

# Assignment

Que. 1 Why CSS selectors are used in HTML?

Ans. CSS selectors are essential because they allow us to **target specific HTML elements** and apply styles to them. They provide flexibility in defining how elements should look based on their type, class, ID, state, or location in the document hierarchy. Without selectors, you would have to manually style each element, which is inefficient.

## Key Benefits:

1. **Modularity:** Selectors let you style multiple elements consistently.
2. **Maintainability:** You can change the appearance globally by modifying styles in one place.
3. **Separation of Concerns:** CSS selectors allow HTML (structure) and CSS (presentation) to remain separate.

Que.2 What are the different types of Selectors in CSS?

Ans. **Different Types of CSS Selectors**

Here are the primary types of CSS selectors:

| Selector Type             | Example                                   | Description  |
|---------------------------|---|--|
| <b>Universal Selector</b> | <code>* { margin: 0; }</code>             | Selects <b>all elements</b> on the page.                 |
| <b>Type Selector</b>      | <code>p { color: blue; }</code>           | Selects all <code>&lt;p&gt;</code> (paragraph) elements. |
| <b>Class Selector</b>     | <code>.box { padding: 10px; }</code>      | Selects all elements with the class <code>box</code> .   |
| <b>ID Selector</b>        | <code>#header { font-size: 20px; }</code> | Selects the element with the ID <code>header</code> .    |

|                            |  |  |
|----------------------------|--|--|
| <b>Group Selector</b>      | <code>h1, h2 { margin: 0; }</code>               | Styles multiple element types with the same rules.                                       |
| <b>Attribute Selector</b>  | <code>input[type="text"] { width: 100%; }</code> | Selects elements with specific attributes.   |
| <b>Descendant Selector</b> | <code>div p { color: red; }</code>               | Selects <code>&lt;p&gt;</code> elements inside <code>&lt;div&gt;</code> elements.        |
| <b>Child Selector</b>      | <code>ul &gt; li { list-style: none; }</code>    | Selects direct children of a parent element.   |
| <b>Adjacent Sibling</b>    | <code>h1 + p { margin-top: 10px; }</code>        | Selects a <code>&lt;p&gt;</code> immediately following an <code>&lt;h1&gt;</code> .      |
| <b>General Sibling</b>     | <code>h1 ~ p { color: green; }</code>            | Selects all <code>&lt;p&gt;</code> siblings that come after an <code>&lt;h1&gt;</code> . |

Que.3 How do you include external fonts and apply them?

Ans. You can include **external fonts** from services like **Google Fonts** or by loading custom fonts in CSS.

#### Method 1: Using Google Fonts

1. Go to [Google Fonts](https://fonts.google.com/) and select a font.
2. \*\*Copy the `<link>` tag or `@import` URL provided.

#### Example: Using `<link>` in HTML

html

Copy code

```
<head>
```

```
  <link
```

```
    href="https://fonts.googleapis.com/css2?family=Roboto:wght@400;700&display=swap" rel="stylesheet">
```

```
</head>
```

## CSS Example: Apply Font

CSS

Copy code

```
body {  
    font-family: 'Roboto', sans-serif;  
}
```