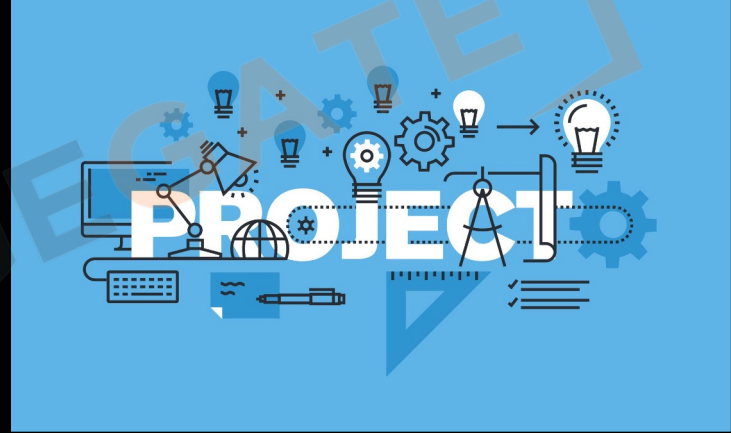


# Practise Set

1. Create a page with **heading**, **paragraph**, **line breaks** and **separators**.
2. Use an **image** with height 300, which is a **link** to another page.
3. Use **bold**, **italic**, **underline** and **strike through** in one line.
4. Write third equation of motion using **superscript** and **subscript**.



# CSS Levels



Level 1 CSS Basics

Level 2 Color System and Background

Level 3 Text Properties

Level 4 Box Model CSS

Level 5 Display & Position

Level 6 Flexbox, Grid & Media Queries

Level 7 Animation, Transition & Transform



# Importance of CSS



Premium Website



Premium Brand



Premium Customer



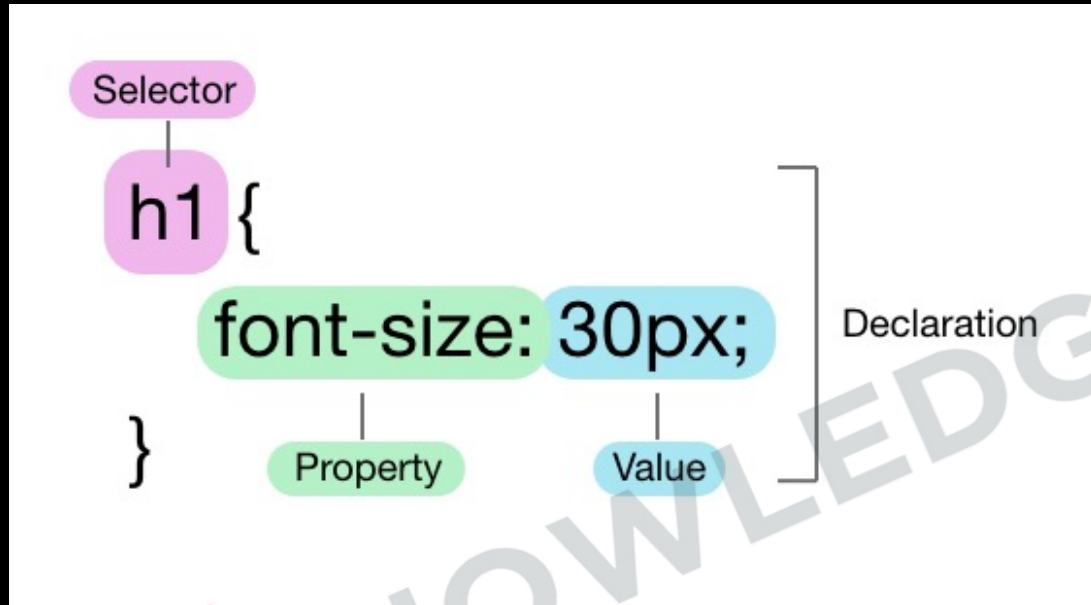
High Salary Developer

# Level 1

## CSS Basics

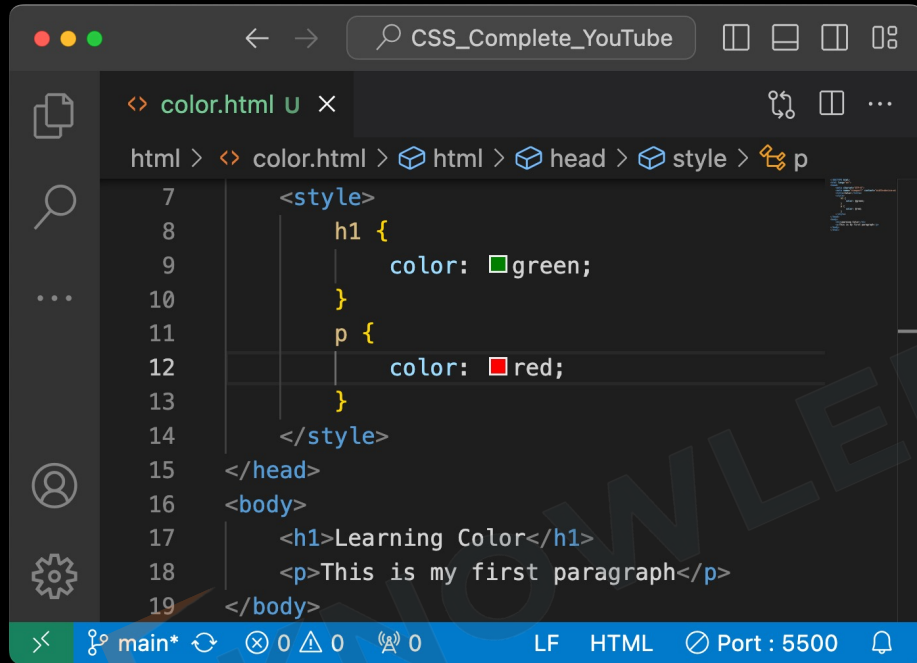
1. Basic Syntax
2. Color Property
3. Including Styles
4. HTML Refresher
5. Comments
6. MDN Documentation
7. Selectors

# 1. Basic Syntax

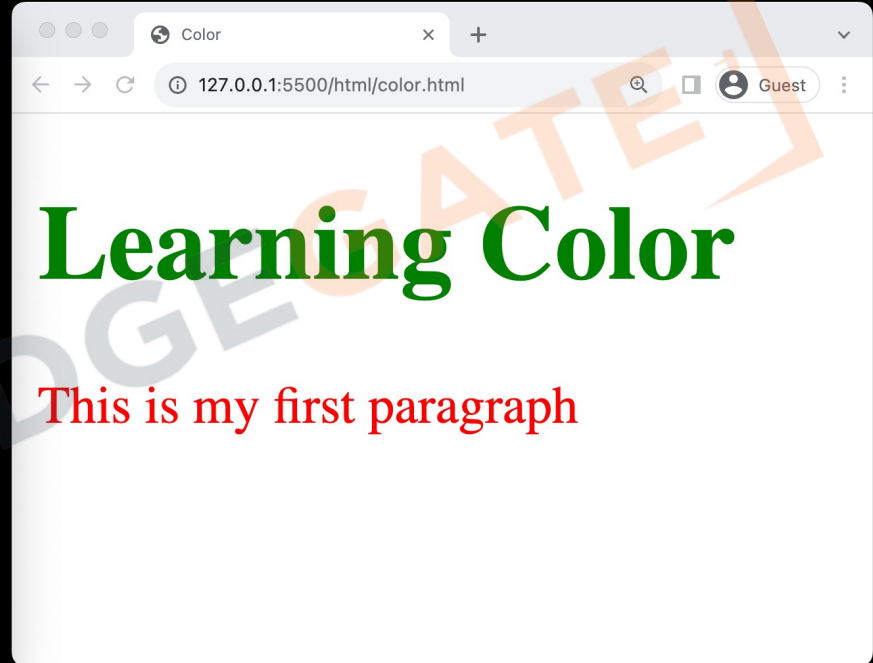


- **Selector:** The HTML element that you want to style.
- **Property:** The attribute you want to change (like font, color, etc.).
- **Value:** The specific style you want to apply to the property (like red, bold, etc.).

## 2. Color Property



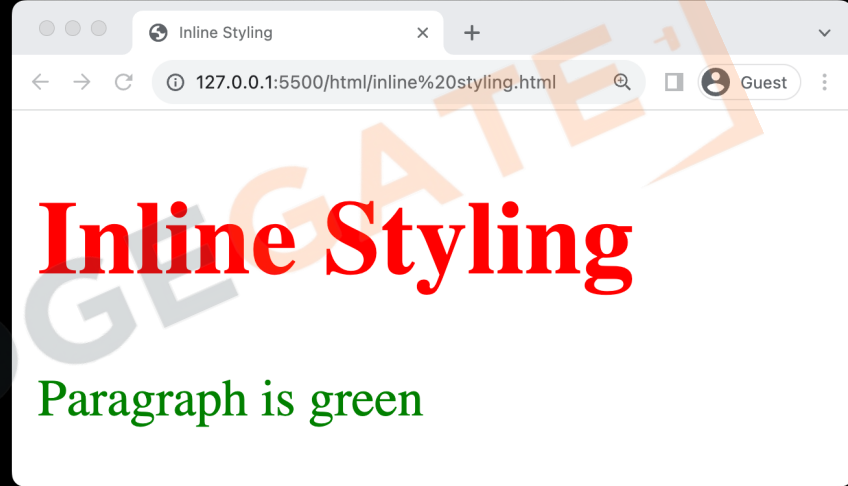
```
<? color.html U x
html > <? color.html > html > head > style > p
7   <style>
8     h1 {
9       color: green;
10    }
11    p {
12      color: red;
13    }
14  </style>
15 </head>
16 <body>
17   <h1>Learning Color</h1>
18   <p>This is my first paragraph</p>
19 </body>
```



- **Definition:** The CSS color property defines the text color or foreground color in an HTML element.
- **Enhancement:** Use it to emphasize sections and elevate webpage aesthetics.

### 3. Including Styles (Inline Styling)

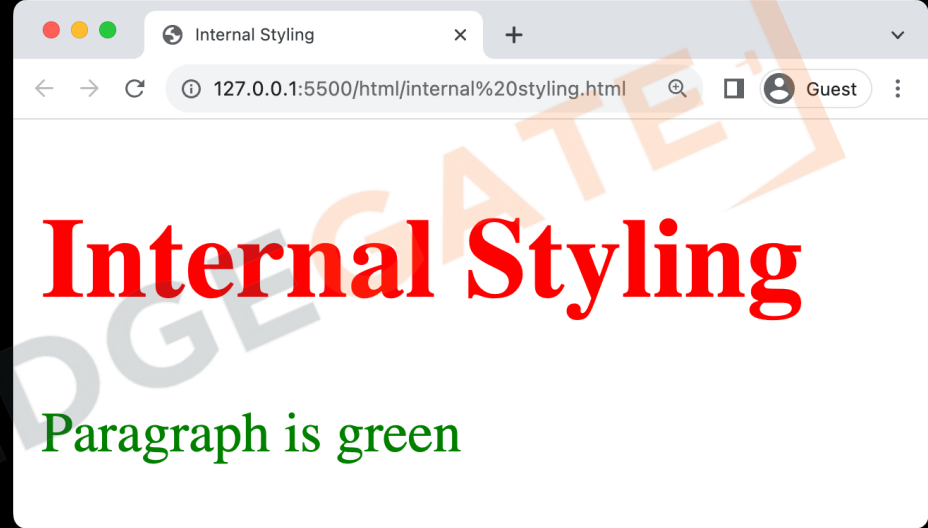
```
html > <> inline styling.html > html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  |   <title>Inline Styling</title>
5  </head>
6  <body>
7  |   <h1 style="color: red;">Inline Styling</h1>
8  |   <p style="color: green;">Paragraph is green</p>
9  </body>
10 </html>
```



- **Direct Application:** Apply styles directly to **HTML** elements using the **style** attribute.
- **One-off Changes:** Ideal for **single**, unique style alterations.
- **Can Be Cluttered:** May lead to **cluttered** HTML if used extensively.
- **Limited Reusability:** Reduces the **reusability** of CSS rules in larger projects.

### 3. Including Styles (Internal Styling)

```
3 <head>
4   <title>Internal Styling</title>
5   <style>
6     h1 {color: red;}
7     p {color: green;}
8   </style>
9 </head>
10 <body>
11   <h1>Internal Styling</h1>
12   <p>Paragraph is green</p>
13 </body>
14 </html>
```



- **Embedded CSS:** Styles are placed within `<style>` tags in the HTML head section.
- **Cleaner than Inline:** More organized compared to inline styles.
- **Reusable Styles:** Allows for some reuse of styles across the page.



### 3. Including Styles (External Styling)

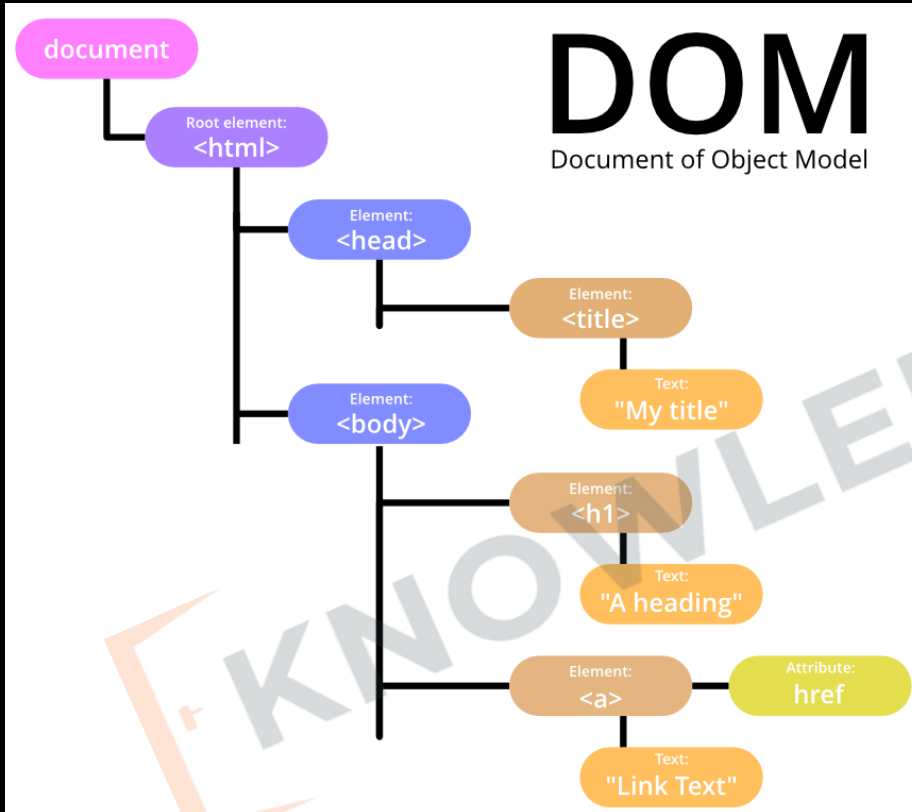
```
3 <head>
4   <title>External Styling</title>
5   <link rel="stylesheet" href="../css/
    external styling.css">
6 </head>
7 <body>
8   <h1>External Styling</h1>
9   <p>Paragraph is green</p>
10 </body>
```

```
css > # external styling.css > p
1  ∨ h1 {
2      color: ■ red;
3  }
4
5  ∨ p {
6      color: ■ green;
7  }
```



- **Separate CSS File:** Stores styles in a **separate .css file**, linked to HTML.
- **Reusable:** Enables style **reuse** across multiple webpages.
- **Link in HTML:** Use the **<link>** tag within the **<head>** section to link the CSS.
- **Relative or Absolute Path:** The href attribute can contain a relative or absolute path to the CSS file.

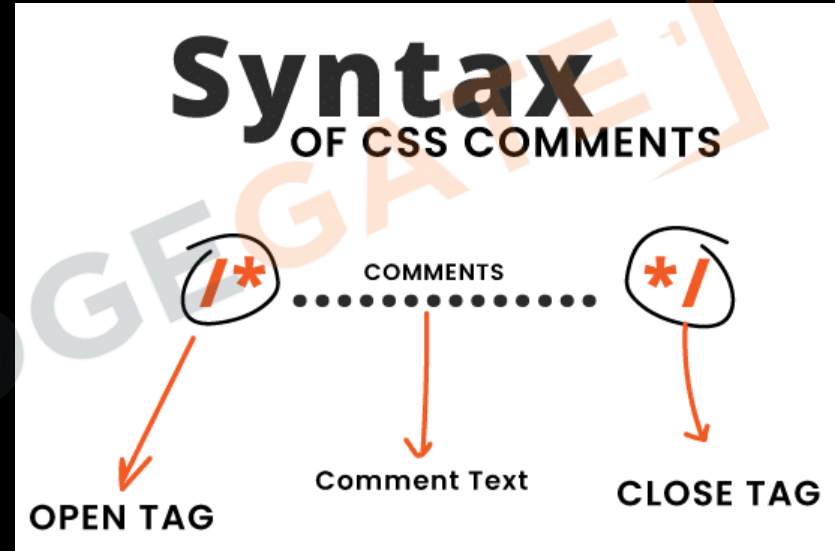
## 4. HTML Refresher (DOM)



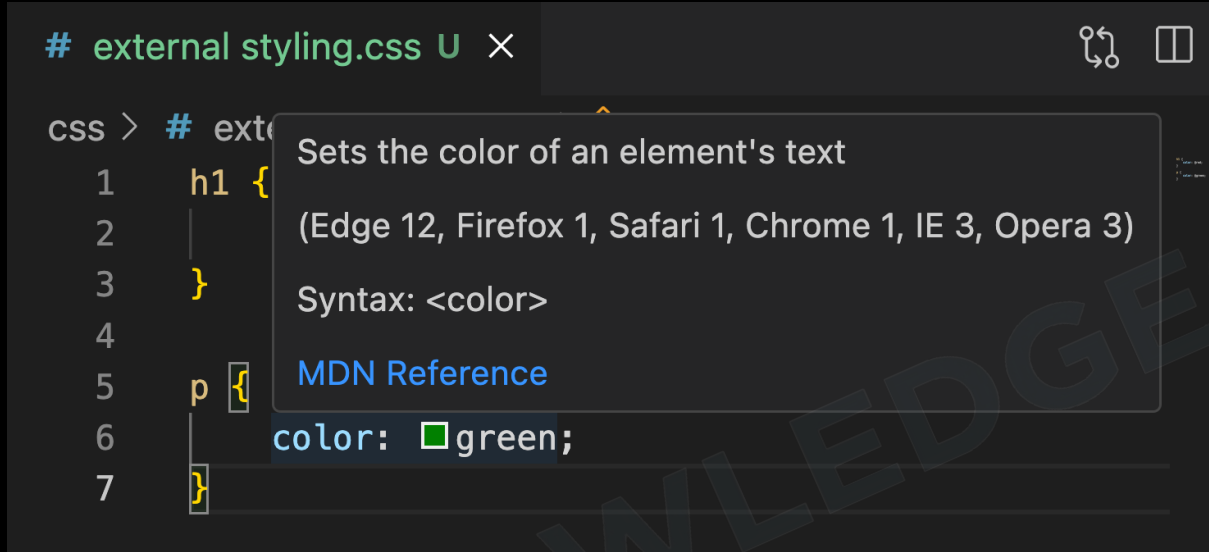
- 1. Structure Understanding:** Helps in understanding the **hierarchical structure** of a webpage, crucial for applying targeted CSS styles.
- 2. Dynamic Styling:** Enables learning about dynamic styling, allowing for **real-time changes** and interactivity through CSS.

# 5 Comments

1. Used to add **notes** in HTML or CSS code
2. **Not displayed** on the web page
3. Syntax: `/* ..... */`
4. Helpful for **code organization**
5. Can be **multi-line** or **single-line**



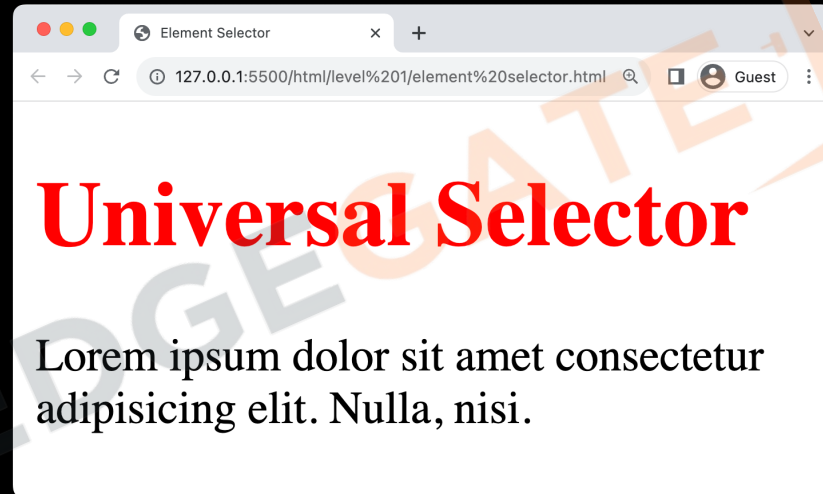
# 6.MDN Documentation



1. **For Official resource** for CSS, visit <https://developer.mozilla.org/>
2. Includes examples for real-world use
3. **Updated** with latest CSS-3 features
4. Trusted by developers worldwide

# 9. Selectors (Element selector)

```
3 <head>
4   <title>Element Selector</title>
5   <style>
6     h1 {
7       color: red
8     }
9   </style>
10 </head>
11 <body>
12   <h1>Universal Selector</h1>
13   <p>Lorem ipsum dolor sit amet consectetur
14     adipiscing elit. Nulla, nisi.</p>
15 </body>
```



- **Targets Elements:** Selects HTML elements based on their **tag name**.
- **Syntax:** Simply use the **element's name**
- **Uniform Styling:** Helps in applying **consistent styles** to all instances.
- **Ease of Use:** Straightforward and **easy** to implement for basic styling.

# 9. Selectors (Universal selector)

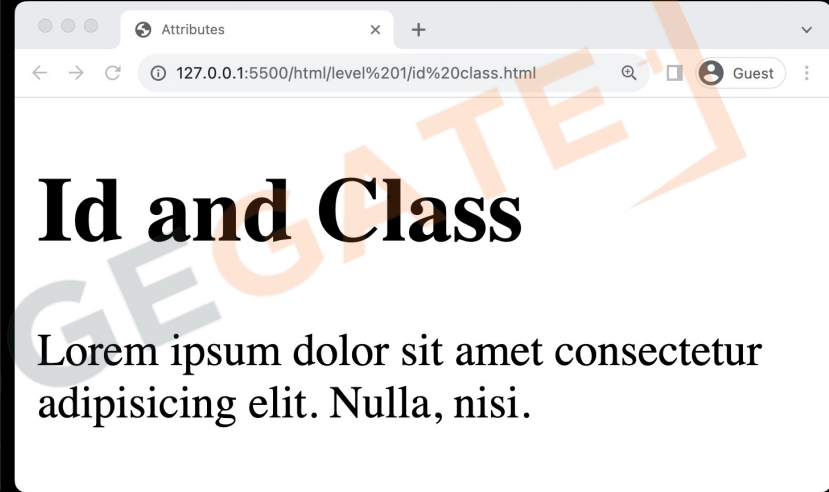
```
3 <head>
4   <title>Universal Selector</title>
5   <style>
6     * {
7       color: red
8     }
9   </style>
10 </head>
11 <body>
12   <h1>Universal Selector</h1>
13   <p>Lorem ipsum dolor sit amet consectetur
14     adipiscing elit. Nulla, nisi.</p>
15 </body>
```



- **Matches All:** Targets and styles **all elements** on a webpage.
- **Syntax:** Utilized as an **asterisk (\*)**.
- **Resets Styles:** Commonly used to **reset margins** and paddings globally.
- **Broad Styling:** Useful for setting universal attributes like **font or color**.
- **Usage Caution:** Can cause style **conflicts** due to its wide-reaching effects.

# 9. Selectors (id & class property)

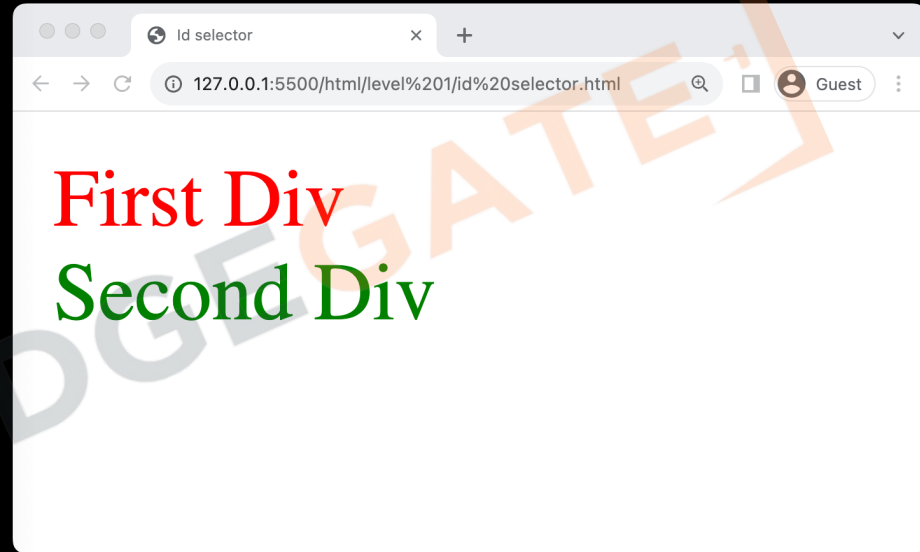
```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>Attributes</title>
5 </head>
6 <body>
7   <h1 id="top_heading">Id and Class</h1>
8   <p class="article">Lorem ipsum dolor sit amet
9     consectetur adipisicing elit. Nulla, nisi.</p>
10 </body>
</html>
```



- **ID Property:** Assigns a unique identifier to a single HTML element.
- **Class Property:** Allows grouping of multiple HTML elements to style them collectively.
- **Reusable Classes:** Class properties can be reused across different elements for consistent styling.
- **Specificity and Targeting:** Both properties assist in targeting specific elements or groups of elements for precise styling.

## 9. Selectors (Id selector)

```
3 <head>
4   <title>Id selector</title>
5   <style>
6     #first { color: red; }
7     #second { color: green; }
8   </style>
9 </head>
10 <body>
11   <div id="first">First Div</div>
12   <div id="second">Second Div</div>
13 </body>
```

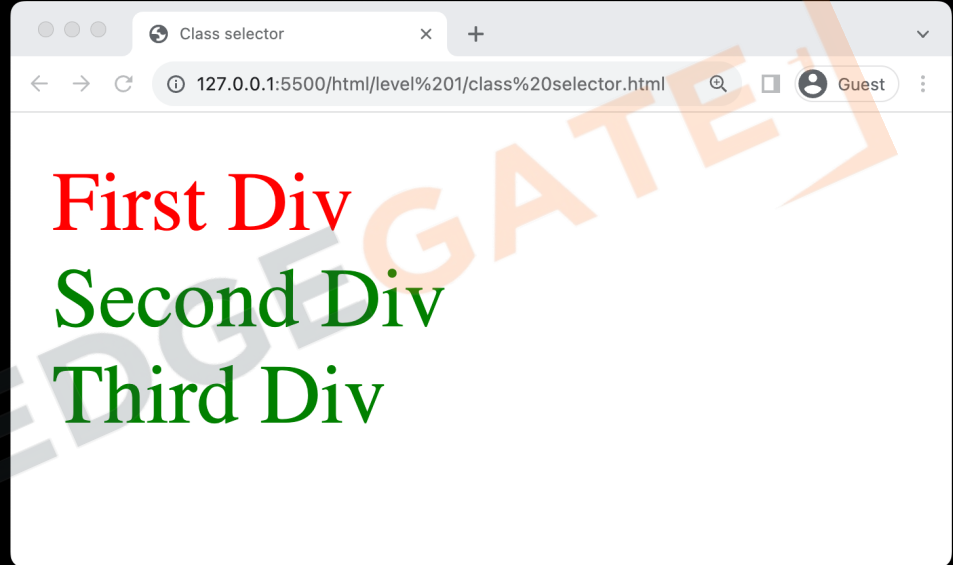


- **Unique Identifier:** Targets a specific element with a **unique ID** attribute.
- **Syntax:** Uses the **hash (#)** symbol
- **Single Use:** Each ID should be used **once per page** for uniqueness.
- **Specific Targeting:** Ideal for styling **individual, distinct** elements.



## 9. Selectors (Class selector)

```
<head>
  <title>Class selector</title>
  <style>
    #first { color: red; }
    .second { color: green; }
  </style>
</head>
<body>
  <div id="first">First Div</div>
  <div class="second">Second Div</div>
  <div class="second">Third Div</div>
</body>
```



- **Group Styling:** Allows styling of multiple elements grouped under a class.
- **Syntax:** Utilizes the dot (.) symbol.
- **Reusable:** Can be used on multiple elements for consistent styling.
- **Versatility:** Ideal for applying styles to a category of elements.

# 9. Selectors (Group selector)

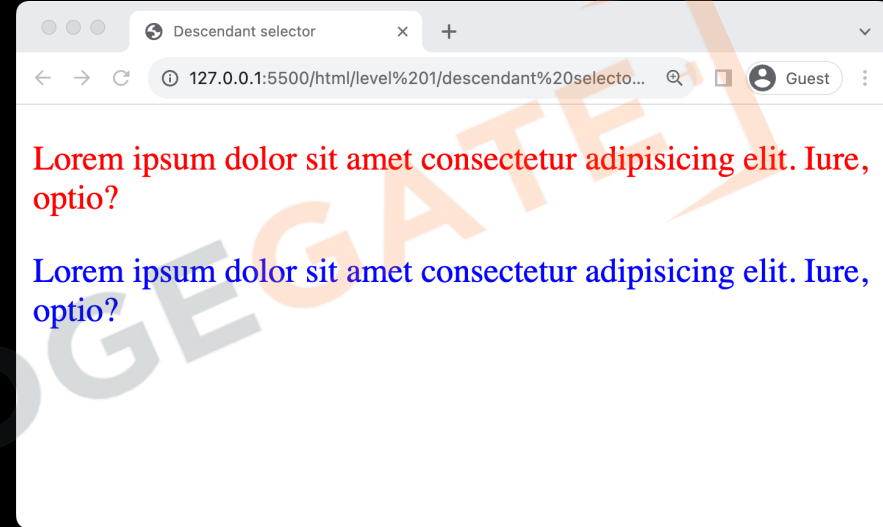
```
<head>
  <title>Group selector</title>
  <style>
    h1, h2, h3 {
      color: red
    }
  </style>
</head>
<body>
  <h1>Heading 1</h1>
  <h2>Heading 2</h2>
  <h3>Heading 3</h3>
  <h4>Heading 4</h4>
</body>
```



- **Multiple Elements:** Styles multiple elements simultaneously.
- **Syntax:** Separates selectors with commas.
- **Efficiency:** Reduces code redundancy and saves time.

# 9. Selectors (Descendant selector)

```
<head>
  <title>Descendant selector</title>
  <style>
    div p { color: red }
    p { color: blue }
  </style>
</head>
<body>
  <div>
    <p>
      Lorem ipsum dolor sit amet consectetur adipisicing
      elit. Iure, optio?
    </p>
  </div>
  <p>
    Lorem ipsum dolor sit amet consectetur adipisicing
    elit. Iure, optio?
  </p>
</body>
```



- **Nested Targeting:** Styles elements **nested** within a specified element.
- **Syntax:** Separate selectors with **spaces**.
- **Hierarchy-Based:** Allows styling based on the **hierarchical** structure of HTML.
- **Specific Styling:** Facilitates more **targeted** and specific styling of elements.

# Practice Set Level 1

## CSS Basics

- Create a heading and set the text color **red**.
- Create a div with id **#heading**, include CSS using all 3 ways **line**, **style tag** and **external**, and observe priority.
- Add **comments** to your **CSS** class
- Create a **div**, **paragraph** and **heading** and use id Selector, element selector and class selector for them.
- Create two divs with id **first** and **second** and define color for both using group selector.

