

1. Explain the difference between inline, internal, and external CSS.

Ans:

1) Inline CSS

- **Where:** style attribute on the element.
- **Example:** `<h1 style="color: navy;">Title</h1>`
- **Pros:** Quick one-off change; highest priority in the cascade (except! important).
- **Cons:** Messy, hard to maintain, no reusability, larger HTML.

2) Internal CSS

- **Where:** `<style>` tag inside the HTML `<head>`.

Example:

```
<style>
```

```
h1 {color: navy;}
```

```
</style>
```

- **Pros:** Keeps styles in one place per page; OK for small pages or page-specific tweaks.
- **Cons:** Not reusable across pages; bigger HTML; lower caching benefit.

3) External CSS

- **Where:** Separate .css file linked with `<link rel="stylesheet" href="styles.css">`.
- **Pros:** Best practice; reusable, maintainable, cacheable; cleaner HTML.
- **Cons:** Extra HTTP request (but cache usually offsets this).

Cascade/Priority (highest → lowest, if specificity ties):

Inline style > Internal `<style>` > External file; later rules override earlier ones. Specificity still rules: ID > Class/Attribute/Pseudo-class > Element.

2. Describe CSS selectors and list the types of selectors.

Ans: There are many types of selectors like class, id, universal, element, group, pseudo classes,

Pseudo elements, combinators, etc.

Types:

- **Element selector** → selects tag
p {}, h1 {}
- **Class selector** → reusable
.box {}
- **ID selector** → unique
#header {}
- **Universal selector**
* {} (selects everything)
- **Attribute selector:**
input[type="text"] {}
- **Pseudo-class:**
Used for **states**
a:hover (mouse over)
input:focus
- **Pseudo-element:**
Used for **parts of an element**
::before, ::after, ::first-letter

3) Discuss the CSS box model and its components.

Ans:

Every HTML element is a **box**.

This box has 4 layers:

1. **Content** → text or image inside the box
2. **Padding** → space around content (inside the box)
3. **Border** → line around the padding
4. **Margin** → outside space (between two boxes)

Think of it like this:

Content → Padding → Border → Margin

This is what decides the size and spacing of elements on a webpage.

