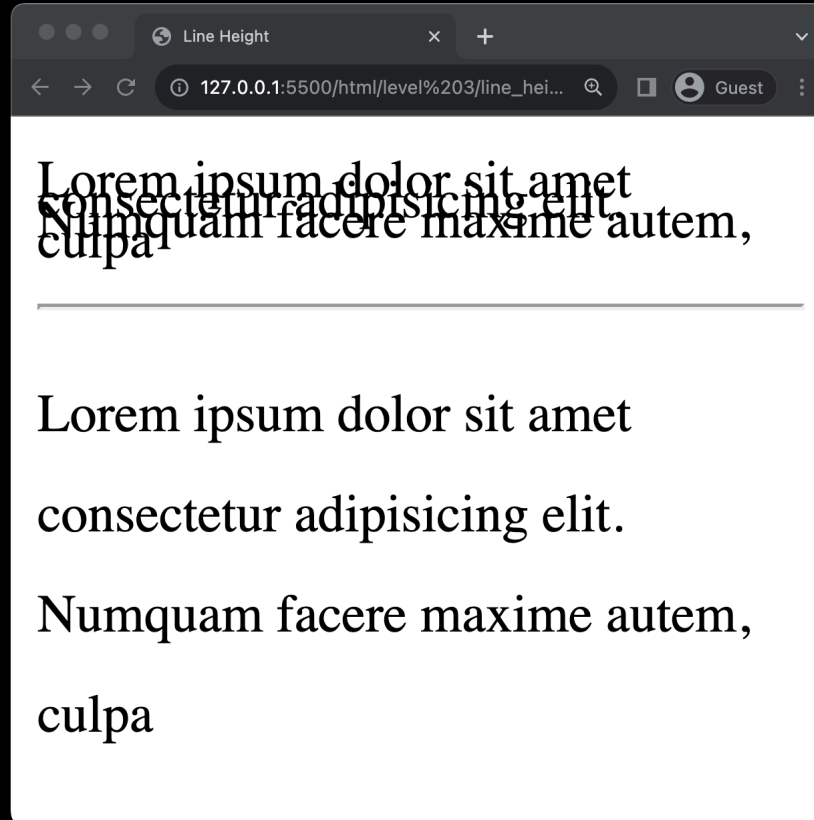# Line Height

```
<head>
    <title>Line Height</title>
    <style>
        #first { line-height: 6px; }
        #second { line-height: 30px; }
    </style>
</head>
<body>
    <p id="first">Lorem ipsum dolor sit amet
    consectetur adipisicing elit. Numquam facere
    maxime autem, culpa</p> <hr>
    <p id="second">Lorem ipsum dolor sit amet
    consectetur adipisicing elit. Numquam facere
    maxime autem, culpa</p>
</body>
```
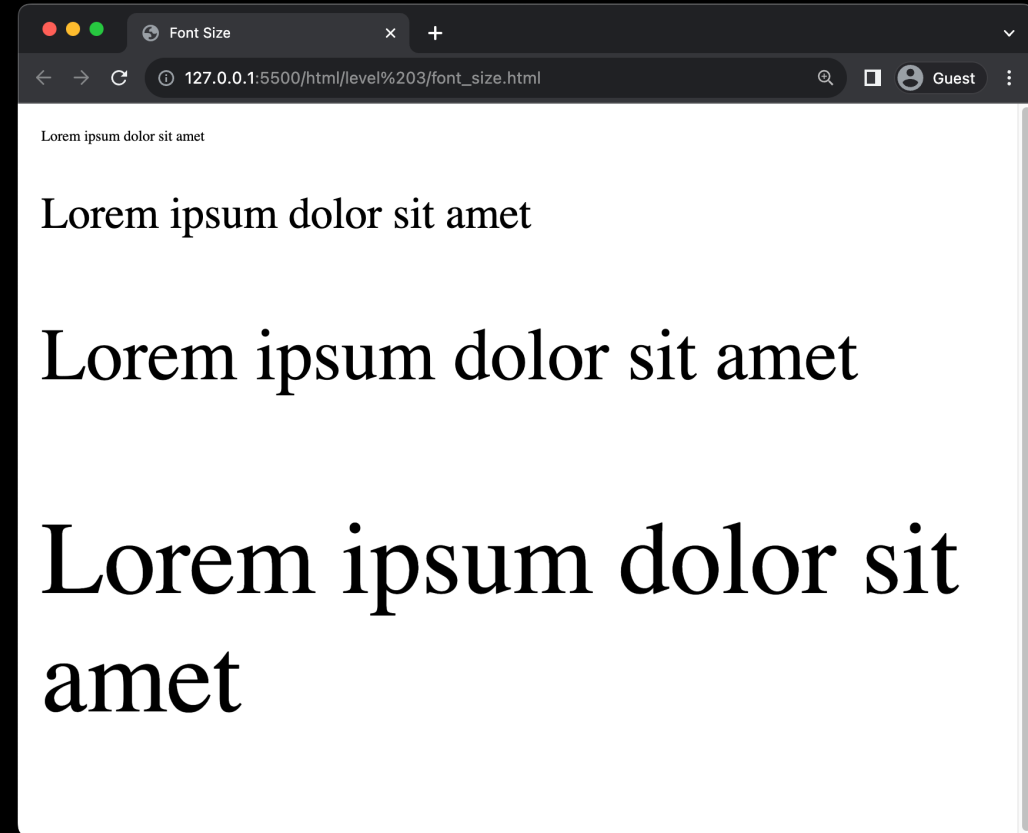
Line Height

127.0.0.1:5500/html/level%203/line_hei...   Guest

Lorem ipsum dolor sit amet
consectetur adipisicing elit.
Numquam facere maxime autem,
culpa

Lorem ipsum dolor sit amet

consectetur adipisicing elit.

Numquam facere maxime autem,

culpa

- **Usage**: Adjusts the amount of space above and below inline elements.
- **Readability**: Enhances text readability by preventing overcrowding.
- **Vertical Spacing**: Useful for controlling vertical spacing between lines of text.

Font Property (font-size)

```
<head>
    <title>Font Size</title>
    <style>
        #first {font-size: 5px;}
        #second {font-size: 15px;}
        #third {font-size: 25px;}
        #fourth {font-size: 35px;}
    </style>
</head>
<body>
    <p id="first">Lorem ipsum dolor sit amet</p>
    <p id="second">Lorem ipsum dolor sit amet</p>
    <p id="third">Lorem ipsum dolor sit amet</p>
    <p id="fourth">Lorem ipsum dolor sit amet</p>
</body>
```
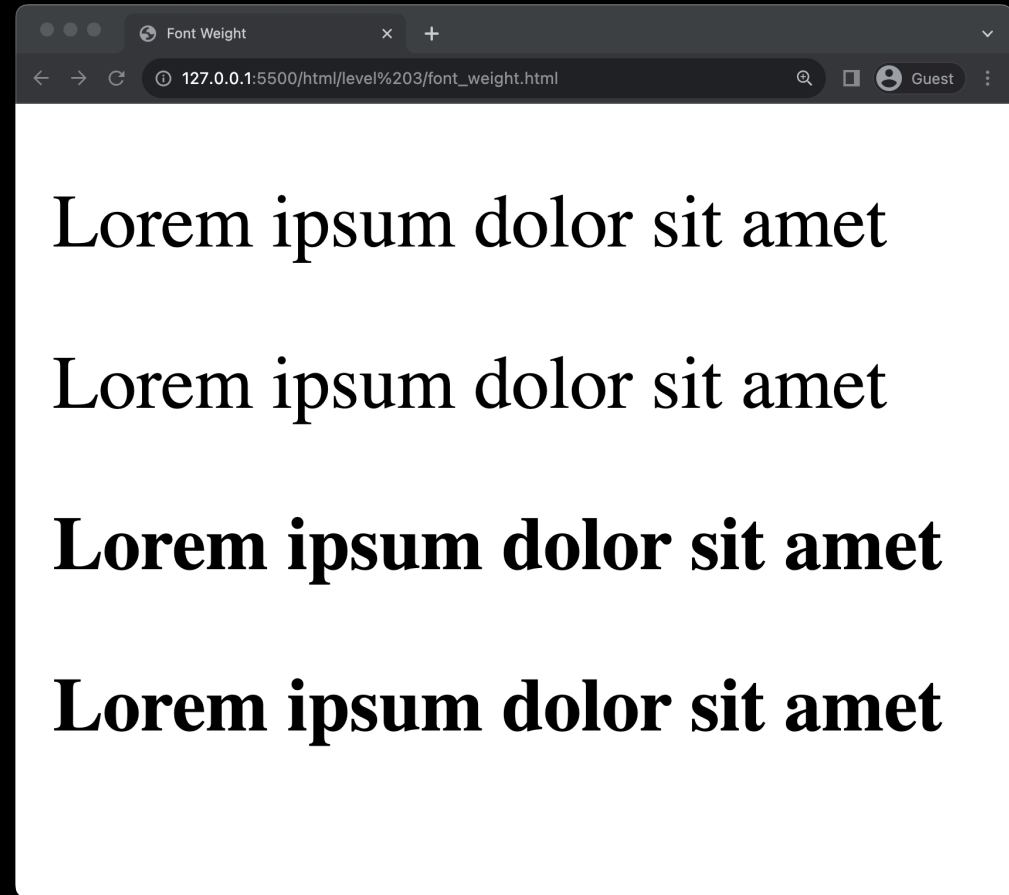
Font Size × +

127.0.0.1:5500/html/level%203/font_size.html   Guest

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

- **Usage**: Sets the size of the font in web content.
- **Responsiveness**: Helps in creating responsive designs adaptable to various screen sizes.
- **Readability**: Crucial for ensuring the readability of text on websites.

Font Property (font-weight)

```html
<head>
    <title>Font Weight</title>
    <style>
        #first {font-weight: 100;}
        #second {font-weight: 400;}
        #third {font-weight: 600;}
        #fourth {font-weight: 900;}
    </style>
</head>
<body>
    <p id="first">Lorem ipsum dolor sit amet</p>
    <p id="second">Lorem ipsum dolor sit amet</p>
    <p id="third">Lorem ipsum dolor sit amet</p>
    <p id="fourth">Lorem ipsum dolor sit amet</p>
</body>
```
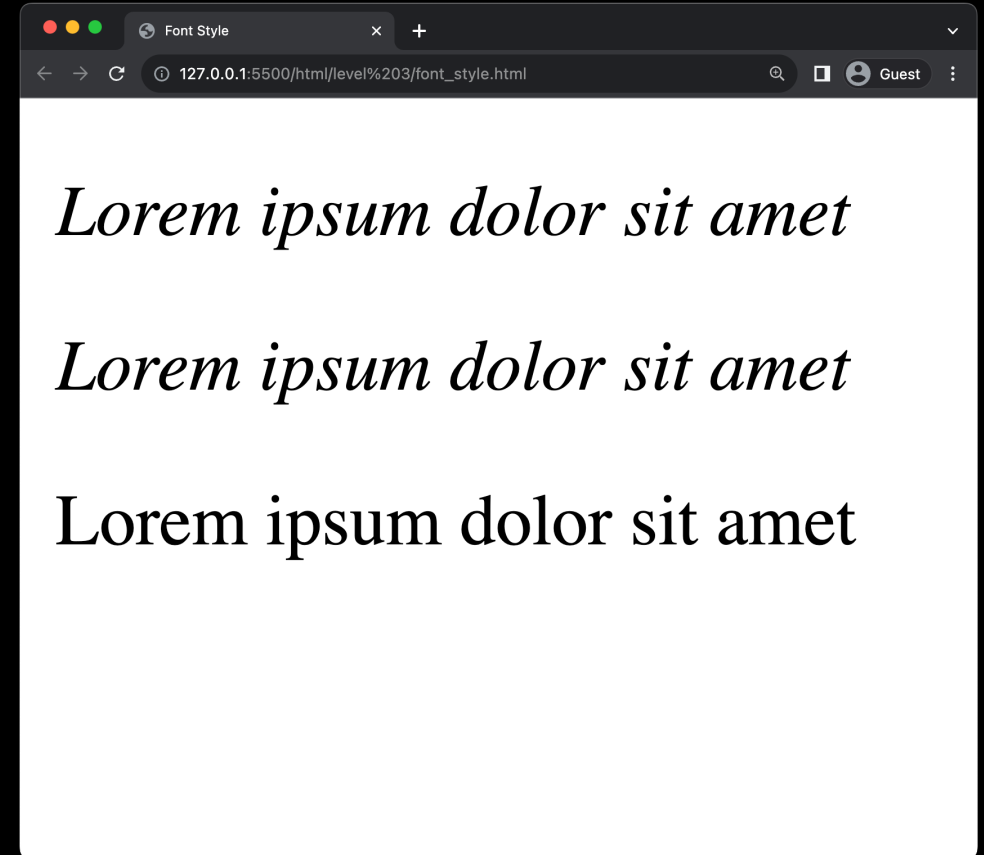
Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

- **Usage**: Defines the thickness of characters in a font.
- **Values**: Can take values like normal, bold, bolder, or numeric values (100 to 900).
- **Text Emphasis**: Utilized to emphasize text or create contrast

Font Property (font-style)

```
<head>
    <title>Font Style</title>
    <style>
        #first {font-style: italic;}
        #second {font-style: oblique;}
        #third {font-style: normal;}
    </style>
</head>
<body>
    <p id="first">Lorem ipsum dolor sit amet</p>
    <p id="second">Lorem ipsum dolor sit amet</p>
    <p id="third">Lorem ipsum dolor sit amet</p>
</body>
```

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

- **Usage**: Controls the style of the font, mainly affecting its inclination.
- **Values**: Common values are normal, italic, and oblique.
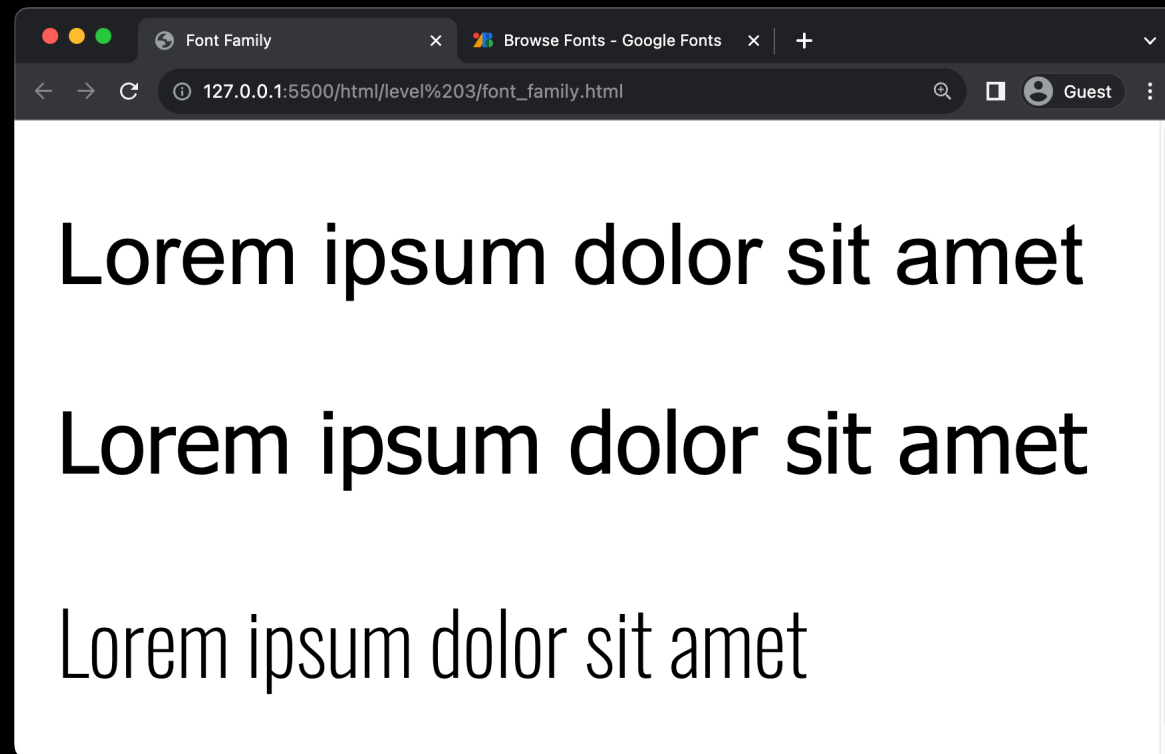- **Text Formatting**: Useful for highlighting or distinguishing

Font Family

- **Usage**: Defines which font should be used for text within an element.
- **Specific Fonts**: Common choices include Arial, Segoe UI, Times New Roman, and others.
- **Fallback Mechanism**: Incorporate a fallback font family in case the primary font is unavailable; helps in maintaining the site aesthetics.
- **Web Safe Fonts**: Employ web-safe fonts to ensure consistency across different browsers and operating systems.
- **Generic Family**: Always end the font family list with a generic family like serif or sans-serif as a last resort option.

Arial Narrow
Book Antiqua
Cambria
Century Gothic
Consolas
COPPERPLATE
Georgia
Impact
Lucida Sans Unicode
Papyrus
Script MT Bold
Tahoma
Times New Roman
Verdana

Font Family

```
<head>
    <title>Font Family</title>
    <link rel="preconnect" href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
<link href="https://fonts.googleapis.com/css2?family=Oswald:wght@200&
display=swap" rel="stylesheet">
    <style>
        #first {font-family: Arial, Helvetica, sans-serif;}
        #second {font-family: 'Segoe UI', Tahoma, Geneva, Verdana,
        sans-serif;}
        #third {font-family: 'Oswald', sans-serif;}
    </style>
</head>
<body>
    <p id="first">Lorem ipsum dolor sit amet</p>
    <p id="second">Lorem ipsum dolor sit amet</p>
    <p id="third">Lorem ipsum dolor sit amet</p>
</body>
```

Font Family — 127.0.0.1:5500/html/level%203/font_family.html

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

Font Family (Fallbacks)

```
font-family: "Open Sans", "Helvetica Neue", "Arial", sans-serif;
```
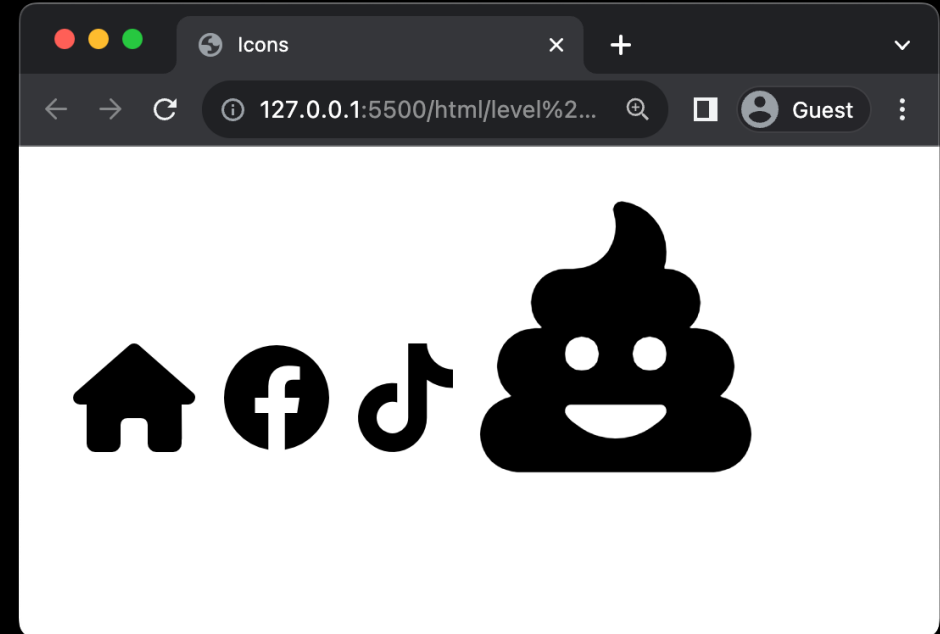
When defining a font-family in CSS, you can list multiple fallback fonts. There's no strict limit, but keep it reasonable for maintainability and readability.

In this example:
- If "Open Sans" is not available, the browser will try "Helvetica Neue".
- If "Helvetica Neue" is not available, the browser will try "Arial".
- If none of the specified fonts are available, the browser will use the default sans-serif font.

Icons using Fonts

```
<head>
    <title>Icons</title>
    <script src="https://kit.fontawesome.com/43290fa92d.
    js" crossorigin="anonymous"></script>
</head>
<body>
    <i class="fa-solid fa-house"></i>
    <i class="fa-brands fa-facebook"></i>
    <i class="fa-brands fa-tiktok"></i>
    <i class="fa-solid fa-poo" style="font-size: 40px;"></
    i>
</body>
```


Using https://fontawesome.com

Practice Set
Text Properties

- Create one div inside another div. Set id and text outer to outer div, set id and text inner to inner div. Set outer div text size to 25px. Set inner to 10px.
- Use icons from fontawesome.com and use icons of LinkedIn and GitHub
- Create an Heading at the centre and make capitalized
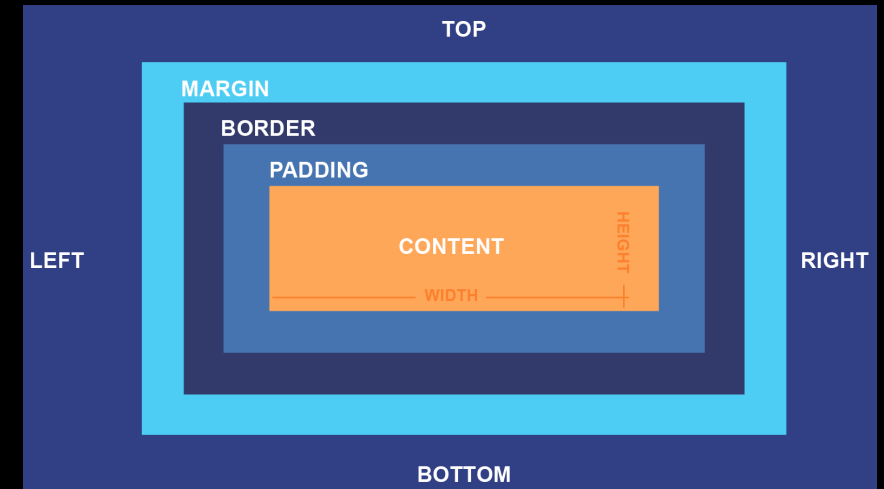- Use Font family for the whole page to TimeNewRoman

What is Box Model

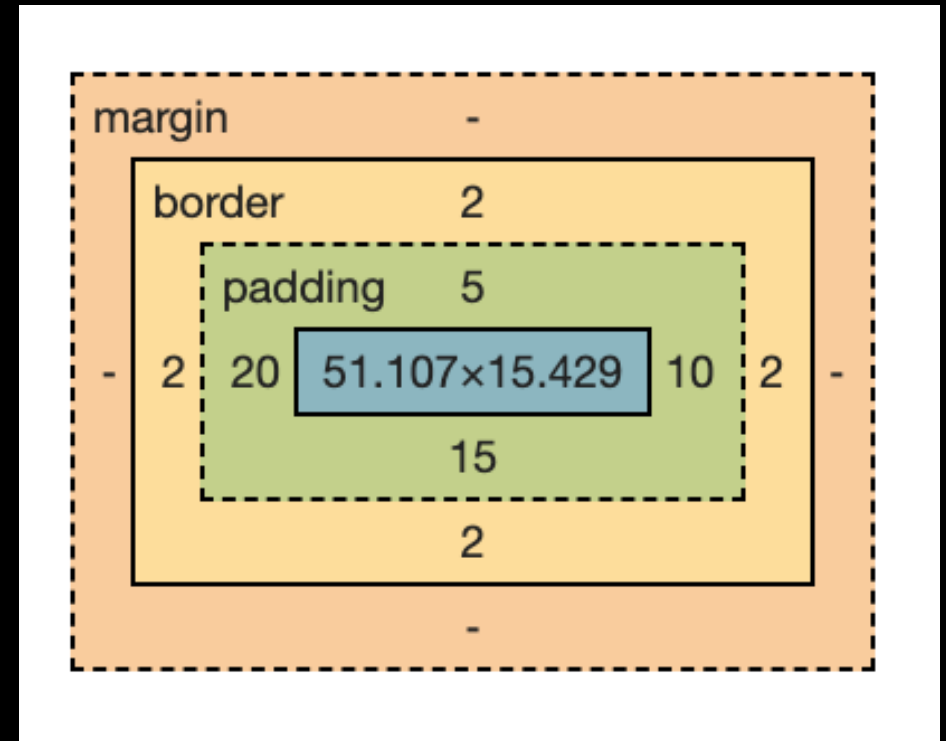- **Core Concept**: Central concept in CSS that outlines the design and layout of elements on the web page.
- **Components**: Consists of four main components - margin, border, padding, and content.
- **Margin**: The space outside the border, separating the element from others.
- **Border**: The outline that encapsulates the padding and content.
- **Padding**: The space between the border and the actual content, providing a buffer.
- **Content**: The innermost layer where text, images, or other media are housed.
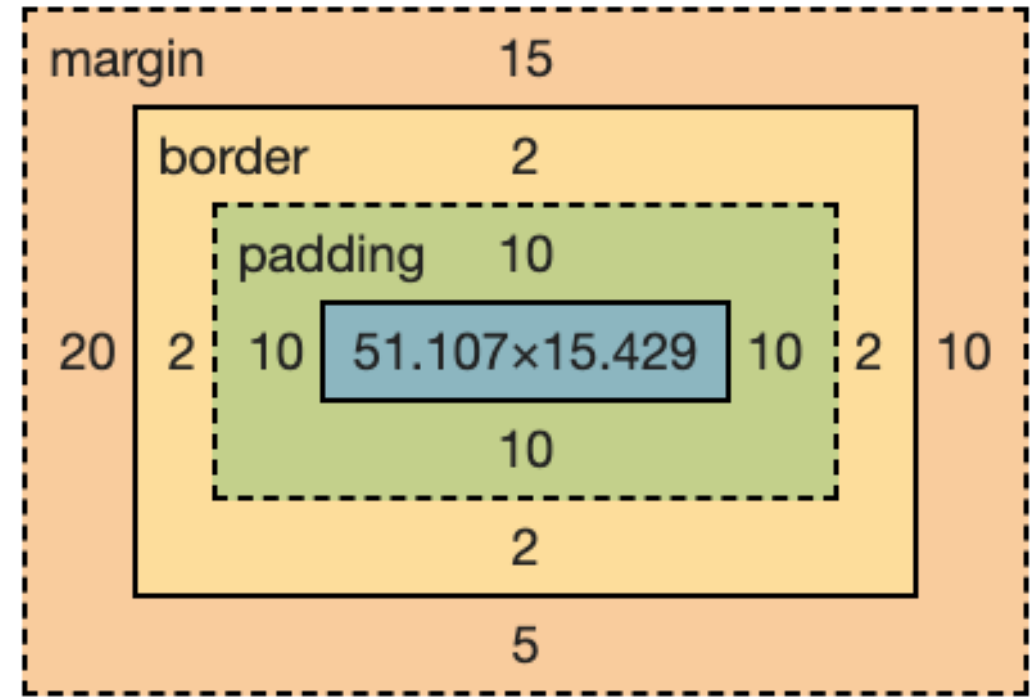
Padding Property

```html
<head>
    <title>Padding</title>
    <style>
        * { margin: 0; padding: 0; }
        #button1 {
            padding: 5px 10px 15px 20px;
            background-color: ▪aquamarine;
        }
    </style>
</head>
<body>
    <button id="button1">Click Me</button>
</body>
```


- **Usage**: Defines the space between the content of an element and its border.
- **Individual Sides**: Allows setting padding for individual sides using padding-top, padding-right, padding-bottom, and padding-left.
- **Shorthand**: Can use shorthand property padding to set all sides at once, e.g., padding: 10px 20px 10px 20px.

Margin Property

```html
<head>
    <title>margin</title>
    <style>
        * { margin: 0; padding: 0; }
        #button1 {
            margin: 15px 10px 5px 20px;
            padding: 10px;
            background-color: ▫aquamarine;
        }
    </style>
</head>
<body>
    <button id="button1">Click Me</button>
</body>
```
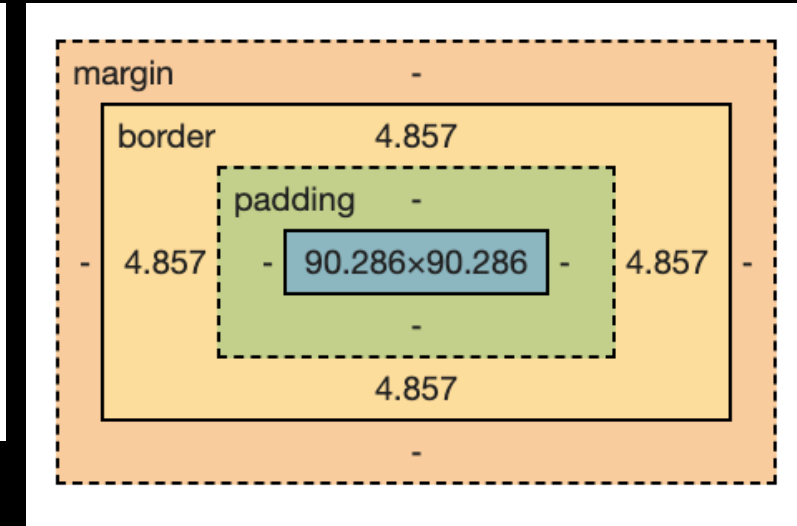
margin					15			
	border				2			
		padding			10			
20	2	10	51.107×15.429			10	2	10
			10					
		2						
	5							

- **Functionality:** Sets the space around elements, separating them from others.
- **Individual Sides:** Customizable for top, right, bottom, and left sides.
- **Shorthand:** Allows quick setup, e.g., margin: 10px 20px. (clockwise)
- **Auto Value:** Can be used for central alignment with auto value.

Border Property

```
<head>
    <title>Border</title>
    <style>
        * { margin: 0; padding: 0; }
        #button1 {
            height: 100px; width: 100px;
            border: 5px dashed ☐black;
            background-color: ☐aquamarine;
        }
    </style>
</head>
<body>
    <button id="button1">Click Me</button>
</body>
```
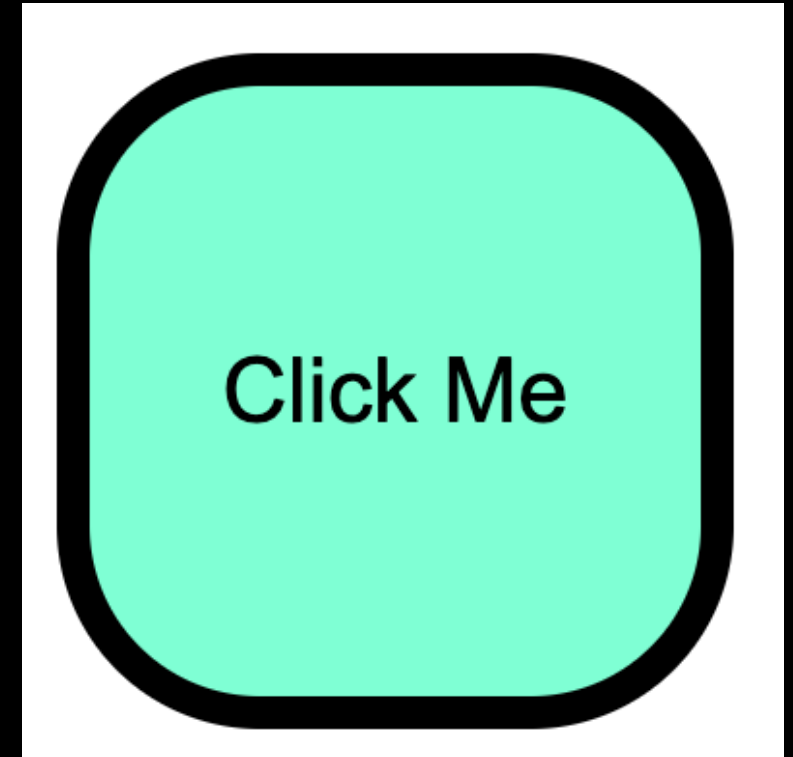
Click Me

- **Usage**: Creates an outline around HTML elements.
- **Components**: Defined by width, style, and color attributes.
- **Styles**: Includes options like solid, dashed, and dotted.
- **Shorthand**: Can set attributes at once, e.g., border: 2px solid black.

Border Property (border radius)

```html
<head>
    <title>Border Radius</title>
    <style>
        * { margin: 0; padding: 0; }
        #button1 {
            height: 100px; width: 100px;
            border: 5px solid black;
            border-radius: 30px;
            background-color: aquamarine;
        }
    </style>
</head>
<body>
    <button id="button1">Click Me</button>
</body>
```
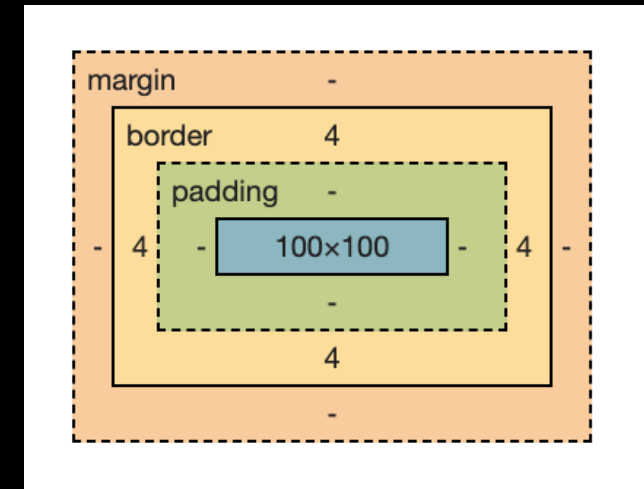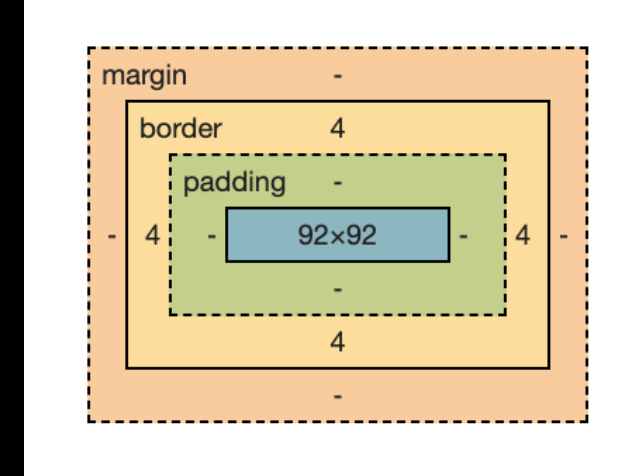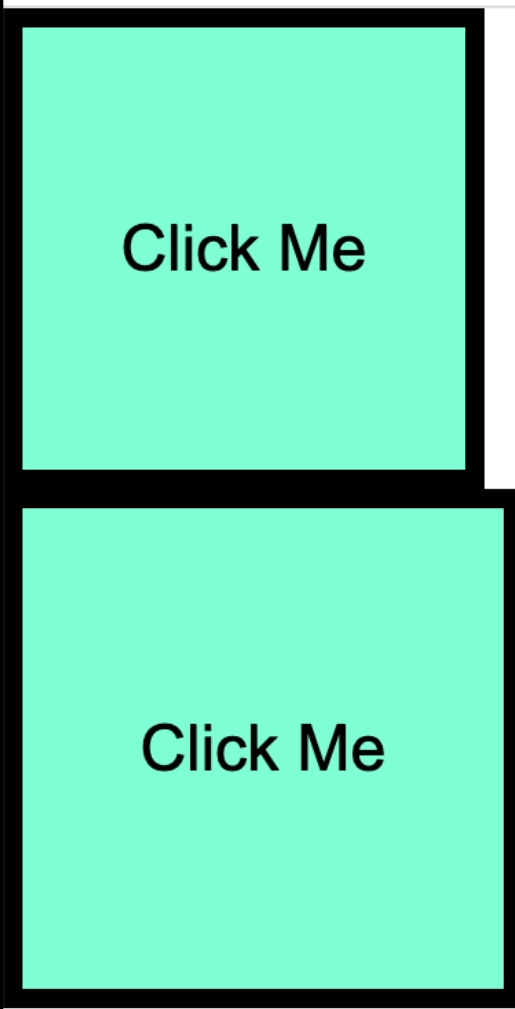

- **Usage**: Used to create rounded corners for elements.
- **Individual Corners**: Allows setting different radii for each corner.
- **Shorthand**: e.g., border-radius: 10px 20px.

Border Property (box sizing)

```html
<head>
    <title>Box Sizing</title>
    <style>
        * { margin: 0; padding: 0; }
        button {
            height: 100px; width: 100px;
            border: 4px solid ☐black;
            background-color: ☐aquamarine;
        }
        #button1 { box-sizing: border-box; }
        #button2 { box-sizing: content-box; }
    </style>
</head>
<body>
    <button id="button1">Click Me</button>
    <button id="button2">Click Me</button>
</body>
```

Click Me

Click Me

margin   -
border   4
padding   -
- 4 - 92×92 - 4 -
-
4

margin   -
border   4
padding   -
- 4 - 100×100 - 4 -
-
4

Practice Set

Box Model

– Create a div with height and width 200px and observe different values in the box model by inspecting.
– Create a button and give 10px padding to top and bottom and 15px on the sides.
– Add 100px margin to the button on all sides.
– Add dotter border with color red and so much that the button becomes a circle.
– Create two boxes with different box-sizing values and observe changes in box model.