CSS Properties

Padding in CSS

Padding is a CSS property that adds space **inside** an element, between its content and its border. It helps in controlling the spacing inside elements without affecting their border or margin.

Syntax:

```css
element {
    padding: value;  /* Can be in px, %, em, etc. */
}
```

Different Ways to Use Padding:

1. **Equal Padding on All Sides**

```css
div {
    padding: 20px;  /* Adds 20px padding on top, right, bottom, and left */
}
```

2. **Different Padding for Each Side**

```css
div {
    padding-top: 10px;
    padding-right: 20px;
    padding-bottom: 15px;
    padding-left: 25px;
}
```

3. **Shorthand Notation**

```css
div {
    padding: 10px 20px 15px 25px;
    /* Order: TOP RIGHT BOTTOM LEFT */
}
```

- **Two values:** `padding: 10px 20px;` (Top-Bottom 10px, Left-Right 20px)
- **Three values:** `padding: 10px 20px 15px;` (Top 10px, Left-Right 20px, Bottom 15px)
- **One value:** `padding: 10px;` (Applies 10px padding on all sides)

Example:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>CSS Padding Example</title>
    <style>
        .box {
            background-color: lightblue;
            padding: 20px; /* Adds space inside the box */
            border: 2px solid blue;
            width: 200px;
            text-align: center;
        }
    </style>
</head>
<body>
    <div class="box">This is a padded box</div>
</body>
</html>
```

Key Points:

- Padding increases the **inner space** of an element.
- It does not affect the margin (space **outside** the element).
- It can be set in various units like px, %, em, rem, etc.
- Negative padding values **are not allowed**.