only available for that single HTML file.
  - Not reusable across multiple pages.
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## **3. External CSS**

- Written in a separate .css file and linked with `<link rel="stylesheet">`.

```
<head>
```

```
  <link rel="stylesheet" href="styles.css">
```

</head>

**Advantages:**

- Best for large websites.
- Code reuse (one CSS file can style multiple pages).
- Clean separation of content (HTML) and design (CSS).

**Disadvantages:**

- Extra HTTP request (can slightly slow first load).
- Styles won't apply if the CSS file fails to load.