

HTML Background

- HTML Background is used to set background image or background color. Whether you want to add an image or a plain color as background you need to specify it in the `<body>` tag. Specify a background image for an HTML document: `<body background="url">`

Example:

```
<html>
<body background="pc.jpg">
<h1>Background Image</h1>
</body> </html>
```

Specify a background color for an HTML document: `<body bgcolor="#E6E6FA">` Example:

```
<html>
<body bgcolor="#E6E6FA">
<h1>Background Color</h1>
<p><a href="home.html">Home</a></p>
</body> </html>
```

HTML Tables

Tables are used on websites for two major purposes:

- ❑ Arranging information in a table.
- ❑ Creating a page layout with the use of tables.

Some other uses of Table in a website are:

Table is used to divide the page into different sections.

- ❑ Creating menus.
- ❑ Adding interactive form fields.
- ❑ Easy alignment of images that have been cut into smaller pieces.

HTML Tables

The HTML tables are created using the `<table>` tag in which the `<tr>` tag is used to create table rows and `<td>` tag is used to create data cells.

```
<html>
<body>
<table border="1">
<tr>
<td>Row 1, Column 1</td><td>Row 1, Column 2</td>
</tr>
<tr>
<td>Row 2, Column 1</td><td>Row 2, Column 2</td>
</tr>
</table>
</body></html>
```

HTML Tables

This will produce following result:

| | |
|-----------------|-----------------|
| Row 1, Column 1 | Row 1, Column 2 |
| Row 2, Column 1 | Row 2, Column 2 |

Here border is an attribute of <table> tag and it is used to put a border across all the cells. If you do not need a border then you can use border="0".

HTML Headings

Table Heading Table heading can be defined using <th> tag. This tag will be put to replace <td> tag, which is used to represent actual data cell. Normally you will put your top row as table heading as shown below, otherwise you can use <th> element in any row.

Example

```
<html>
<body>
<table border="1">
<tr>
<th>Name</th><th>Salary</th>
</tr>
<tr><td>Ramesh Raman</td><td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td><td>7000</td>
</tr>
</table></body></html>
```

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This will produce following result:

| Name | Salary |
|-----------------|--------|
| Ramesh Raman | 5000 |
| Shabbir Hussein | 7000 |

Cellpadding and Cellspacing Attributes

There are two attributes called cellpadding and cellspacing which you will use to adjust the white space in your table cells. The cellspacing attribute defines the width of the border, while cellpadding represents the distance between cell borders and the content within a cell.

```
<html>
<body>
<table border="1" cellpadding="5" cellspacing="5">
<tr>
<th>Name</th><th>Salary</th>
</tr>
<tr>
<td>Ramesh Raman</td><td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td><td>7000</td>
</tr></table></body></html>
```

This will produce following result

| Name | Salary |
|-----------------|--------|
| Ramesh Raman | 5000 |
| Shabbir Hussein | 7000 |

Colspan and Rowspan Attributes

You will use colspan attribute if you want to merge two or more columns into a single column. Similar way you will use rowspan if you want to merge two or more rows.

Example

```
<html>
<body>
<table border="1">
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
```

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```
<tr>
<td rowspan="2">Row 1 Cell 1</td><td>Row 1 Cell 2</td><td>Row 1 Cell
3</td>
</tr>
<tr>
<td>Row 2 Cell 2</td><td>Row 2 Cell 3</td>
</tr>
<tr>
<td colspan="3">Row 3 Cell 1</td>
</tr>
</table>
</body>
</html>
```

This will produce following result:

| Column 1 | Column 2 | Column 3 |
|--------------|--------------|--------------|
| Row 1 Cell 1 | Row 1 Cell 2 | Row 1 Cell 3 |
| | Row 2 Cell 2 | Row 2 Cell 3 |
| Row 3 Cell 1 | | |

Tables Backgrounds

You can set table background using one of the following two ways:

❓ bgcolor attribute - You can set background color for whole table or just for one cell. ❓ background attribute - You can set background image for whole table or just for one cell. You can also set border color also using bordercolor attribute.

Example

```
<table border="1" bordercolor="green" bgcolor="yellow">
```

Here is an example of using background attribute. Here we will use an image available in /images directory.

```
<table border="1" bordercolor="green" background="/images/test.png">
```

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Table Height and Width

You can set a table width and height using width and height attributes. You can specify table width or height in terms of pixels or in terms of percentage of available screen area. Example

```
<html>
<body>
<table border="1" width="400" height="150">
<tr>
<td>Row 1, Column 1</td><td>Row 1, Column 2</td>
</tr>
<tr>
<td>Row 2, Column 1</td><td>Row 2, Column 2</td>
</tr>
</table>
</body>
</html>
```

HTML IFRAME

This will produce following result:

| | |
|-----------------|-----------------|
| Row 1, Column 1 | Row 1, Column 2 |
| Row 2, Column 1 | Row 2, Column 2 |

Table Caption

The caption tag will serve as a title for the table and it shows up at the top of the table.

Example:

```
<html>
<body>
<table border="1" width="100%">
<caption>This is the caption</caption>
<tr>
<td>row 1, column 1</td><td>row 1, columnn 2</td>
</tr>
<tr>
<td>row 2, column 1</td><td>row 2, columnn 2</td>
</tr>
</table></body></html>
```

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HTML

This will produce following result:

This is the caption

| | |
|-----------------|------------------|
| row 1, column 1 | row 1, columnn 2 |
| row 2, column 1 | row 2, columnn 2 |

Nested Tables

You can use one table inside another table. Not only tables you can use almost all the tags inside table data tag <td>.

Example

Following is the example of using another table and other tags inside a table cell.

```
<html>
<body>
<table border="1" width="100%">
<tr>
<td>
  <table border="1" width="100%">
  <tr>
  <th>Name</th>
  <th>Salary</th>
  </tr>
```

Nested Tables

```
<tr>
<td>Ramesh Raman</td>
  <td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
</tr>
</table>
</td>
</tr>
</table></body></html>
```


Nested Tables

```
<tr>  
<td>Ramesh Raman</td>  
  <td>5000</td>  
</tr>  
<tr>  
<td>Shabbir Hussein</td>  
<td>7000</td>  
</tr>  
</table>  
</td>  
</tr>  
</table></body></html>
```

This will produce following result:

| Name | Salary |
|-----------------|--------|
| Ramesh Raman | 5000 |
| Shabbir Hussein | 7000 |

HTML Layouts - Using Tables

- A simple way of creating layouts is by using the HTML <table> tag.
- Multiple columns are created by using <div> or <table> elements.
- CSS are used to position elements, or to create backgrounds or colorful look for the pages.

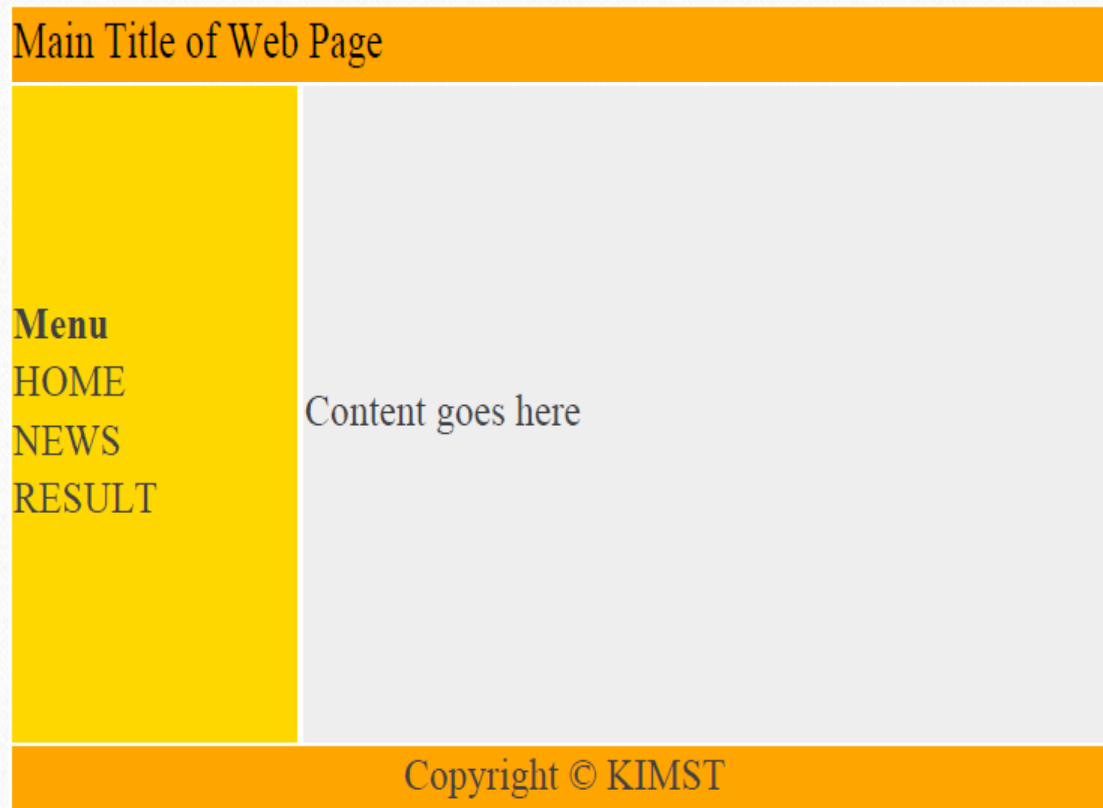
Example:

```
<html>
<body>
<table width="500" border="0">
<tr> <td colspan="2" style="background-color:#FFA500;">
  <h1>Main Title of Web Page</h1> </td>
</tr>
```

HTML Layouts

```
<tr> <td style="background-color:#FFD700;width:100px;">
  <b>Menu</b><br>
  HOME<br>
  NEWS<br>
  RESULT </td>
<td style="background-
color:#EEEEEE;height:200px;width:400px;"> Content goes
here</td> </tr>
<tr> <td colspan="2" style="background-color:#FFA500;text-
align:center;"> Copyright © KIMST</td> </tr>
</table>
</body> </html>
```

The HTML code above will produce the following result:



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HTML Layouts - Using <div> Elements

The div element is a block level element used for grouping HTML elements.

The following example uses three div elements to create multiple Sections.

Example:

```
<html>
```

```
<body>
```

```
<div id="header" style="background-color:#FFA500;">
```

```
<h1 style="margin-bottom:0;">Main Title of Web Page</h1>
```

```
</div>
```

```
<div id="content" style="background-  
color:#EEEEEE;height:200px;width:400px;">
```

Content goes here

```
</div>
```

```
<div id="footer" style="background-color:#FFA500;text-  
align:center;">
```

Copyright © kimst

```
</div>
```

```
</body>
```

```
</html>
```


This will produce following result:

Main Title of Web Page

Content goes here

Copyright © KIMST

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HTML Layouts - Using <div> Elements

The div element is a block level element used for grouping HTML elements.

The following example uses five div elements to create a multiple column layout, creating the same result as in the previous example:

Example:

```
<html>
```

```
<body>
```

```
<div id="container" style="width:500px">
```

```
<div id="header" style="background-color:#FFA500;">
```

```
<h1 style="margin-bottom:0;">Main Title of Web Page</h1>
```

```
</div>
```

```
<div id="menu" style="background-  
color:#FFD700;height:200px;width:100px;float:left;">  
<b>Menu</b><br>  
HOME<br>  
NEWS<br>  
RESULT  
</div>  
<div id="content" style="background-  
color:#EEEEEE;height:200px;width:400px;float:left;">  
Content goes here  
</div>  
<div id="footer" style="background-color:#FFA500;clear:both;text-  
align:center;"> Copyright © kimst  
</div>  
</div>  
</body>  
</html>
```

This will produce following result:

Main Title of Web Page

Menu
HOME
NEWS
RESULT

Content goes here

Copyright © KIMST

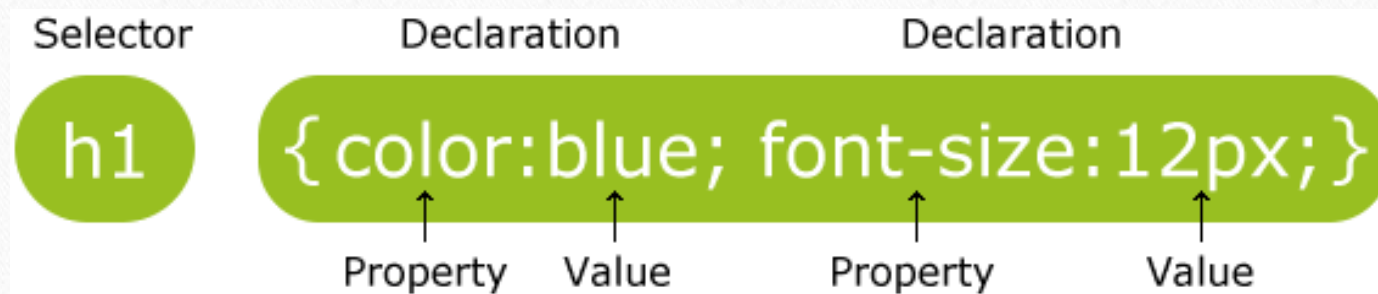
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CSS

- CSS stands for Cascading Style Sheets
- CSS defines how HTML elements are to be displayed
- CSS saves a lot of work

CSS Syntax

A CSS rule set consists of a selector and a declaration block:



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CSS

- The selector points to the HTML element you want to style.
- The declaration block contains one or more declarations separated by semicolons.
- Each declaration includes a property name and a value, separated by a colon.
- A CSS declaration always ends with a semicolon, and declaration groups are surrounded by curly braces:

```
p {color:red;text-align:center;}
```

To make the CSS code more readable, you can put one declaration on each line.

In the following example all `<p>` elements will be center-aligned, with a red text color:

```
<html>
<head>
<style>
p {
  color: red;
  text-align: center;
}
</style>
</head>
<body>
  <p>Hello World!</p>
  <p>This paragraph is styled with CSS.</p>
</body>
</html>
```

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CSS Selectors

- **CSS selectors allow you to select and manipulate HTML elements.**
- **CSS selectors are used to "find" (or select) HTML elements based on their id, class, type, attribute, and more.**

Types of Selectors

- **The element Selector**
- **The id Selector**
- **The class Selector**
- **Grouping Selectors**

- **The element Selector**

The element selector selects elements based on the element name.

You can select all <p> elements on a page like this:

(all <p> elements will be center-aligned, with a red text color)

Example:

```
<html>
```

```
<head>
```

```
<style>
```

```
p {
```

```
  text-align: center;
```

```
  color: red;
```

```
}
```

```
</style></head>
```

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```
<body>
```

```
<p>Every paragraph will be affected by the  
style.</p>
```

```
<p id="para1">Me too!</p>
```

```
<p>And me!</p>
```

```
</body>
```

```
</html>
```

The id Selector

- The id selector uses the id attribute of an HTML element to select a specific element.
- An id should be unique within a page, so the id selector is used if you want to select a single, unique element.
- To select an element with a specific id, write a hash character, followed by the id of the element.
- The style rule below will be applied to the HTML element with id="para1":

```
<html>
<head>
<style>
#para1 {
    text-align: center;
    color: red;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<p id="para1">Hello World!</p>
```

```
<p>This paragraph is not affected by the style.</p>
```

```
</body>
```

```
</html>
```

- **The class Selector**
- **The class selector selects elements with a specific class attribute.**
- **To select elements with a specific class, write a period character, followed by the name of the class:**
- **In the example below, all HTML elements with class="center" will be center-aligned:**

```
<html>  
<head>  
<style>  
.center {  
  text-align: center;  
  color: red;  
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1 class="center">Red and center-aligned  
heading</h1>
```

```
<p class="center">Red and center-aligned  
paragraph.</p>
```

```
</body>
```

```
</html>
```


- **Grouping Selectors**
- **If you have elements with the same style definitions, like this:**

```
h1 {  
  text-align: center;  
  color: red;  
}
```

```
h2 {  
  text-align: center;  
  color: red;  
}
```

```
p {  
  text-align: center;  
  color: red;  
}
```

- **you can group the selectors, to minimize the code.**
- **To group selectors, separate each selector with a comma.**

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- In the example below we have grouped the selectors from the code above:

```
<html>
```

```
<head>
```

```
<style>
```

```
h1, h2, p {
```

```
  text-align: center;
```

```
  color: red;
```

```
}</style></head>
```

```
<body>
```

```
<h1>Hello World!</h1>
```

```
<h2>Smaller heading!</h2>
```

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

```
</body></html>
```

Ways to Insert CSS

There are three ways of inserting a style sheet:

- External style sheet
- Internal style sheet
- Inline style

External Style Sheet

- An external style sheet is ideal when the style is applied to many pages. With an external style sheet, you can change the look of an entire Web site by changing just one file.
- Each page must include a link to the style sheet with the <link> tag. The <link> tag goes inside the head section:

```
<head>  
<link rel="stylesheet" type="text/css" href="mystyle.css">  
</head>
```

An external style sheet can be written in any text editor. The file should not contain any html tags. The style sheet file must be saved with a .css extension. An example of a style sheet file called "myStyle.css", is shown below:

```
body {  
    background-color: lightblue;  
}  
h1 {  
    color: navy;  
    margin-left: 20px;  
}
```

Internal Style Sheet

- An internal style sheet should be used when a single document has a unique style. You define internal styles in the head section of an HTML page, inside the `<style>` tag, like this:

```
<html>
<head><style>
body {
  background-color: linen;
}
h1 {
  color: maroon;
  margin-left: 40px;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

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

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

```
</body>
```

```
</html>
```


Inline Styles

- To use inline styles, add the style attribute to the relevant tag. The style attribute can contain any CSS property. The example shows how to change the color and the left margin of a h1 element:

```
<html>
```

```
<body>
```

```
<h1 style="color:blue;margin-left:30px;">This is a heading.</h1>
```

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

```
</body>
```

```
</html>
```

CSS Background

The CSS background properties are used to define the background effects for elements.

background is made up of these properties:

- **background-color**
- **background-image**
- **background-repeat**
- **background-attachment**
- **background-position**

background-color

The background-color property specifies the background color of an element.

Example:

```
body {  
    background-color: green;  
}
```

In CSS, there are 3 ways to define color.

1. **Color Name** – Such as “Blue”
2. **Hexadecimal Value** – Such as “#0000ff”
3. **RGB Value** – Such as “RGB(0,0,255)”

Background Image

The background-image property specifies an image to use as the background of an element.

By default, the image is repeated so it covers the entire element.

The background-image property in CSS applies a graphic (e.g. PNG, SVG, JPG, GIF or gradient) to the background of an element.

There are two different types of images you can include with CSS: regular images and gradients.

Example:

```
body {  
  
background: url("pic1.jpg");  
  
}
```

Or

```
body {  
  
background-image: url("pic1.jpg");  
  
}
```

Set two background images for the <body> element:

Example:

```
body {  
    background-image: url("pic1.gif"), url("pic2.gif");  
}
```

Another option when using backgrounds is to tell the browser to create a **gradient**.

Example:

```
body
{
background: linear-gradient(black, white);
}
```

You can also use **radial gradients**:

```
body {
background: radial-gradient(circle, black, white);
}
```

gradients are just another form of background image. The difference is that the *browser* makes the image for you.

Background Repeat

If a background-image property is specified, the background-repeat property in CSS defines if (and how) it will repeat. It sets a repeat direction for an image in the element's background.

Example:

```
body{ background-image: url("pic1.png");  
background-repeat: repeat-x; }
```

These are the possible values for this property:

repeat: tile the image in both directions. This is the default value.

repeat-x: tile the image horizontally

repeat-y: tile the image vertically

no-repeat: don't tile, just show the image once

By default, a background-image is repeated both vertically and horizontally.

Background Position

The background-position property sets the starting position of a background image.

| Value | Description |
|---|--|
| left top left center left bottom right top right center right bottom center top center center center bottom | If you only specify one keyword, the other value will be "center". |
| <i>x% y%</i> | The first value is the horizontal position and the second value is the vertical. The top left corner is 0% 0%. The right bottom corner is 100% 100%. If you only specify one value, the other value will be 50%. . Default value is: 0% 0% |
| <i>xpos ypos</i> | The first value is the horizontal position and the second value is the vertical. The top left corner is 0 0. Units can be pixels (0px 0px) or any other CSS units. If you only specify one value, the other value will be 50%. You can mix % and positions |
| inherit | Sets this property to its default value. |

Background Position

Example

```
body {  
    background-image: url("Lion.jpg");  
    background-repeat: no-repeat;  
    background-position: right top;  
}
```

Background Attachment

CSS background attachment property specifies whether the image set using background-image property is fixed with respect to the containing block or shall it scroll.

Syntax:

```
background-attachment: scroll | fixed | inherit
```

Values

- **scroll** : Specifies that the background image will scroll along with the containing block.
- **fixed** : Specifies that the background image will be fixed against the containing block and will not scroll.
- **inherit** : If set, the associated element takes computed value of its parent element's background-attachment property.

Example:

```
body {  
  background-image: url("Lion.jpg");  
  background-repeat: no-repeat;  
  background-position: right top;  
  background-attachment: fixed;  
}
```

CSS Font

The CSS font properties define the font family, boldness, size, and the style of a text.

The font property is a shorthand property for:

- **font-style**
- **font-variant**
- **font-weight**
- **font-size/line-height**
- **font-family**

Font Style

The font-style property is mostly used to specify italic text.

This property has three values:

- normal - The text is shown normally
- italic - The text is shown in italics

Font Variant

The font-variant property specifies whether or not a text should be displayed in a small-caps font.

In a small-caps font, all lowercase letters are converted to uppercase letters. However, the converted uppercase letters appears in a smaller font size than the original uppercase letters in the text.

Example

```
<html>
```

```
<head>
```

```
<style>
```

```
p.normal {
```

```
  font-variant: normal;
```

```
}
```

```
p.small {
```

```
  font-variant: small-caps;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<p class="normal">Example of font variant property</p>
```

```
<p class="small"> Example of font variant property </p>
```

```
</body>
```

```
</html>
```

Font-weight

The font-weight property specifies the weight of a font:

Example

```
.normal {  
    font-weight: normal;  
}
```

```
.bold {  
    font-weight: bold;  
}
```

Font-size

The font-size property sets the size of the text.

Example

Set the font size for different elements:

```
div.a {  
    font-size: 15px;  
}
```

```
div.b {  
    font-size: large;  
}
```

```
div.c {  
    font-size: 150%;  
}
```

Font Family

It specifies the font family for text.

If the name of a font family is more than one word, it must be in quotation marks, like: "Times New Roman".

More than one font family is specified in a comma-separated list:

Example

```
p {  
    font-family: "Times New Roman", Arial, Verdana;  
}
```

Note: Font is used to set all the font properties in one declaration.

```
p.style1 {  
    font: italic bold 12px Arial;  
}
```


CSS TEXT

CSS Text is used to set some text formatting such as:

- **Text Color**
- **Text Alignment**
- **Text Decoration**
- **Text Transform**
- **Text Indent**
- **Letter Spacing**
- **Line Height**
- **Word Spacing**
- **Text Direction**
- **Text Shadow**

Text Color

The color property is used to set the color of the text.

The default text color for a page is defined in the body selector.

Example:

```
body {  
    color: blue;  
}
```

```
h1 {  
    color: green;  
}
```

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.

Example

```
p {  
    text-align: justify;  
}  
  
h1 {  
    text-align: left;  
}  
  
h2 {  
    text-align: right;  
}  
h3 {  
    text-align: center;  
}
```

Text Decoration

The text-decoration property is used to set or remove decorations from text.

Example

```
<html>
<head>
<style>
a {
  text-decoration: none;
}
h1{
  text-decoration: overline;
}

h2 {
  text-decoration: line-through;
}

h3 {
  text-decoration: underline;
}
</style>
</head>
<body>
<a> Link without decoration</a>
<h1>Heading with overline</h1>
<h2>Heading with strike through a line</h2>
<h3>Heading with underline</h3>>1
</body>
</html>
```

Text Transformation

The `text-transform` property is used to change text in uppercase and lowercase letters or capitalize the first letter of each word.

Example

```
p.uppercase {  
  text-transform: uppercase;  
}
```

```
p.lowercase {  
  text-transform: lowercase;  
}
```

```
p.capitalize {  
  text-transform: capitalize;  
}
```

Text Indent

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

Example

```
p {  
    text-indent: 100px;  
}
```

Letter Spacing

It is used to specify the space between the characters in a text.

```
p {  
    letter-spacing: 5px;  
}
```

Line Height

This property is used to specify the space between lines.

Example

```
p {  
  line-height: 1.5;  
}
```

Word Spacing

It is used to specify the space between the words in a text.

Example

```
P {  
  word-spacing: 15px;  
}
```

Text Direction

This property is used to change the text direction.

Example

```
p {  
    direction: rtl;  
}
```

Text Shadow

This property adds shadow to text.

Example

```
h1 {  
    text-shadow: 3px 2px red;  
}
```

Here position of the horizontal shadow, position of the vertical shadow and the color of the shadow is given.

Thank You !