## Child Selectors

A child selector is used to select only those elements that are the direct children of some element.

A child selector is made up of two or more selectors separated by a greater than symbol (>). You can use this selector, for instance, to select the first level of list elements inside a nested list that has more than one level.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Example of CSS Child Selectors</title>

<style>

ul > li {

list-style: square;

}

ul > li ol {

list-style: none;

}

</style>

</head>

<body>

<ul>

<li><a href="#">Home</a></li>

<li><a href="#">About</a></li>

<li>

<a href="#">Services</a>

<ol>

<li><a href="#">Design</a></li>

<li><a href="#">Development</a></li>

</ol>

</li>

<li><a href="#">Contact</a></li>

</ul>

</body>

</html>

The style rule inside the selector ul > li applied to only those <li> elements that are direct children of the <ul> elements, and has no effect on other list elements.

## Adjacent Sibling Selectors

The adjacent sibling selectors can be used to select sibling elements (i.e. elements at the same level). This selector has the syntax like: E1 + E2, where E2 is the target of the selector.

The selector h1 + p in the following example will select the [<p>](https://www.tutorialrepublic.com/html-tutorial/html-paragraphs.php) elements only if both the [<h1>](https://www.tutorialrepublic.com/html-tutorial/html-headings.php) and <p> elements share the same parent in the document tree and <h1> is immediately precedes the <p> element. That means only those paragraphs that come immediately after each <h1> heading will have the associated style rules.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Example of CSS Adjacent Sibling Selectors</title>

<style>

h1 + p {

color: blue;

font-size: 18px;

}

ul.task + p {

color: #f0f;

text-indent: 30px;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

<p>This is another paragraph.</p>

<ul class="task">

<li>Task 1</li>

<li>Task 2</li>

<li>Task 3</li>

</ul>

<p>This is one more paragraph.</p>

<p>This is also a paragraph.</p>

</body>

</html>

## General Sibling Selectors

The general sibling selector is similar to the adjacent sibling selector (E1 + E2), but it is less strict. A general sibling selector is made up of two simple selectors separated by the tilde (∼) character. It can be written like: E1 ∼ E2, where E2 is the target of the selector.

The selector h1 ∼ p in the example below will select all the <p> elements that preceded by the <h1> element, where all the elements share the same parent in the document tree.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Example of CSS General Sibling Selectors</title>

<style>

h1 ~ p {

color: blue;

font-size: 18px;

}

ul.task ~ p {

color: #f0f;

text-indent: 30px;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

<p>This is another paragraph.</p>

<ul class="task">

<li>Task 1</li>

<li>Task 2</li>

<li>Task 3</li>

</ul>

<p>This is one more paragraph.</p>

<p>This is also a paragraph.</p>

</body>

</html>

## Grouping Selectors

Often several selectors in a style sheet share the same style rules declarations. You can group them into a comma-separated list to minimize the code in your style sheet. It also prevents you from repeating the same style rules over and over again

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Example of CSS Selectors without Grouping</title>

<style>

h1 {

font-size: 36px;

font-weight: normal;

}

h2 {

font-size: 28px;

font-weight: normal;

}

h3 {

font-size: 22px;

font-weight: normal;

}

</style>

</head>

<body>

<h1>This is a heading of level 1</h1>

<h2>This is a heading of level 2</h2>

<h3>This is a heading of level 3</h3>

</body>

</html>

As you can see in the above example, the same style rule font-weight: normal; is shared by the selectors h1, h2 and h3, so it can be grouped in a comma-separated list,

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Example of CSS Grouping Selectors</title>

<style>

h1, h2, h3 {

font-weight: normal;

}

h1 {

font-size: 36px;

}

h2 {

font-size: 28px;

}

h3 {

font-size: 22px;

}

</style>

</head>

<body>

<h1>This is a heading of level 1</h1>

<h2>This is a heading of level 2</h2>

<h3>This is a heading of level 3</h3>

</body>

</html>

## Background Image

The background-image property set an image as a background of an HTML element.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting background-image in CSS</title>

<style>

body {

background-image: url("/examples/images/tile.png");

}

</style>

</head>

<body>

<h1>Background Image Demo</h1>

<p>Python Language

</p>

</body>

</html>

## Background Repeat

The background-repeat property allows you to control how a background image is repeated or tiled in the background of an element. You can set a background image to repeat vertically (y-axis), horizontally (x-axis), in both directions, or in neither direction.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting Horizontal background-repeat in CSS</title>

<style>

body {

background-image: url("/examples/images/gradient.png");

background-repeat: repeat-x;

}

</style>

</head>

<body>

<h1>Background Repeat Demo</h1>

<p>Python language .</p>

</body>

</html>

Similarly, you can use the value repeat-y to repeat the background image vertically along the y-axis, or the value no-repeat to prevent the repetition altogether.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Disabling background-repeat in CSS</title>

<style>

body {

background-image: url("/examples/images/texture.png");

background-repeat: no-repeat;

}

</style>

</head>

<body>

<h1>Background Repeat Demo</h1>

<p>Python Language.</p>

</body>

</html>

## Background Position

The background-position property is used to control the position of the background image.

If no background position has been specified, the background image is placed at the default top-left position of the element i.e. at (0,0)

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Default background-position of Images in CSS</title>

<style>

body {

background-image: url("/examples/images/robot.png");

background-repeat: no-repeat;

}

h1, p {

margin-left: 200px;

}

</style>

</head>

<body>

<h1>Background Position Demo</h1>

<p>Python Language.</p>

</body>

</html>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting Custom background-position of Images in CSS</title>

<style>

body {

background-image: url("/examples/images/robot.png");

background-repeat: no-repeat;

background-position: 100% top;

}

h1, p {

margin-right: 200px;

}

</style>

</head>

<body>

<h1>Background Position Demo</h1>

<p>Python Language.</p>

</body>

</html>

**CSS Fonts**

## Styling Fonts with CSS

Choosing the right font and style is very crucial for the readability of text on a page.

CSS provide several properties for styling the font of the text, including changing their face, controlling their size and boldness, managing variant, and so on.

## Font Family

The font-family property is used to specify the font to be used to render the text.

This property can hold several comma-separated font names as a fallback system, so that if the first font is not available on the user's system, browser tries to use the second one, and so on.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting font-family in CSS</title>

<style>

body {

font-family: Arial, Helvetica, sans-serif;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

## Font Style

The font-style property is used to set the font face style for the text content of an element.

The font style can be normal, italic or oblique. The default value is normal.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting font-style in CSS</title>

<style>

p.normal {

font-style: normal;

}

p.italic {

font-style: italic;

}

p.oblique {

font-style: oblique;

}

</style>

</head>

<body>

<p class="normal">This is a normal paragraph.</p>

<p class="italic">This is a paragraph with italic font style.</p>

<p class="oblique">This is a paragraph with oblique font style.</p>

</body>

</html>

## Font Size

The font-size property is used to set the size of font for the text content of an element.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Defining Font Size Using Pixels</title>

<style>

h1 {

font-size: 24px;

}

p {

font-size: 14px;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

## Font Weight

The font-weight property specifies the weight or boldness of the font.

This property can take one of the following values: normal, bold, bolder, lighter, 100, 200, 300, 400, 500, 600, 700, 800, 900 and [inherit](https://www.tutorialrepublic.com/definitions.php#inherit).

* The numeric values 100-900 specify the font weights, where each number represents a weight greater than its predecessor. 400 is same as normal & 700 is same as bold.
* The bolder and lighter values are relative to the inherited font weight, while the other values such as normal and bold are absolute font weights.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting font-weight in CSS</title>

<style>

p {

font-weight: bold;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph in bold font.</p>

</body>

</html>

## Font Variant

The font-variant property allows the text to be displayed in a special small-caps variation.

Small-caps or small capital letters are slightly different to normal capital letters, in which lowercase letters appear as smaller versions of the corresponding uppercase letters.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting font-variant in CSS</title>

<style>

p {

font-variant: small-caps;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>

</html>

# CSS Text

## Formatting Text with CSS

CSS provides several properties that allows you to define various text styles such as color, alignment, spacing, decoration, transformation, etc. very easily and effectively.

The commonly used text properties are: text-align, text-decoration, text-transform, text-indent, line-height, letter-spacing, word-spacing

These properties give you precise control over the visual appearance of the characters, words, spaces, and so on

## Text Color

The color of the text is defined by the CSS color property.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting Text Color using CSS</title>

<style>

h1 {

color: #ff0000;

}

p {

color: green;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>This is a simple paragraph of text.</p>

</body>

</html>

## Text Alignment

The [text-align](https://www.tutorialrepublic.com/css-reference/css-text-align-property.php) property is used to set the horizontal alignment of the text.

Text can be aligned in four ways: to the left, right, centre or justified (straight left and right margins).

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting Text Alignment using CSS</title>

<style>

h1 {

text-align: center;

}

p {

width: 300px;

text-align: justify;

}

</style>

</head>

<body>

<h1>This is a heading</h1>

<p>Python language Python language

Python language

Python language

Python language

Python language

Python language

.</p>

</body>

</html>

## Text Decoration

The [text-decoration](https://www.tutorialrepublic.com/css-reference/css-text-decoration-property.php) property is used to set or remove decorations from text.

This property typically accepts one of the following values: underline, overline, line-through, and none. You should avoid underline text that is not a link, as it might confuse the visitor.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting Text Decoration using CSS</title>

<style>

h1 {

text-decoration:overline;

}

h2 {

text-decoration:line-through;

}

h3 {

text-decoration:underline;

}

</style>

</head>

<body>

<h1>This is heading 1</h1>

<h2>This is heading 2</h2>

<h3>This is heading 3</h3>

</body>

</html>

## Text Transformation

The text-transform property is used to set the cases for a text.

Text are often written in mixed case. However, in certain situations you may want to display your text in entirely different case. Using this property you can change an element's text content into uppercase or lowercase letters, or capitalize the first letter of each word without modifying the original text.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting Text Transformation using CSS</title>

<style>

h1 {

text-transform: uppercase;

}

h2 {

text-transform: capitalize;

}

h3 {

text-transform: lowercase;

}

</style>

</head>

<body>

<h1>This is heading 1</h1>

<h2>This is heading 2</h2>

<h3>This is heading 3</h3>

</body>

</html>

## Letter Spacing

The [letter-spacing](https://www.tutorialrepublic.com/css-reference/css-letter-spacing-property.php) property is used to set extra spacing between the characters of text.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting Letter Spacing using CSS</title>

<style>

h1 {

letter-spacing: -3px;

}

p {

letter-spacing: 10px;

}

</style>

</head>

<body>

<h1>This is a heading.</h1>

<p>This is a simple paragraph of text.</p>

</body>

</html>

## Word Spacing

The word-spacing property is used to specify additional spacing between the words.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>Setting word spacing using CSS</title>

<style>

p.one {

word-spacing: 20px;

}

p.two {

width: 150px;

word-spacing: 20px;

text-align: justify;

}

p.three {

word-spacing: 20px;

white-space: pre;

}

</style>

</head>

<body>

<p class="one">This is a normal paragraph.</p>

<hr>

<p class="two">Note that spacing between the words of this paragraph are varying in order to justify the text even if the value of word-spacing property is set to 20px.</p>

<hr>

<p class="three">Note that spacing between the words

of this paragraph are higher than the normal spacing

even if whitespace are preserved.</p>

</body>

</html>