

**Title – CSS Introduction**

**Learning Objectives**

- To understand the basics of Cascading Style Sheets (CSS).
- To learn how to apply CSS to an HTML page.
- To practice using inline, internal, and external CSS.
- To get familiar with basic CSS properties.

**CSS (Cascading Style Sheets)**

CSS (Cascading Style Sheets) is the language used to style and layout web pages. It controls the visual presentation of HTML elements, including things like colors, fonts, spacing, and overall page design.

**CSS Syntax**

CSS is made up of style rules that the browser interprets and applies to the matching elements within an HTML document.

A style rule has three parts:

- **Selector:** A selector refers to an HTML tag to which a style is applied. It can be any tag such as <h1>, <table>, etc.
- **Property:** A property represents a characteristic or attribute of an HTML element. In CSS, these define aspects like color, border, and more.
- **Value:** A value is assigned to a property to specify its effect. For example, the color property can take values like red or #F1F1F1.

**The Syntax (Structure)**

```
selector {  
    property: value;  
}
```

Ex:

```
table {  
    border: 1px solid #C00;  
}
```

## Selector Categories

| Selector Type                          | Syntax Example     | Description  | HTML Example                           |
|--|--------------------|--|--|
| <b>Type Selector</b>                   | p                  | Selects all elements of the specified HTML tag name.                                       | <p>Hello</p>                           |
| <b>Class Selector</b>                  | .intro             | Select all elements with the specified class attribute. (Most common & reusable).          | <p class="intro">Hi</p>                |
| <b>ID Selector</b>                     | #header            | Selects the single element with the specified id attribute. (IDs must be unique).          | <div id="header"></div>                |
| <b>Descendant Selector</b>             | article p          | Selects all elements that are descendants (nested at any level) of a specified parent.     | <article><p>Text</p></article>         |
| <b>Child Selector</b>                  | ul > li            | Selects all elements that are direct children (only one level deep) of a specified parent. | <ul><li>Item</li></ul>                 |
| <b>Universal Selector</b>              | *                  | Select all elements on the page.   | <html>...all elements...</html>        |
| <b>Attribute Selector</b>              | a[target]          | Select elements that have a specified attribute.   | <a href="..." target="_blank">Link</a> |
| <b>Attribute Selector (with value)</b> | input[type="text"] | Selects elements with a specified attribute and value.                                     | <input type="text">                    |

## CSS Inclusion

- Inline CSS
- Internal CSS
- External CSS

### Inline CSS

Inline CSS allows you to add a style attribute directly to an HTML element to define its styles.

The styles defined this way are applied only to that specific element.

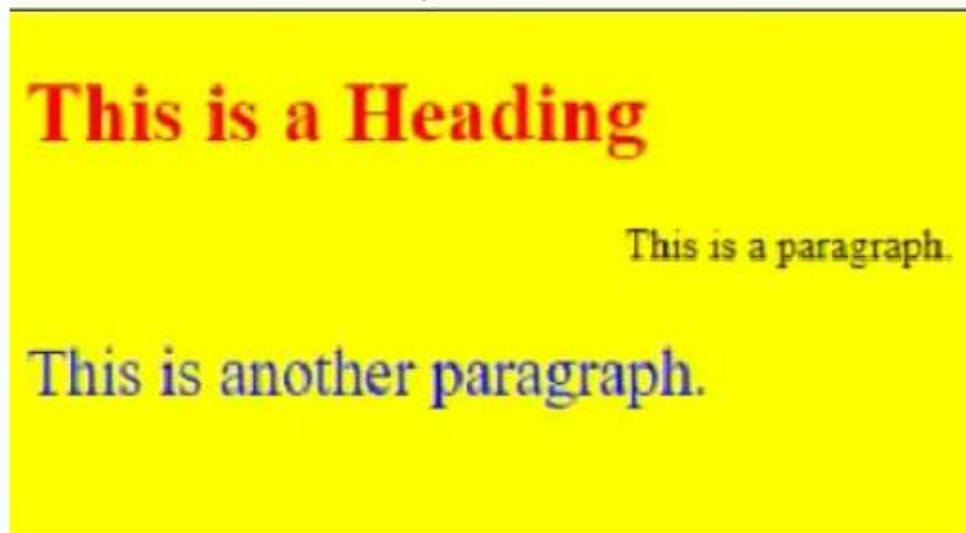
For Example:

```
<h1 style="color:#36C;">This is inline CSS</h1>
```

### Activity 1: Using Inline Style

In this task you will create an HTML page, and apply CSS style inline to different elements on the page using the elements style attribute. The output should look as shown in the figure below:

Output for Task 1



### Activity 2: Inline CSS - Creating a Special Offers Banner

1. Create a new HTML file
2. Set up the basic HTML structure with doctype, html, head, and body tags
3. In the body, create a div element for the special offers banner
4. Apply inline CSS directly to this div using the style attribute:

- Set background color to a vibrant color like #ff4757
  - Add padding of 15px
  - Make text color white
  - Center align the text
  - Set font size to 18px
  - Add a bold font weight
5. Add text inside the div: "Weekend Special: 20% Off All Pasta Dishes!"
  6. Open the file in a browser to see.

## Internal CSS

CSS can be included directly within an HTML document using the <style> tag.

The <style> tag is placed inside the <head> section.

Styles defined here are applied to all matching elements within the same document.

### For Example

```
<head>
  <title>Internal CSS Example</title>
  <style>
    h1 {
      color: blue;
      text-align: center;
    }
    p {
      font-size: 18px;
      color: green;
    }
  </style>
</head>
```

## Activity 3: Using Internal Style

In this task you will create an HTML page, and apply CSS style within the <style> element, inside the <head> section of an HTML page. The output should look as shown in the figure below:

### Output for Task 2



### Activity 4: Internal CSS - Restaurant Hero Section

1. Create HTML Structure
  - Create a new file called restaurant-hero.html
  - Set up basic HTML structure with doctype, html, head, and body tags
  - Add a title: "Tasty Bites - Home"
2. Add Internal CSS
  - In the head section, add a <style> tag
  - Create CSS rules for:
    - Body: Set background color, font family, remove default margins
    - Hero section: Full viewport height, background image, centered content
    - Restaurant name: Large font, contrasting color, centered
    - Tagline: Medium font, different style
    - Button: Attractive styling with hover effect
3. Build Hero Section
  - In the body, create a div with class "hero"
  - Add an h1 with the restaurant name
  - Add a paragraph with a tagline
  - Add a button for reservations
4. Test Your Page

### External CSS

The <link> element is used to attach an external stylesheet to an HTML document.

An external stylesheet is a separate text file with the .css extension.

All style rules are written in this file, and it can be linked to any HTML document using the <link> element.

## style.css

```
p {  
  color: darkgreen;  
}
```

## index.html

```
<head>  
  <title>External CSS Example</title>  
  <!-- Linking the external CSS file -->  
  <link rel="stylesheet" type="text/css" href="style.css">  
</head>
```

### Activity 5: External CSS - Styling a Restaurant Menu Page

**Objective:** Use an external CSS file to style a complete restaurant menu page.

**Steps:**

1. **Create two files** in the same folder:
  - o external-css-activity.html
  - o styles.css
2. **In the HTML file (external-css-activity.html):**
  - o Set up the basic HTML structure with <!DOCTYPE html>, <html>, <head>, and <body> tags.
  - o Inside the <head> section, link the external CSS file using:  
**<link rel="stylesheet" href="styles.css">**
  - o In the <body> section, create the restaurant menu structure:
    - Restaurant name as <h1>
    - Menu sections with categories (Appetizers, Mains, Desserts)
    - Several menu items with names and prices
    - Footer with copyright information
3. **In the CSS file (styles.css):**
  - o Style the body: background color #f8f8f8 and font family
  - o Style the restaurant name: color, font size, text alignment
  - o Style the menu sections with background color, padding, border-radius
  - o Style category headers (appetizers, mains, desserts) with color and text-transform
  - o Style menu items and prices using descendant selectors
  - o Style the footer with centered text and top margin
4. **Open external-css-activity.html** in a browser to see how all elements are styled using the external CSS.