

# CSS Comments

Comments are used to explain the code, and may help when you edit the source code at a later date.

Comments are ignored by browsers.

A CSS comment is placed inside the `<style>` element, and starts with `/*` and ends with `*/`:

## Example

```
/* This is a single-line comment */  
p {  
  color: red;  
}
```

# HTML and CSS Comments

From the HTML tutorial, you learned that you can add comments to your HTML source by using the `<!--...-->` syntax.

In the following example, we use a combination of HTML and CSS comments:

## Example

```
<!DOCTYPE html>  
<html>  
  <head>  
    <style>  
      p {  
        color: red; /* Set text color to red */  
      }  
    </style>  
  </head>  
  <body>  
  
    <h2>My Heading</h2>  
  
    <!-- These paragraphs will be red -->  
    <p>Hello World!</p>  
    <p>This paragraph is styled with CSS.</p>  
    <p>CSS comments are not shown in the output.</p>  
  
  </body>  
</html>
```

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# Color :

We use color to design the webpage or the elements of html. We have few methods to use color in css as given below:

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## RGB Value

- In CSS, a color can be specified as an RGB value, using this formula:
- ***rgb(red, green, blue)***
- Each parameter (red, green, and blue) defines the intensity of the color between 0 and 255.
- For example, `rgb(255, 0, 0)` is displayed as red, because red is set to its highest value (255) and the others are set to 0.
- To display black, set all color parameters to 0, like this: `rgb(0, 0, 0)`.
- To display white, set all color parameters to 255, like this: `rgb(255, 255, 255)`.

**RGBA**(red, green, blue, alpha{FOR OPACITY OF COLOR})

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## CSS HEX Colors

### HEX Value

In CSS, a color can be specified using a hexadecimal value in the form:

***#rrggbb***

Where rr (red), gg (green) and bb (blue) are hexadecimal values between 00 and ff (same as decimal 0-255).

For example, `#ff0000` is displayed as red, because red is set to its highest value (ff) and the others are set to the lowest value (00).

To display black, set all values to 00, like this: `#000000`.

To display white, set all values to ff, like this: `#ffffff`.

## 3 Digit HEX Value

Where r, g, and b represent the red, green, and blue components with values between 0 and f.

The 3-digit hex code can only be used when both the values (RR, GG, and BB) are the same for each component. So, if we have #ff00cc, it can be written like this: #f0c.

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## HSL Value

In CSS, a color can be specified using hue, saturation, and lightness (HSL) in the form:

***hsl(hue, saturation, lightness)***

Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue.

Saturation is a percentage value. 0% means a shade of gray, and 100% is the full color.

Lightness is also a percentage. 0% is black, 50% is neither light or dark, 100% is white

- **HSLA: hue, saturation, lightness, alpha**  
Ex. #p1 {background-color:hsl(120,100%,50%);}
-

# CSS Text properties

## Alignment properties:

In this chapter you will learn about the following properties:

- `text-align`
- `text-align-last`
- `direction`
- `unicode-bidi`
- `vertical-align`

## Text Alignment

The `text-align` property is used to set the horizontal alignment of a text.

A text can be left or right aligned, centered, or justified.

<pre>p.a {   text-align-last: right; } p.b {   text-align-last: center; } p.c {   text-align-last: justify; }</pre>	<h3>The text-align-last Property</h3> <p><b>text-align-last: right:</b></p> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.</p> <p><b>text-align-last: center:</b></p> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.</p> <p><b>text-align-last: justify:</b></p> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam semper diam at erat pulvinar, at pulvinar felis blandit. Vestibulum volutpat tellus diam, consequat gravida libero rhoncus ut.</p>
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## Text Direction

The `direction` and `unicode-bidi` properties can be used to change the text direction of an element:

```
p.ex1 {
  direction: rtl;
  unicode-bidi: bidi-override;
}
```

# Vertical Alignment

The **vertical-align** property sets the vertical alignment of an element.

Default value is baseline

```
<p>
this is
  
the logo of css
</p>
```

```
img.c {
  vertical-align: text-bottom;
}
text-top/ text-bottom/sup/
super/ %/middle
```

---

## Text Decoration

- **text-decoration-line**
- **text-decoration-color**
- **text-decoration-style**
- **text-decoration-thickness**
- **text-decoration**

\*we can use these values combinedly also.

**Overline text decoration**

**~~Line-through text decoration~~**

**Underline text decoration**

**Overline and underline text decoration.**

```
h1 {
  text-decoration: overline;
}
h2 {
  text-decoration: line-through;
}
h3 {
  text-decoration: underline;
}
p {
  text-decoration: overline
underline line-through;
}
```

# Specify a Color for the Decoration Line

The `text-decoration-color` property is used to set the color of the decoration line.

```
h1 {  
  text-decoration-line: overline;  
  text-decoration-color: red;  
}  
  
h2 {  
  text-decoration-line: line-through;  
  text-decoration-color: blue;  
}  
  
h3 {  
  text-decoration-line: underline;  
  text-decoration-color: green;  
}  
  
p {  
  text-decoration-line: overline  
  underline;  
  text-decoration-color: purple;  
}
```

**Overline text decoration**

~~Line-through text decoration~~

Underline text decoration

Overline and underline text decoration.

# Specify a Style for the Decoration Line

```
h1 {  
  text-decoration-line: underline;  
  text-decoration-style: solid;  
}  
  
h2 {  
  text-decoration-line: underline;  
  text-decoration-style: double;  
}  
  
h3 {  
  text-decoration-line: underline;  
  text-decoration-style: dotted;  
}  
  
p.ex1 {  
  text-decoration-line: underline;  
  text-decoration-style: dashed;  
}  
  
p.ex2 {  
  text-decoration-line: underline;  
  text-decoration-style: wavy;  
}  
  
p.ex3 {  
  text-decoration-line: underline;  
  text-decoration-color: red;  
  text-decoration-style: wavy;  
}
```

**Heading 1**

**Heading 2**

**Heading 3**

A paragraph.

Another paragraph.

Another paragraph.

# Specify the Thickness for the Decoration Line

<pre>h1 {   text-decoration-line: underline;   text-decoration-thickness: auto; }  h2 {   text-decoration-line: underline;   text-decoration-thickness: 5px; }  h3 {   text-decoration-line: underline;   text-decoration-thickness: 25%; }  p {   text-decoration-line: underline;   text-decoration-color: red;   text-decoration-style: double;   text-decoration-thickness: 5px; }</pre>	<p><u>Heading 1</u></p> <p><u>Heading 2</u></p> <p><u>Heading 3</u></p> <p>A paragraph.</p>
--	---

## The Shorthand Property

The `text-decoration` property is a shorthand property for:

- `text-decoration-line` (required)
- `text-decoration-color` (optional)
- `text-decoration-style` (optional)
- `text-decoration-thickness` (optional)

```
p {  
  text-decoration: underline red double 5px;  
}
```



# CSS Text Transformation

The `text-transform` property is used to specify uppercase and lowercase letters in a text.

It can be used to turn everything into uppercase or lowercase letters, or capitalize the first letter of each word:

<pre>p.uppercase {   text-transform: uppercase; }  p.lowercase {   text-transform: lowercase; }  p.capitalize {   text-transform: capitalize; }</pre>	<p>THIS TEXT IS TRANSFORMED TO UPPERCASE.</p> <p>this text is transformed to lowercase.</p> <p>This Text Is Capitalized.</p>
---	--

# Text Spacing

In this chapter you will learn about the following properties:

- `text-indent`
- `letter-spacing`
- `line-height`
- `word-spacing`
- `white-space`

## Text Indentation

The `text-indent` property is used to specify the indentation of the first line of a text:

<pre>p {   text-indent: 100px; }</pre>	<p>In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since. 'Whenever you feel like criticizing anyone,' he told me, 'just remember that all the people in this world haven't had the advantages that you've had.'</p>
--	--

## Letter Spacing

The `letter-spacing` property is used to specify the space between the characters in a text.

<pre>h1 {   letter-spacing: 5px; }  h2 {   letter-spacing: -2px; }</pre>	<p><b>This is heading 1</b></p> <p><b>This is heading 2</b></p>
--	---

## Line Height

The `line-height` property is used to specify the space between lines:

<pre>p.small { line-height: 0.8}  p.big { line-height: 1.8;}</pre>	<p>This is a paragraph with a smaller line-height. This is a paragraph with a smaller line-height.</p> <p>This is a paragraph with a bigger line-height. This is a paragraph with a bigger line-height.</p>
--	---

# Word Spacing

The `word-spacing` property is used to specify the space between the words in a text.

<pre>p.one {   word-spacing: 10px; }  p.two {   word-spacing: -2px; }</pre>	<p>This is a paragraph with larger word spacing.</p> <p>This is a paragraph with smaller word spacing.</p>
---	--

# White Space

The `white-space` property specifies how white-space inside an element is handled.

<pre>p {   white-space: nowrap; / wrap }</pre>	Got out of page width or not
--	------------------------------

Short view:

# The CSS Text Spacing Properties

Property	Description
<a href="#">letter-spacing</a>	Specifies the space between characters in a text
<a href="#">line-height</a>	Specifies the line height
<a href="#">text-indent</a>	Specifies the indentation of the first line in a text-block
<a href="#">white-space</a>	Specifies how to handle white-space inside an element
<a href="#">word-spacing</a>	Specifies the space between words in a text

=====

## Text Shadow

The `text-shadow` property adds shadow to text.

<pre>h1 {   text-shadow: 2px 2px 5px red; }</pre>	<b>Text-shadow effect!</b>
<pre>h1 {   color: white;   text-shadow: 2px 2px 4px #000000; }</pre>	Text-shadow effect!
<pre>h1 {   text-shadow: 0 0 3px #ff0000,               0 0 5px #0000ff; }</pre>	Text-shadow with red and blue neon glow!
<pre>h1 {   color: white;   text-shadow: 1px 1px 2px black,               0 0 25px blue,               0 0 5px darkblue; }</pre>	Text-shadow effect!