



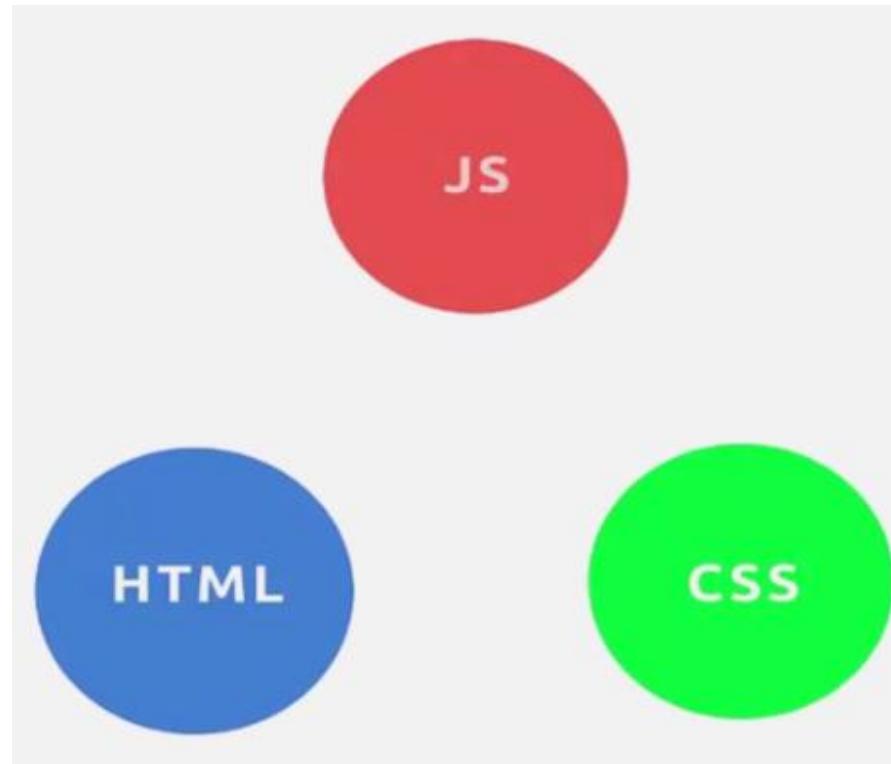
Download a text editor

- | | |
|----------------------|----------------------|
| 1 Sublime Text | Windows, OS X, Linux |
| 2 Visual Studio Code | Windows, OS X, Linux |
| 3 Atom | Windows, OS X, Linux |
| 4 Notepad ++ | Windows |

Download: <https://www.sublimetext.com/3>



Download: <https://www.google.com/chrome/>



Download: <https://www.google.com/chrome/>



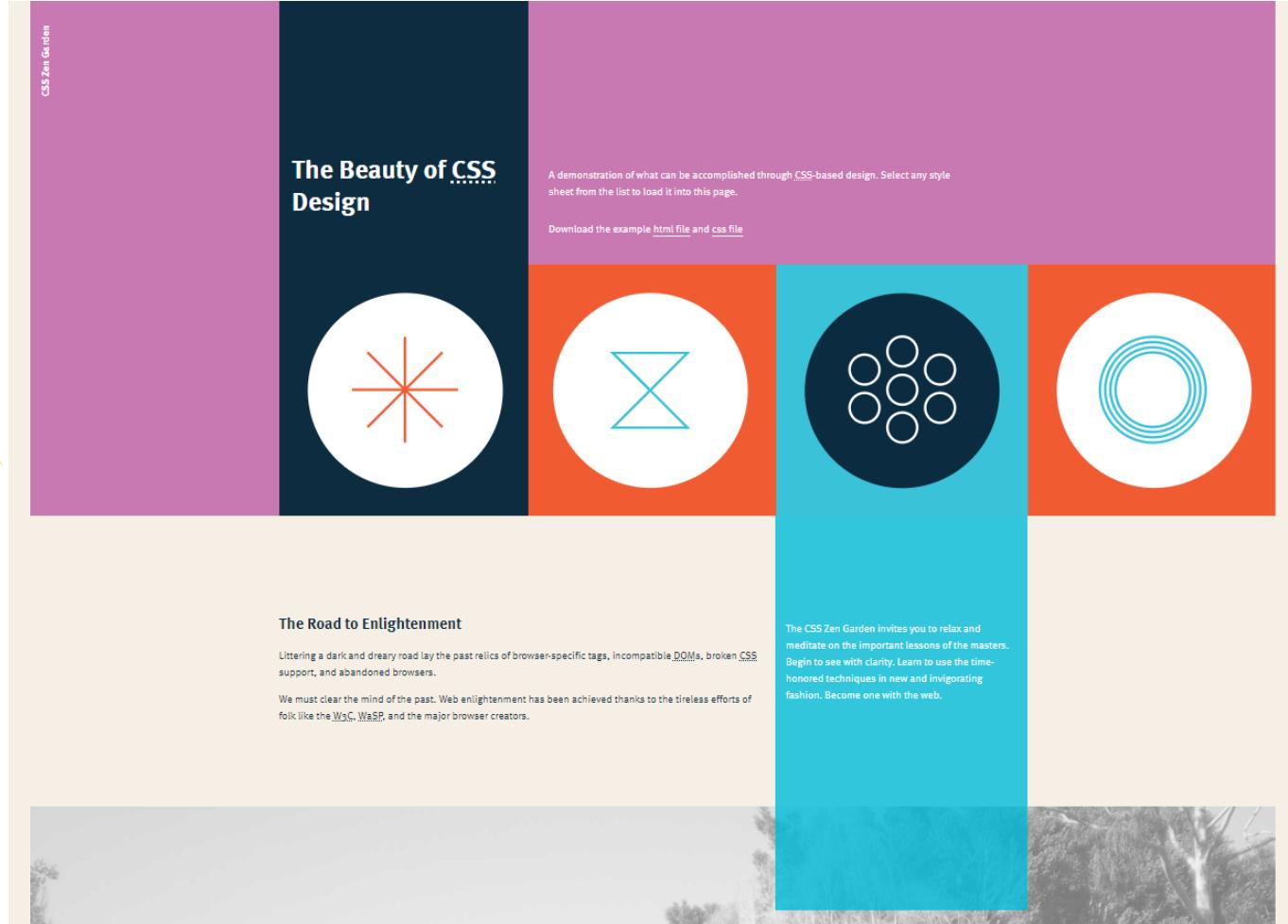
CSS = Cascading Style Sheets

CSS: Why Do We Need It?



css ref pages: <http://www.csszengarden.com/>

css ref pages: <http://www.csszengarden.com/>



css ref pages: <http://www.csszengarden.com/>

MADE LOCALLY
CSS ZEN GARMENTS
IMPECCABLE
QUALITY

A DEMONSTRATION OF WHAT CAN BE ACCOMPLISHED THROUGH `css`-BASED DESIGN. SELECT ANY STYLE SHEET FROM THE LIST TO LOAD IT INTO THIS PAGE.

↓ ⚡ <> ⚡

Littering a dark and dreary road lay the past relics of browser-specific tags, incompatible `DOMs`, broken `css` support, and abandoned browsers. We must clear the mind of the past. Web enlightenment has been achieved thanks to the tireless efforts of folk like the [W3C](#), [WHATWG](#), and the major browser creators.

The CSS Zen Garden invites you to relax and meditate on the important lessons of the masters. Begin to see with clarity. Learn to use the time-honored techniques in new and invigorating fashion. Become one with the web.

There is a continuing need to show the power of `css`. The Zen Garden aims to excite, inspire, and encourage participation. To begin, view some of the existing designs in the list. Clicking on any one will load the style sheet into this very page. The `HTML` remains the same, the only thing that has changed is the external `css` file. Yes, really.

`css` allows complete and total control over the style of a hypertext document. The only way this can be illustrated in a way that gets people excited is by demonstrating what it can truly be, once the reins are placed in the hands of those able to create beauty from structure. Designers and coders alike have contributed to the beauty of the web; we can always push it further.

Strong visual design has always been our focus. You are modifying this page, so strong `css` skills are necessary too, but the example files are commented well enough that even `css` novices can use them as starting points. Please see the [css Resource Guide](#) for advanced tutorials and tips on working with `css`.

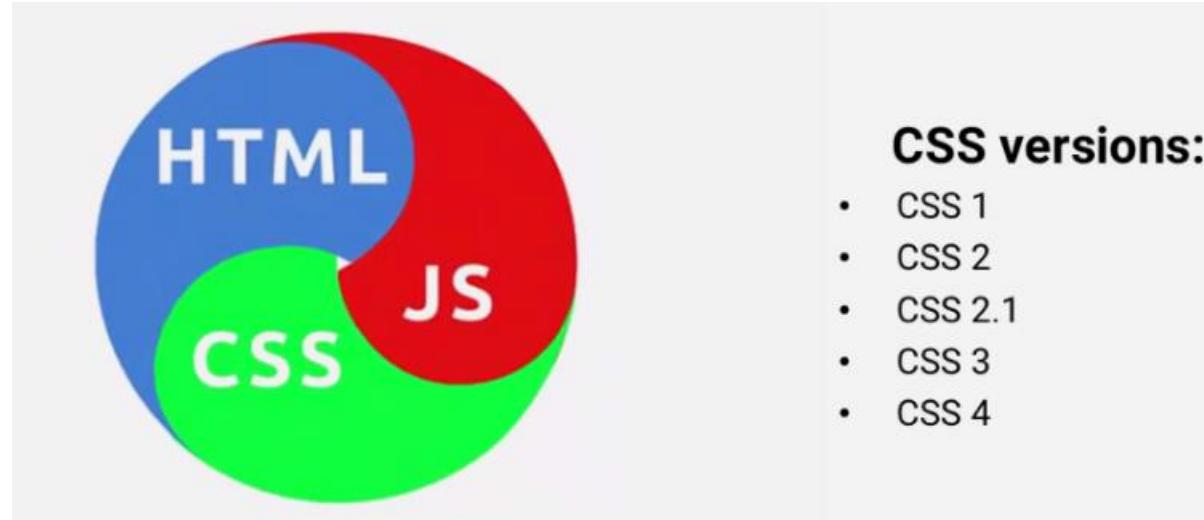
You may modify the style sheet in any way you wish, but not the `HTML`. This may seem daunting at first if you've never worked this way before, but follow the listed links to learn more, and use the sample files as a guide.

A FASHION-FORWARD FUTURE

SEE YOURSELF IN A DIFFERENT WAY

GET INTO A BRAND NEW PAIR

css ref pages: <http://www.csszengarden.com/>



CSS versions:

- CSS 1
- CSS 2
- CSS 2.1
- CSS 3
- CSS 4

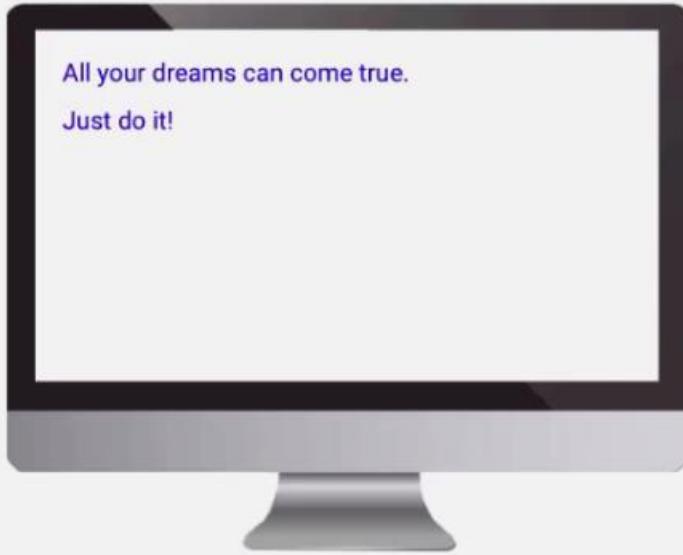
css ref pages: <http://www.csszengarden.com/>



CSS Properties

Property	What it does	Value examples
color	Sets the color of an element	blue red green yellow
font-family	Sets a font-family for text	Arial “Times New Roman” Georgia

1



HTML file

```
<body>
  <p style="color:blue;">All your dreams can come true.</p>
  <p style="color:blue;">Just do it!</p>
</body>
```

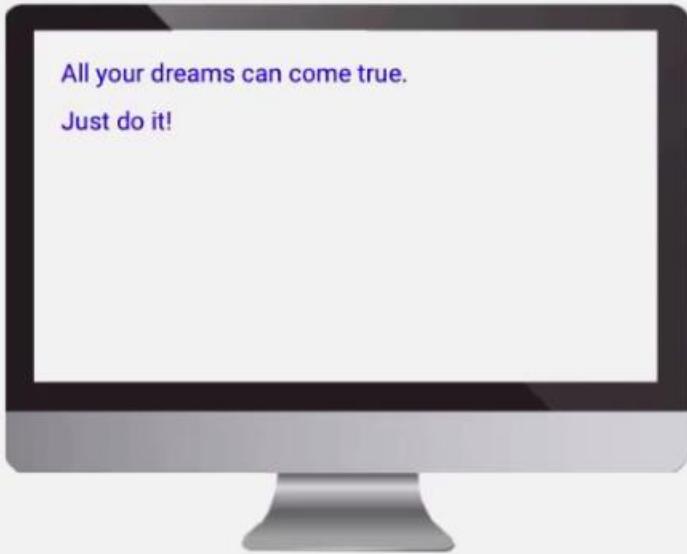
style = "property:value;property:value;..."

Attribute

Value

Inline CSS

2



HTML file

```
<head>
  <meta charset="utf-8">
  <title> CSS </title>
  <style>
    p {
      color: blue;
    }
  </style>
</head>

<body>
  <p>All your dreams can come true.</p>
  <p>Just do it!</p>
</body>
```

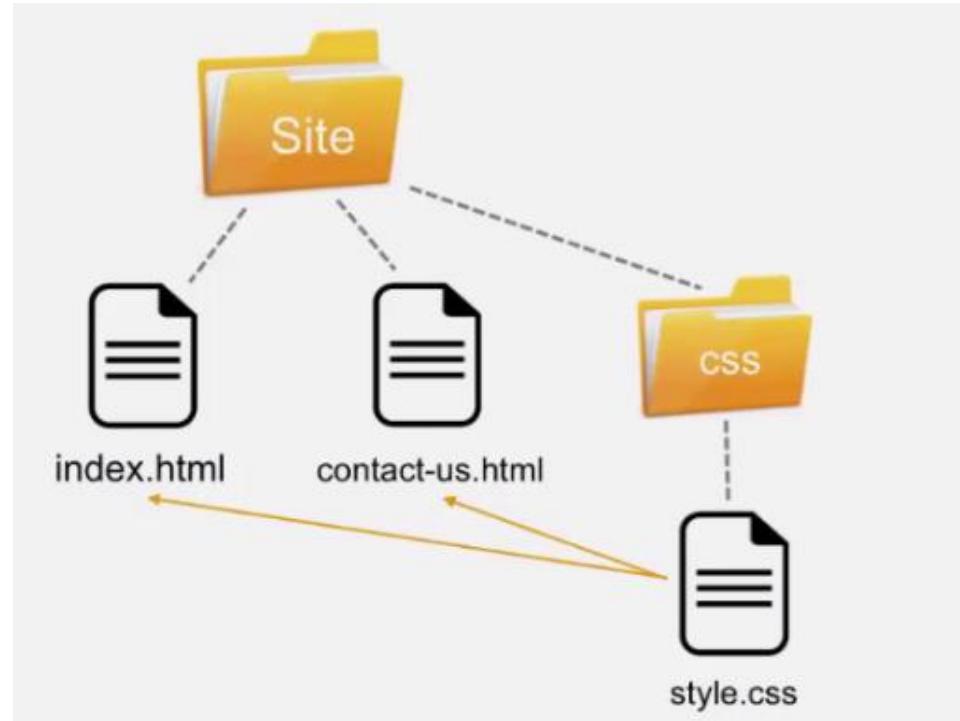
Internal CSS



```
<style>
  selector
    P {
      font-family: Arial;
      color: yellow;
      property   value
    }
</style>
```

Internal CSS

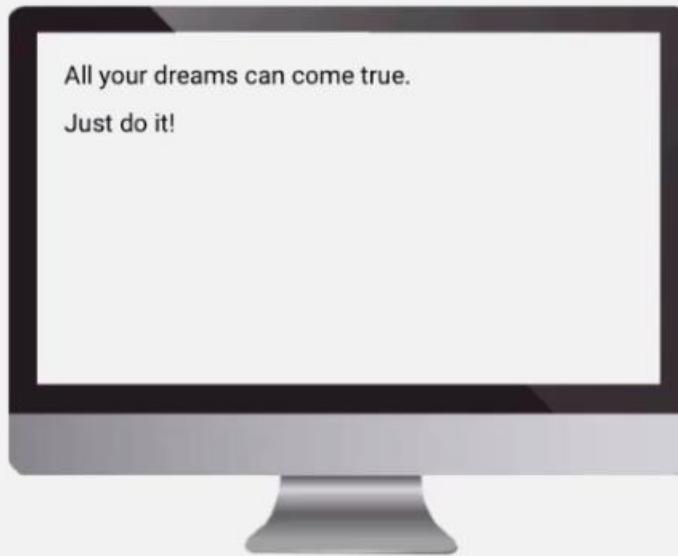
Put in head tag



External CSS

Put in head tag

3



HTML file

```
<head>
  <meta charset="utf-8">
  <title> CSS </title>
  <link rel="stylesheet" href="css/style.css">
</head>
<body>
  <p>All your dreams can come true.</p>
  <p>Just do it!</p>
</body>
```

CSS file

```
p {
  color: blue;
}
```

External CSS

Put in head tag



1

HTML file

```
<p style="color:blue;">All your dreams can come true.</p>
<p style="color:blue;">Just do it!</p>
```

2

HTML file

```
<head>
  <meta charset="utf-8">
  <title> CSS </title>
  <style>
    p {
      color: blue;
    }
  </style>
</head>
<body>
  <p >All your dreams can come true.</p>
  <p >Just do it!</p>
</body>
```

3

HTML file

```
<head>
  <meta charset="utf-8">
  <title> CSS </title>
  <link rel="stylesheet" href="css/style.css">
</head>

<body>
  <p >All your dreams can come true.</p>
  <p >Just do it!</p>
</body>
```

CSS file

```
p {
  color: blue;
}
```

Inline

Internal

External



4 main font families

4 main font families

Strokes with serifs

Serif



Example:

Vertex (Times New Roman)
Vertex (Georgia)
Vertex (Cambria)

Straight strokes.

Sans-Serif



Example:

Vertex (Tahoma)
Vertex (Arial)
Vertex (Trebuchet MS)

Resembles handwriting

Handwritten



Example:

Vertex (Monotype corsiva)
Vertex (Magneto)
Vertex (Vivaldi)

Fancy fonts

Decorative



Example:

VERTEX (Goudy Stout)
Vertex (Snap ITC)
Vertex (Old English Text MT)

<https://blackwoodcreative.com/the-4-main-font-families/>



Monospaced fonts

V

|V|e|r|t|e|x|

Example: **Same width**

Vertex (Lucida Console)

Vertex (Courier New)

Vertex (Anonymous Pro)



<https://blackwoodcreative.com/the-4-main-font-families/>



Windows 10

- Calibri
- Cambria
- Comic Sans



- Dingbats
- FreeMono
- Ubuntu



Mac OS

- Helvetica
- Gill Sans
- Lucida Grande



Web Safe Fonts

1	Arial	Text with this kind of font
2	Arial Black	Text with this kind of font
3	Comic Sans MS	Text with this kind of font
4	Courier New	Text with this kind of font
5	Georgia	Text with this kind of font
6	Impact	Text with this kind of font
7	Times New Roman	Text with this kind of font
8	Trebuchet MS	Text with this kind of font
9	Verdana	Text with this kind of font

https://www.w3schools.com/cssref/css_websafe_fonts.asp



Fallback

https://www.w3schools.com/cssref/css_websafe_fonts.asp

Fallback

`font-family: Tahoma, Geneva, sans-serif;`

`font-family: font1,font2,...;`

https://www.w3schools.com/cssref/css_websafe_fonts.asp

Eurocine AaBbCcDdEeFfGgHh

Font Squirrel > Eurocine > Paulo Goode > 2 Styles

[DOWNLOAD OTF \(OFFSITE\)](#)

INTRO RUST ABCDEFGHIJKLMNOP

Font Squirrel > Intro Rust > Fontfabric > 3 Styles

[DOWNLOAD OTF \(OFFSITE\)](#)

Source Sans Pro AaBbCcDdEeFfGgHh

Font Squirrel > Source Sans Pro > Adobe > 12 Styles

[DOWNLOAD OTF](#)

Open Sans AaBbCcDdEeFfGgHhIijj

Font Squirrel > Open Sans > Ascender Fonts > 10 Styles

[DOWNLOAD TTF](#)

<https://www.fontsquirrel.com/>

<https://www.fontsquirrel.com/fonts/list/tag/calligraphic>

<https://www.fontsquirrel.com/fonts/Chantelli-Antiqua>



woff **ttf/otf**

<https://www.fontsquirrel.com/>
<https://www.fontsquirrel.com/fonts/list/tag/calligraphic>
<https://www.fontsquirrel.com/fonts/Chantelli-Antiqua>

Browser Compatibility

Format	Name	Browser					
		Chrome	Firefox	Safari	Opera	Edge	IE
ttf	truetype	4.0	3.5	3.1	10.0	9.0	9.0 (partly)
otf	opentype	4.0	3.5	3.1	10.0	9.0	9.0 (partly)
woff	woff	5.0	3.6	5.1	11.5	12.0	9.0
eot	embedded-opentype	-	-	-	-	-	6.0

woff

ttf/otf

<https://www.fontsquirrel.com/>

<https://www.fontsquirrel.com/fonts/list/tag/calligraphic>

<https://www.fontsquirrel.com/fonts/Chantelli-Antiqua>



How to Connect a Font



```
@font-face {  
    font-family: "font family name";  
    src: url(path to font) format("name"),  
         url(path to font) format("name");  
}
```

<https://www.fontsquirrel.com/>

<https://www.fontsquirrel.com/fonts/list/tag/calligraphic>

<https://www.fontsquirrel.com/fonts/Chantelli-Antiqua>

Source Sans Pro

[Download family](#)



Select styles

Glyphs

About

License

Pairings

Extra-light 200 italic

Almost before we knew it, we ha + Select this style

Light 300

Almost before we knew it, we h - Remove this style

Light 300 italic

Almost before we knew it, we ha + Select this style

Regular 400

A B C D E F G H I J K L M N O P Q R S T U V W Z + Select this style

Selected family



Review

Source Sans Pro

Light 300

Add more styles Remove all

Header of your html

<link> @import

```
<link rel="preconnect" href="https://fonts.gstatic.com">
<link href="https://fonts.googleapis.com/css2?family=Source+Sans+Pro:wght@300&display=swap" rel="stylesheet">
```

CSS rules to specify families

[API docs](#)

[Download all](#)

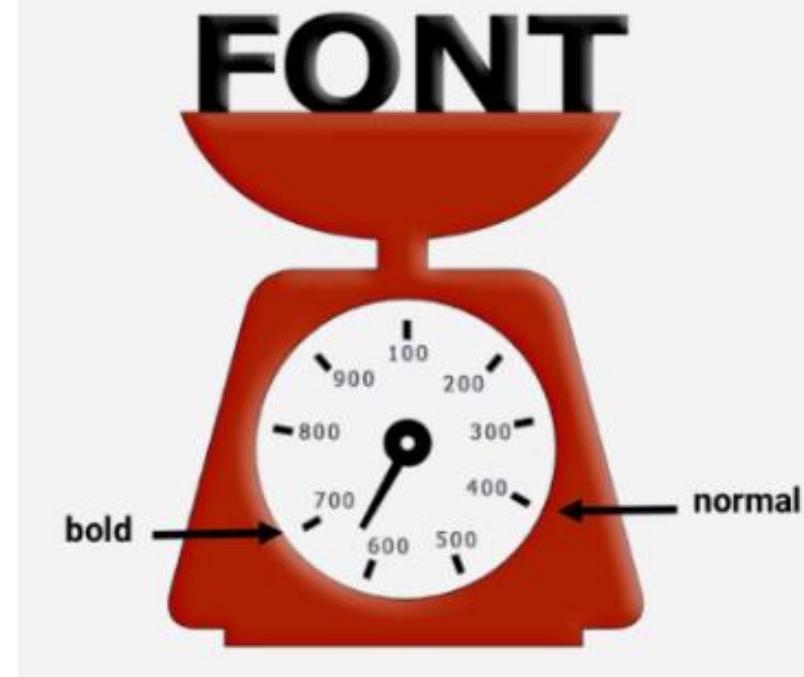
<https://fonts.google.com/>



Everest is **the highest** mountain on Earth

P tag

font-weight



Font-family: Arial

Font-weight: bold



font-style

normal	font-style:normal
italic	<i>font-style:italic</i>
oblique	<i>font-style:oblique</i>

Font-family: Arial

Font-weight: 500

Font-size: 30

Font-style: italic



text-decoration

underline	<u>underline</u>
overline	<u><u>overline</u></u>
line-through	line-through
none	none

Font-family: Arial

Font-weight: 500

Font-size: 30

Font-style: italic

Text-decoration: underline



font-weight: 100...900
bold
normal

text-decoration: underline
overline
line-through
none

font-style: normal
italic
oblique

Font-family: Arial
Font-weight: 500
Font-size: 30
Font-style: italic
Text-decoration: underline



text-transform

capitalize	First Letter Of Each Word Is Capitalized
lowercase	all letters are lowercase
uppercase	ALL LETTERS ARE UPPERCASE
none	Cancels any text transformations

<p>Coding is fun :'(</p>



TEXT

The highest mountain on Earth

letter-spacing

word-spacing

< p> Coding is fun :(</p>

Text-transformation: upper-case

Letter-spacing: 15px;

Letter-spacing: normal;

text-align



left



center

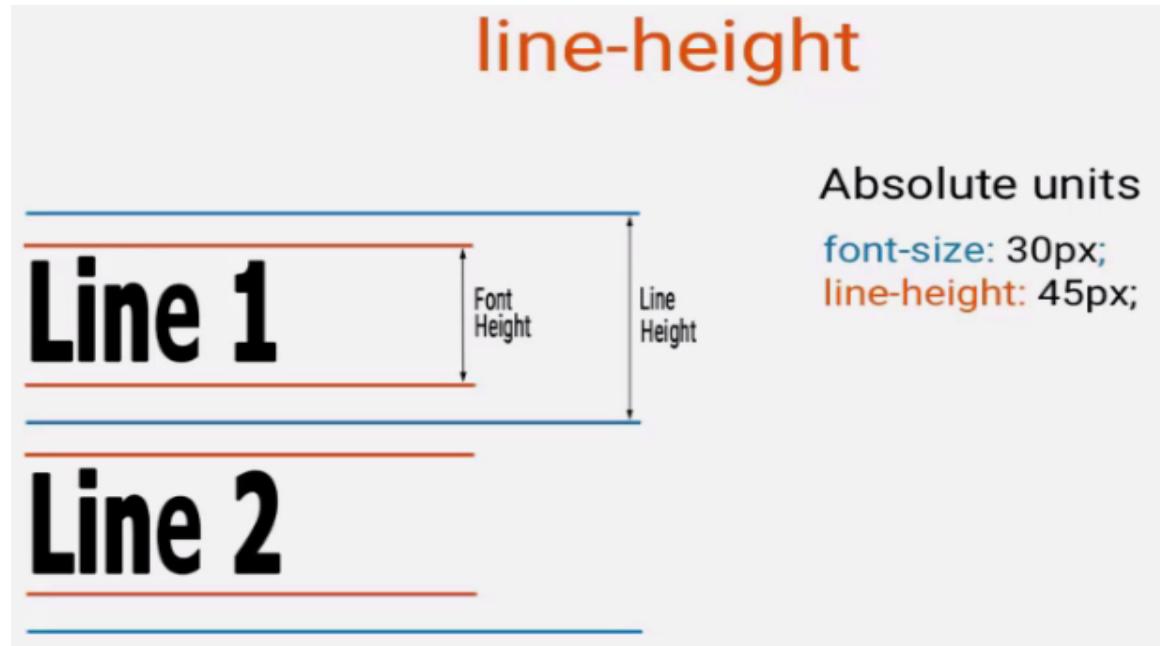


right



justify

P tag with lemonade



P tag with lemonade
Text-align: justify
Font-size: 30px
Line-height: 45px



line-height

The diagram illustrates the concept of line height. It shows two lines of text, "Line 1" and "Line 2". A vertical double-headed arrow between the baseline of "Line 1" and the baseline of "Line 2" is labeled "Font Height". Another vertical double-headed arrow from the baseline of "Line 1" to the top of "Line 1" is labeled "Line Height".

Absolute units

```
font-size: 30px;  
line-height: 45px;
```

Multiplier

```
font-size: 30px;  
line-height: 1.5;
```

Percentage

```
font-size: 30px;  
line-height: 150%;
```

P tag with lemonade

Text-align: justify

Font-size: 30px

Line-height: 45px



1

Color Name

147 colors

red blue yellow black grey green orange lavender darkolivegreen ...

https://www.w3schools.com/colors/colors_picker.asp

https://www.w3schools.com/colors/colors_names.asp

P Have a nice day

Font-size: 30px

Color: yellow

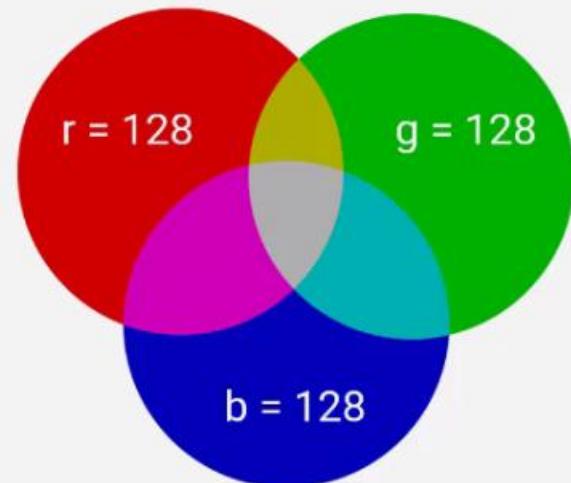
2

RGB = Red Green Blue

0 – 255

0 – 255

0 – 255



Gray

rgb(128, 128, 128)

↑
50% 50% 50%

https://www.w3schools.com/colors/colors_picker.asp

https://www.w3schools.com/colors/colors_names.asp

P Have a nice day

Font-size: 30px

Color: rgb(128,128, 128)



3

Hexadecimal (HEX)

#RedGreenBlue

0 – FF 0 – FF 0 – FF

White

rgb(255, 255, 255)

#FFFFFF

Black

rgb(0, 0, 0)

#000000

Grey

rgb(128, 128, 128)

#808080

https://www.w3schools.com/colors/colors_picker.asp

https://www.w3schools.com/colors/colors_names.asp

P Have a nice day

Font-size: 30px

Color: #FFFFFF

Convert: <http://www.javascripter.net/faq/rgbtohex.htm>



list-style-type

list-style-image

list-style-position



list-style-type

Favorite sports:

- Football
- Baseball
- Hockey

Summer trip:

1. Paris
2. Rome
3. Sri Lanka

list-style-type

Favorite sports:

- Football
- Baseball
- Hockey

● disc

○ circle

■ square

none



list-style-type

Summer trip:

1. Paris
2. Rome
3. Sri Lanka

Value	Result
decimal	1 2 3 4 5
decimal-leading-zero	01 02 03 04
lower-alpha	a b c
upper-alpha	A B C D E
lower-roman	i. ii. iii. iv. v.
upper-roman	I II III IV V

list-style-image



```
ul {  
    list-style-image: url(world.png);  
}
```

list-style-image



Summer trip:

- Paris
- Rome
- Sri Lanka



list-style-position

outside

- When in Rome, do as Romans do
- A picture is worth a thousand words
- All things are difficult before they are easy

inside

- When in Rome, do as Romans do
- A picture is worth a thousand words
- All things are difficult before they are easy

H4 Favorite sports ul Football, Hockey, Tennis

H4 Summer trip ol Para, Rome, Sri Lanka

```
ul {  
    type: none; image-world, position=inside  
}
```

<https://www.iconfinder.com/search/?q=world&price=free>



.class

Definition and Usage

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.

```
<p class="intro">My best friend is Mickey.</p>
```

<https://lipsum.com/>

HTML elements can also refer to more than one class (look at Example 2 below).

This `<p>` element will be styled according to `class="center"` AND to `class="large"`:

```
<p class="center large">This paragraph refers to two classes.</p>
```



```
<h1>
  LOREM IPSUM
</h1>
<p class="special">
  Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
</p>
<p>
  Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
</p>
```

```
h1 {
  color: blue;
  text-transform: uppercase;
}

p {
  color: orange;
  font-style: italic;
}

.special {
  color: black;
  font-weight: bold;
}
```

<https://lipsum.com/>

```
<ul>  <li class="change">
      • Lorem
    </li>
    <li class="change">
      • Lorem
    </li>
    <li>
      • Lorem
    </li>
</ul>
<ol>
  <li class="change">
    1. Lorem
  </li>
  <li>
    2. Lorem
  </li>
  <li>
    3. Lorem
  </li>
</ol>
```

```
li {
  color: green;
}

.change{
  color: orange;
  font-weight: bold
}
```

<https://lipsum.com/>

H1 with 2 P

Class bold-text, green-text



```
<h1>
  LOREM IPSUM
</h1>
<p id="special">
  Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
</p>
<p>
  Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.
</p>
```



```
h1 {
  color: blue;
  text-transform: uppercase;
}

p {
  color: orange;
  font-style: italic;
}

#special {
  color: black;
  font-weight: bold;
}
```

<https://lipsum.com/>

H1 with 2 P

bold with h1 main-heading

A href block – Back to top page



float: left
right
none

clear: both
left
right
none



The float Property

The `float` property is used for positioning and formatting content e.g. let an image float left to the text in a container.

The `float` property can have one of the following values:

- `left` - The element floats to the left of its container
- `right` - The element floats to the right of its container
- `none` - The element does not float (will be displayed just where it occurs in the text). This is default
- `inherit` - The element inherits the float value of its parent



The clear Property

The `clear` property specifies what elements can float beside the cleared element and on which side.

The `clear` property can have one of the following values:

- `none` - Allows floating elements on both sides. This is default
- `left` - No floating elements allowed on the left side
- `right` - No floating elements allowed on the right side
- `both` - No floating elements allowed on either the left or the right side
- `inherit` - The element inherits the clear value of its parent



Normal flow

HTML

```
<div> </div>
<p> Lorem ipsum dolor sit amet, consectetur
adipisicing elit.
</p>
<p> Lorem ipsum dolor sit amet,
consectetur adipisicing elit.
</p>
```

CSS

```
div{
    background-color: orange;
    height: 200px;
    width: 20%;
}
```



Normal flow

HTML

```
<div> </div>
<p> Lorem ipsum dolor sit amet,
consectetur adipisicing elit.
</p>
<p> Lorem ipsum dolor sit amet,
consectetur adipisicing elit.
</p>
```

CSS

```
div{
background-color: orange;
height: 200px;
width: 20%;
}
```



float

HTML

```
<div> </div>
<p> Lorem ipsum dolor sit amet,
consectetur adipisicing elit.
</p>
<p> Lorem ipsum dolor sit amet,
consectetur adipisicing elit.
</p>
```

CSS

```
div{
background-color: orange;
height: 200px;
width: 20%;
float: right;
}
```





Normal flow

HTML

```
<div> </div>
<p> Lorem ipsum dolor sit amet, consectetur adipisicing elit.
<p> Lorem ipsum dolor sit amet, consectetur adipisicing elit.
```

CSS

```
div{
    background-color: orange;
    height: 200px;
    width: 20%;}
```



clear: both

```
<div> </div>
<p> Lorem ipsum dolor sit amet, consectetur adipisicing elit.
<p> Lorem ipsum dolor sit amet, consectetur adipisicing elit.
```

```
div{
    background-color: orange;
    height: 200px;
    width: 20%;
    float: left;}
```

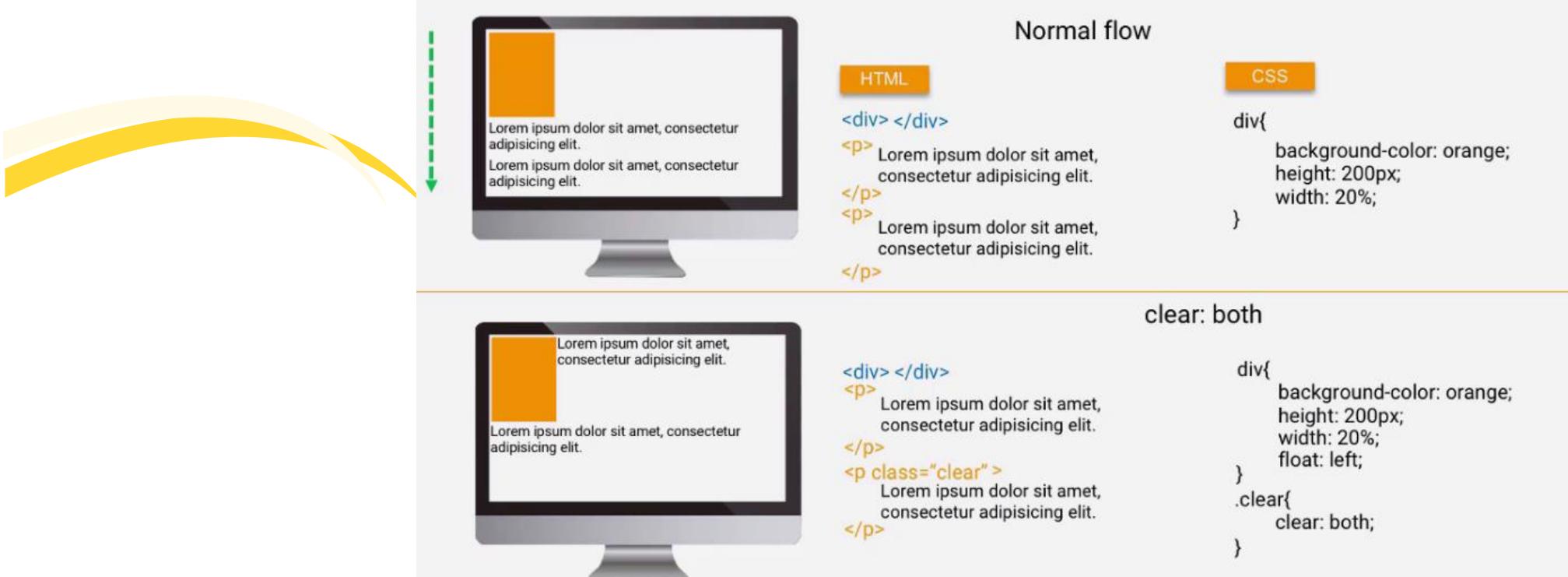


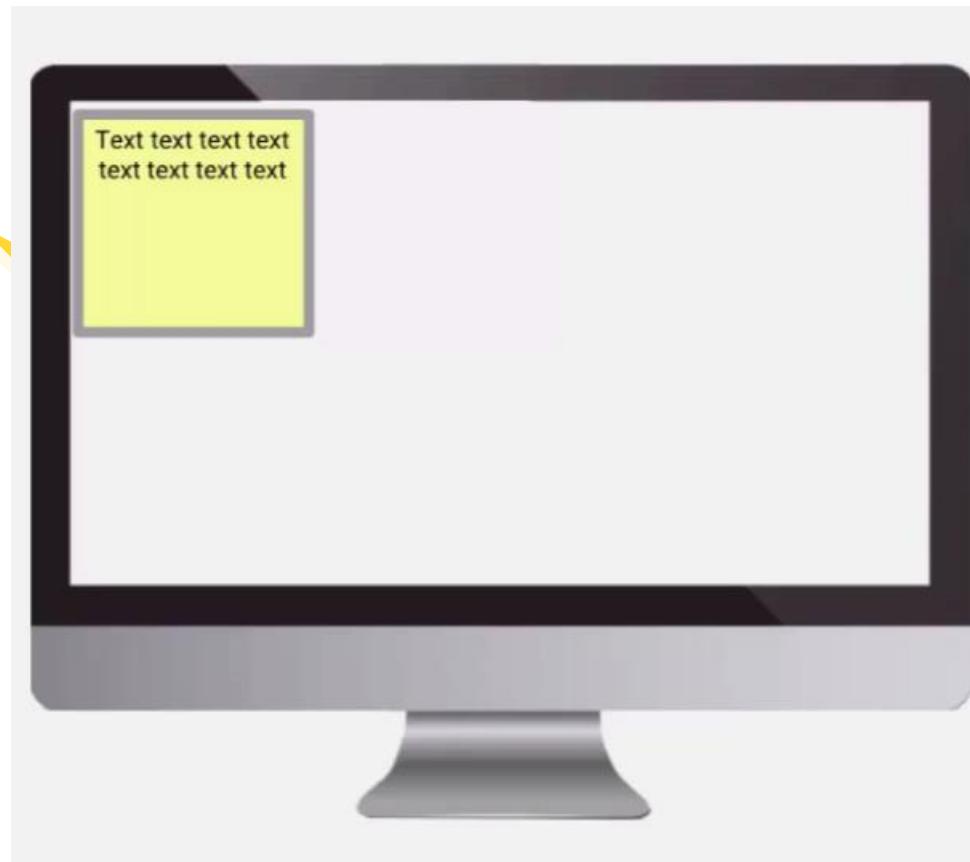
Image with 2 P



Demo Float

- 
- 
1. border
 2. padding
 3. margin

- 
- 
- 1. border
 - border-width
 - border-color
 - border-style
 - 2. padding
 - 3. margin



HTML

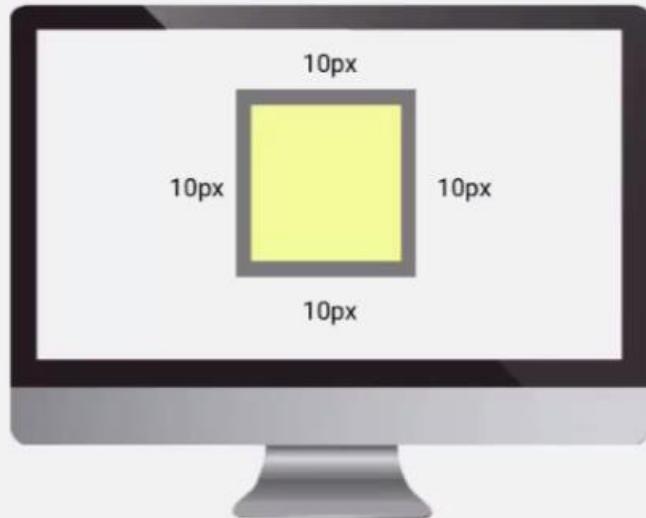
```
<div class ="a">
  <p>
    Text ... text
  </p>
</div>
```

CSS

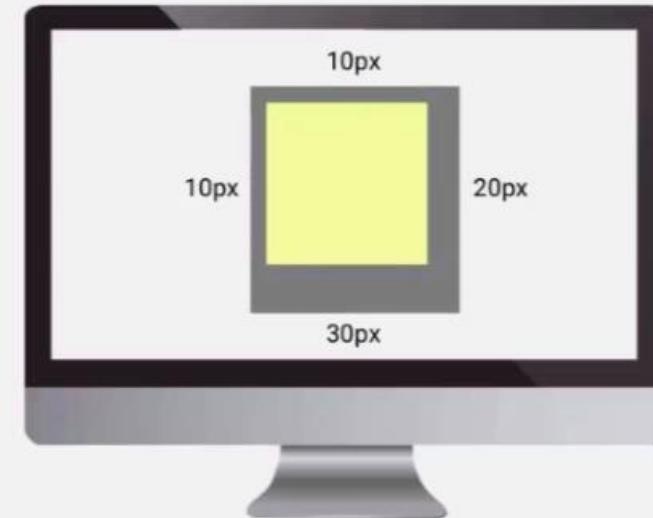
```
div{
  height: 300px;
  width: 200px;
}
.a {
  background-color: yellow;
  border-width: 10px;
  border-color: grey;
}
```



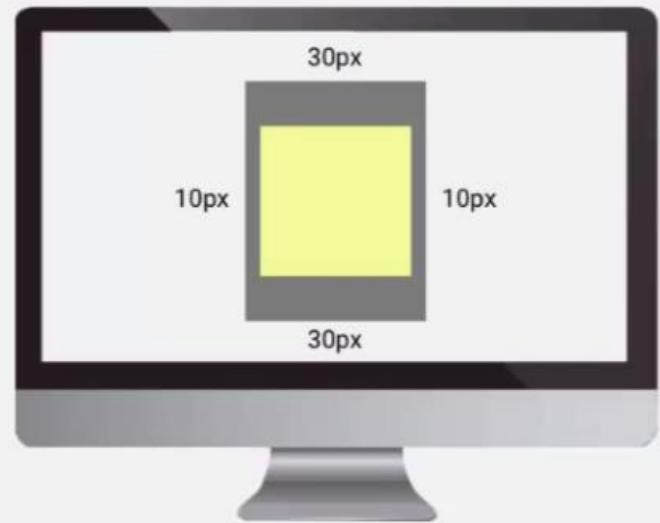
`border-width: 10px;`



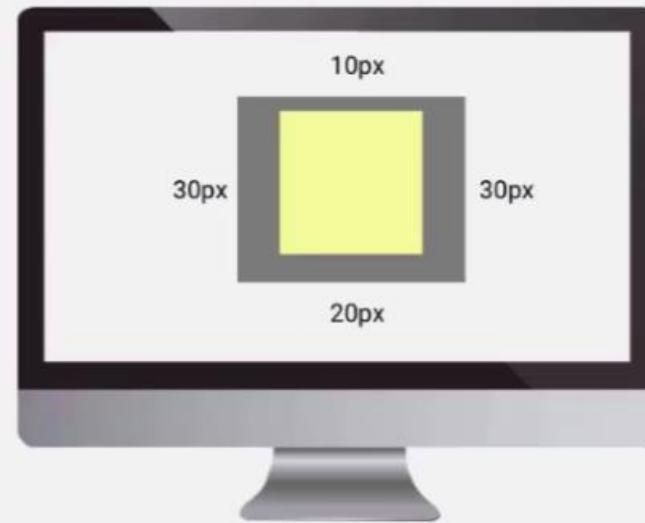
`border-width: 10px 20px 30px 10px;`

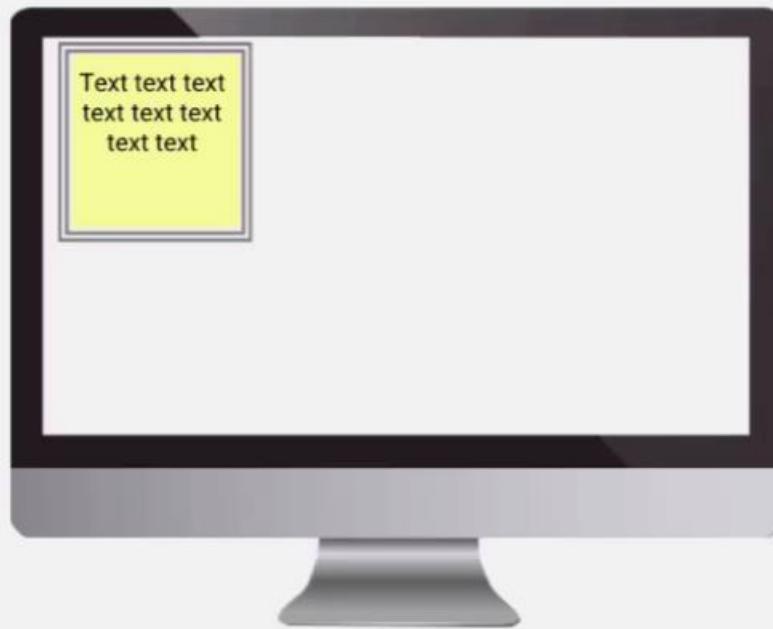
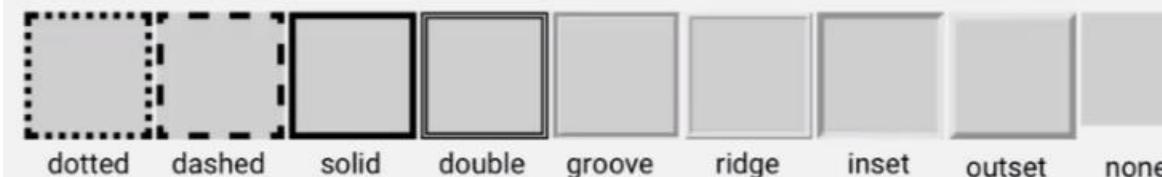


`border-width: 30px 10px;`



`border-width: 10px 30px 20px;`





HTML

```
<div class = "a">
  <p> Text ... text
  </p>
</div>
```

CSS

```
div{
  height: 300px;
  width: 200px;
}
.a {
  background-color: yellow;
  border-width: 10px;
  border-color: grey;
  border-style: double;
}
```

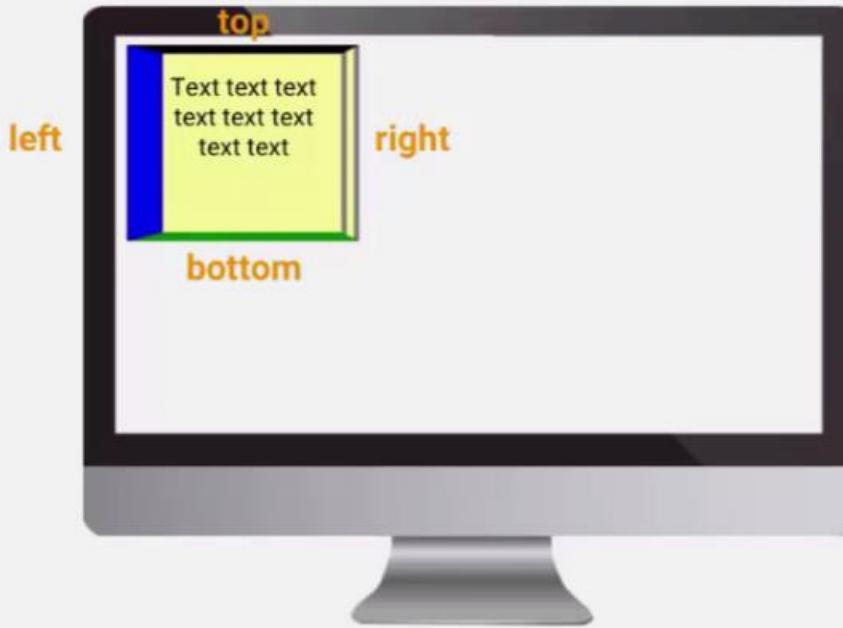
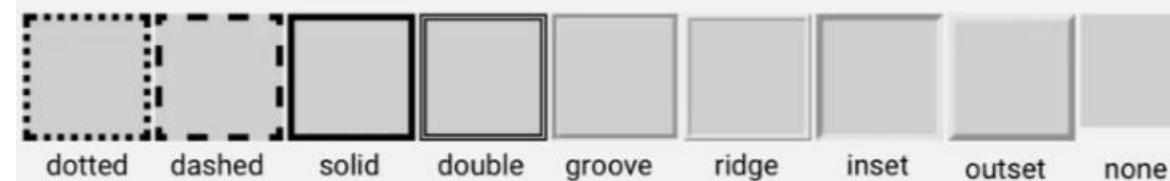


Shorthand

```
.a {  
    border-width: 10px;  
    border-color: grey;  
    border-style: double;  
}  
  
.a {  
    border: 10px double grey;  
}
```



border-width
border-color
border-style



HTML

```
<div class = "a">
  <p> Text ... text
  </p>
</div>
```

CSS

```
div{
  height: 300px;
  width: 200px;
}
.a {
  background-color: yellow;
  border-top: 5px solid black;
  border-right: 10px double grey;
  border-bottom: 5px solid green;
  border-left: 20px solid blue;
}
```

- 
- 
1. border
 2. padding
 3. margin

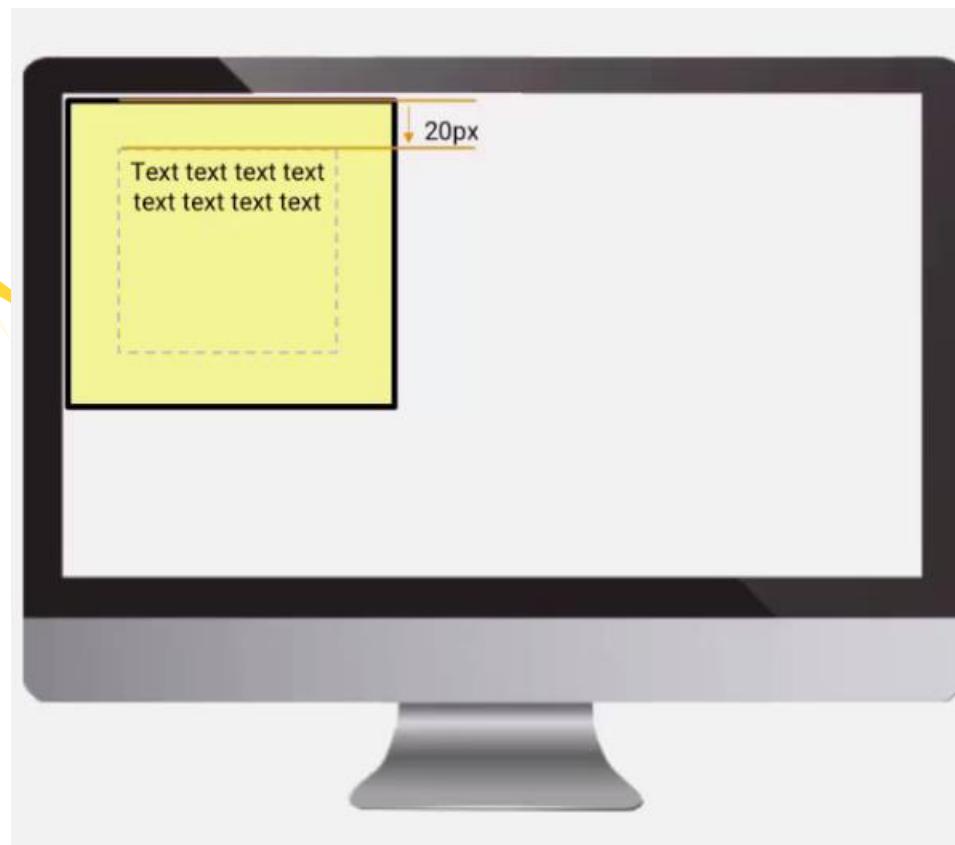


HTML

```
<div class = "a">
  <p>
    Text ... text
  </p>
</div>
```

CSS

```
div{
  height: 300px;
  width: 200px;
}
.a {
  background-color: yellow;
  border: 5px solid black;
}
```



The diagram shows a computer monitor displaying a yellow rectangular box. Inside the box, there is some placeholder text: "Text text text text text text text". A dashed red border surrounds the text area. An orange arrow points from the text area to the right edge of the yellow box, with the value "20px" written next to it, indicating the padding.

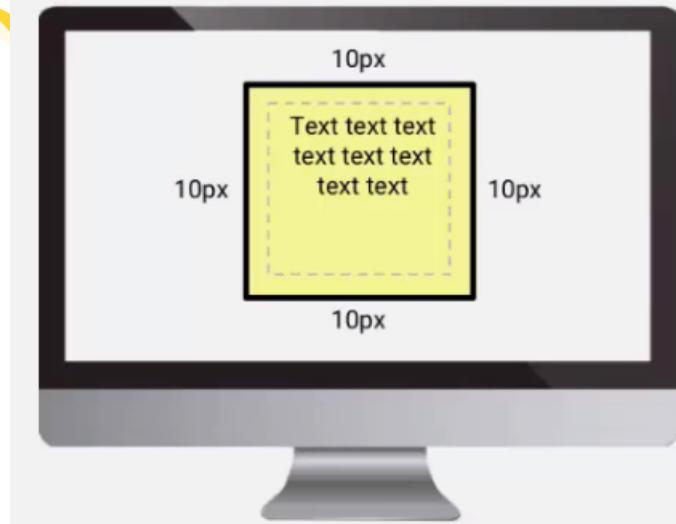
HTML

```
<div class = "a">
  <p>
    Text ... text
  </p>
</div>
```

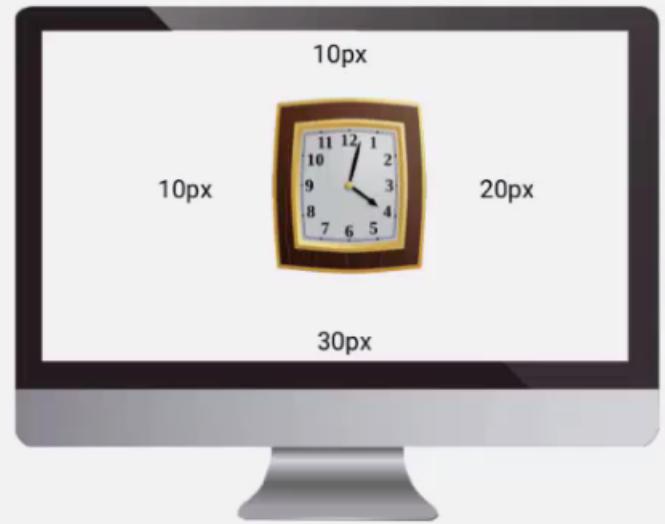
CSS

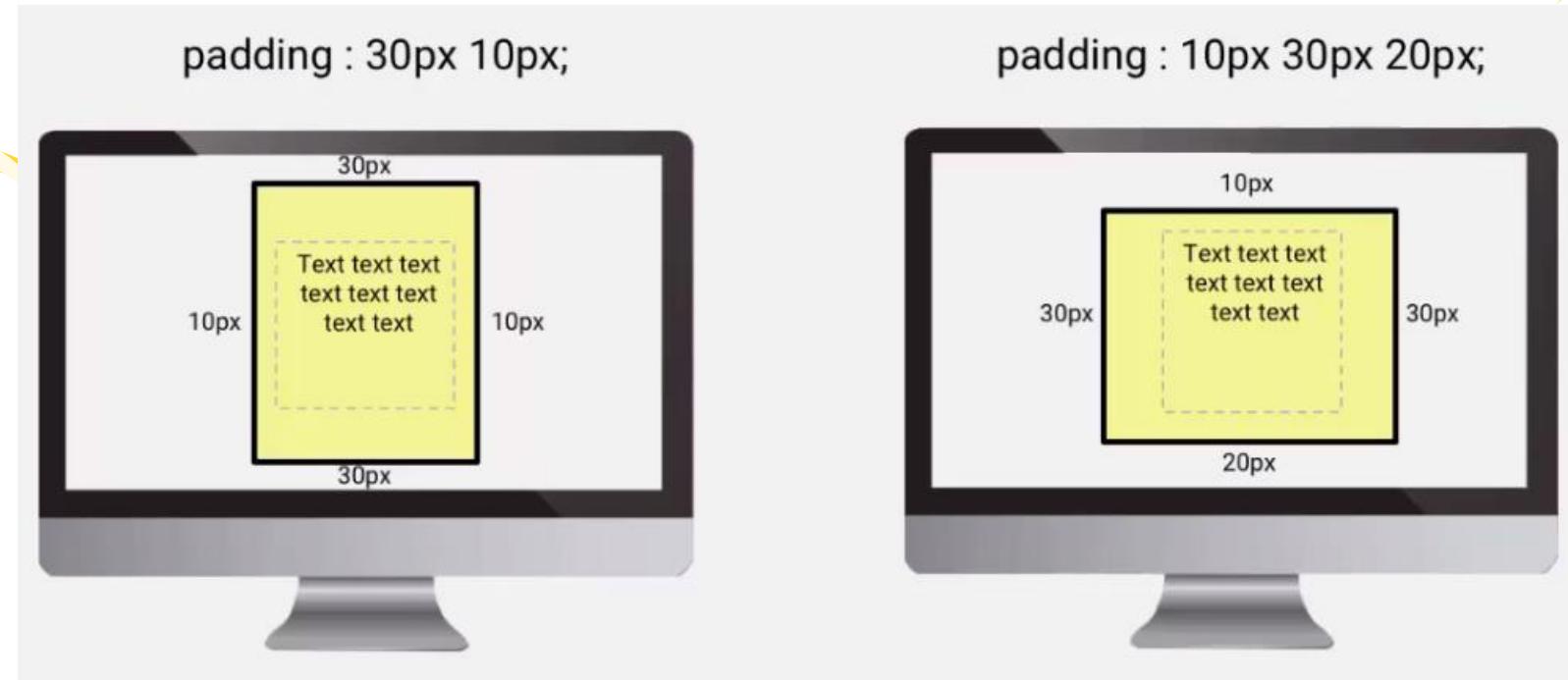
```
div{
  height: 300px;
  width: 200px;
}
.a {
  background-color: yellow;
  border: 5px solid black;
  padding: 20px;
}
```

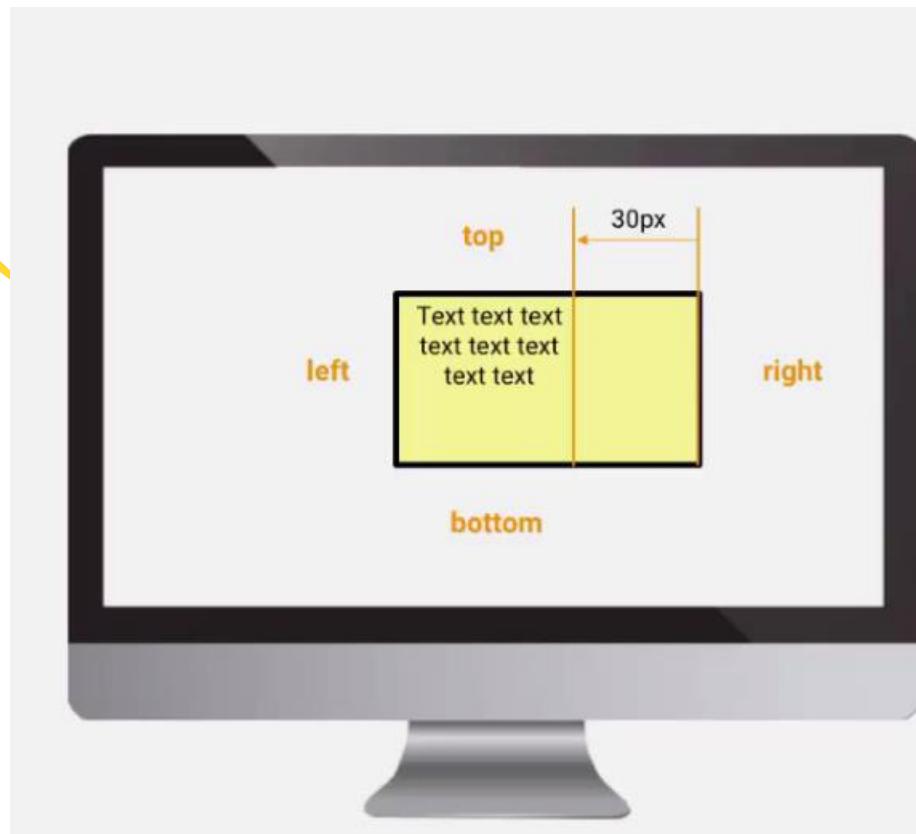
`padding: 10px;`



`padding : 10px 20px 30px 10px;`







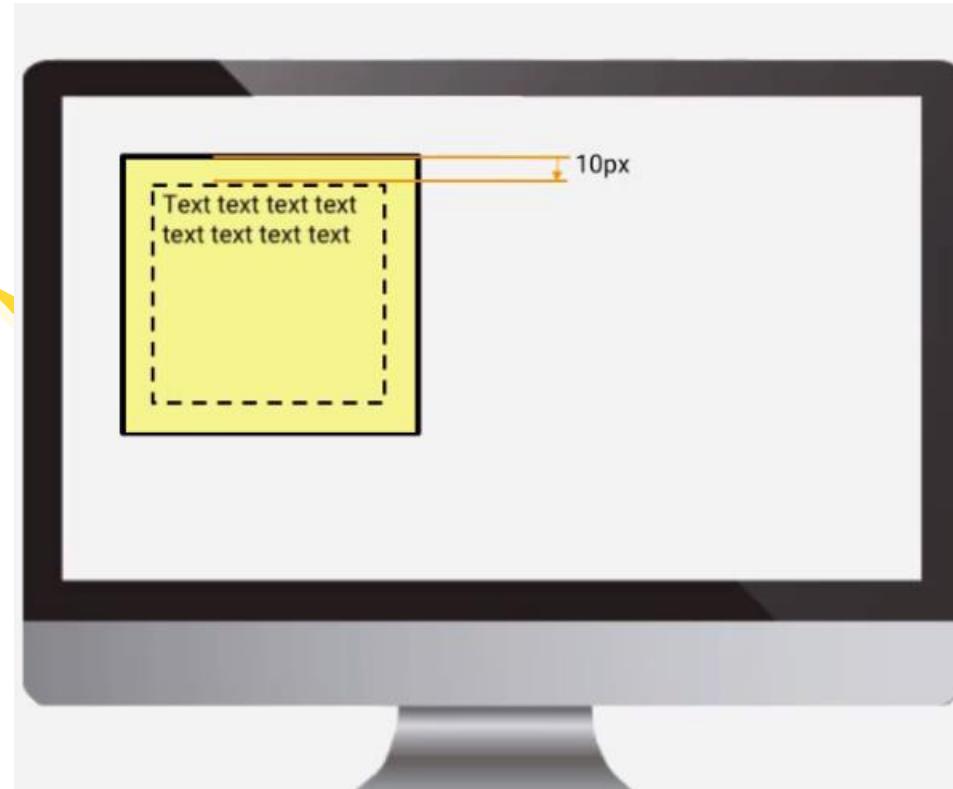
The diagram illustrates a computer monitor displaying a yellow rectangular box with a black border. Inside the box, there is some placeholder text: "Text text text text text text". A vertical line is drawn through the center of the box, and an arrow points from the text "30px" to the right side of this line, indicating the padding-right value. The word "top" is positioned above the top edge of the box, and "bottom" is positioned below the bottom edge. The word "left" is positioned to the left of the left edge, and "right" is positioned to the right of the right edge.

HTML

```
<div class = "a">
  <p> Text ... text
  </p>
</div>
```

CSS

```
div{
  height: 300px;
  width: 200px;
}
.a {
  background-color: yellow;
  border: 5px solid black;
  padding-right: 30px;
```



HTML

```
<div class = "a">
<p> Text ... text
</p>
</div>
```

CSS

```
div{
    height: 300px;
    width: 200px;
}
.a {
    background-color: yellow;
    border: 5px solid black;
    padding: 10px;
    box-sizing: border-box;
}
```

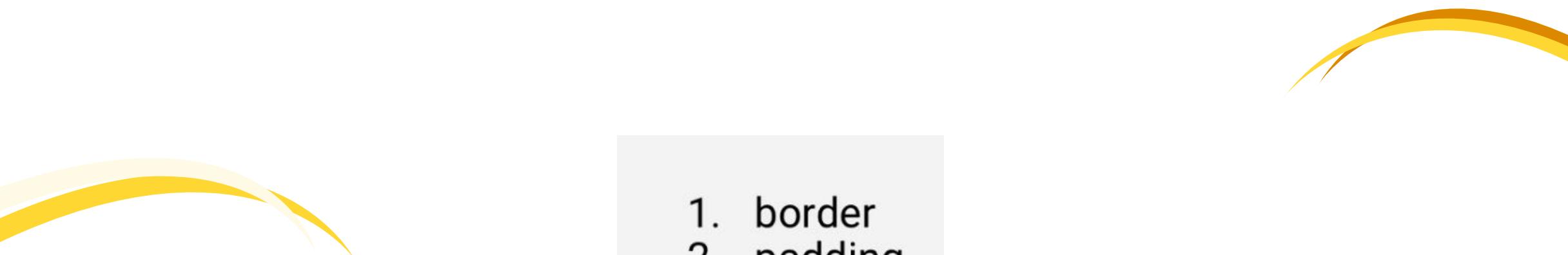
box-sizing: border-box || content-box

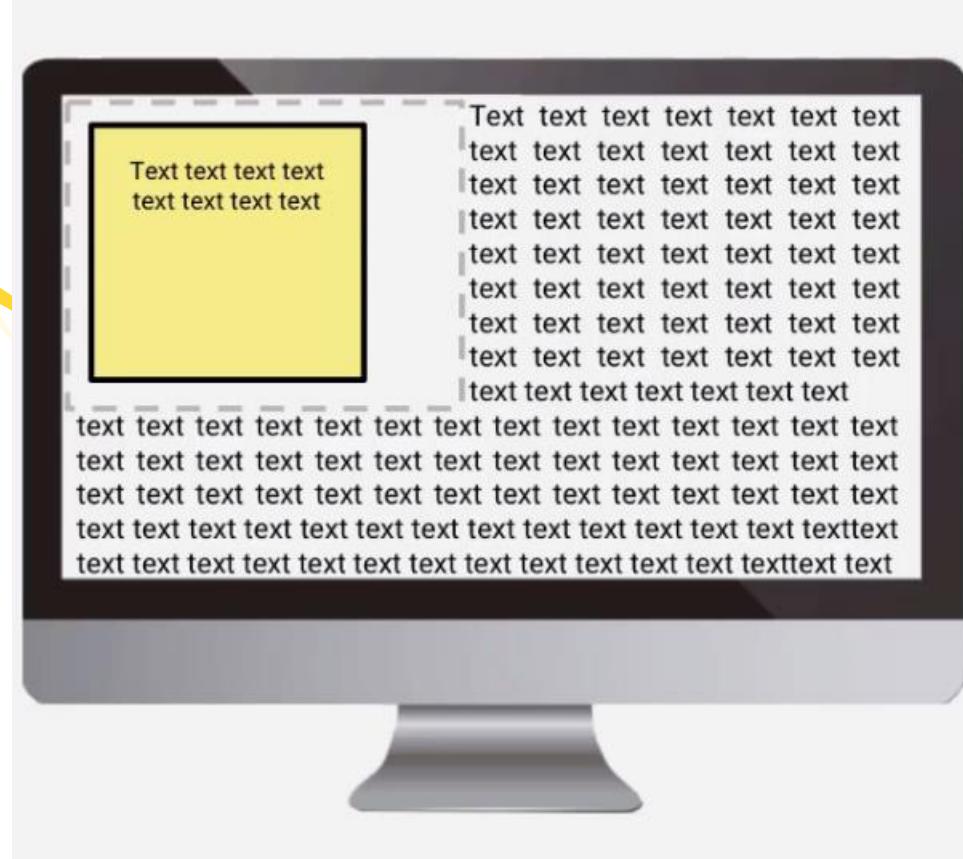


Width: 300, Height: 200

Padding: 10

Padding-left: 40

- 
1. border
 2. padding
 3. margin

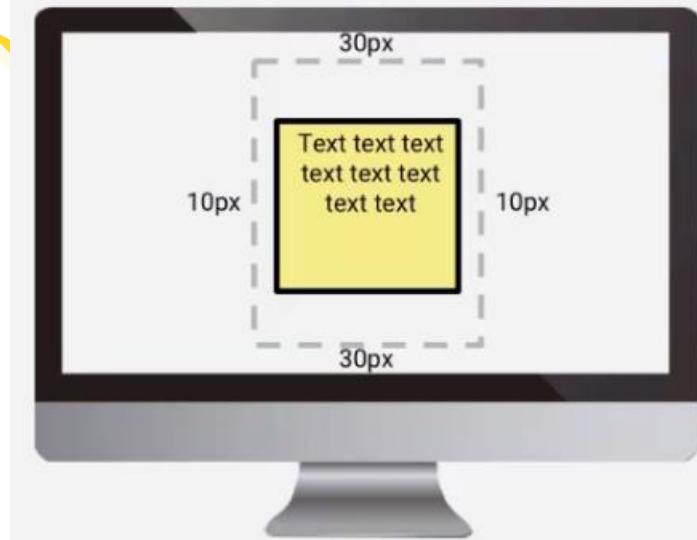


HTML

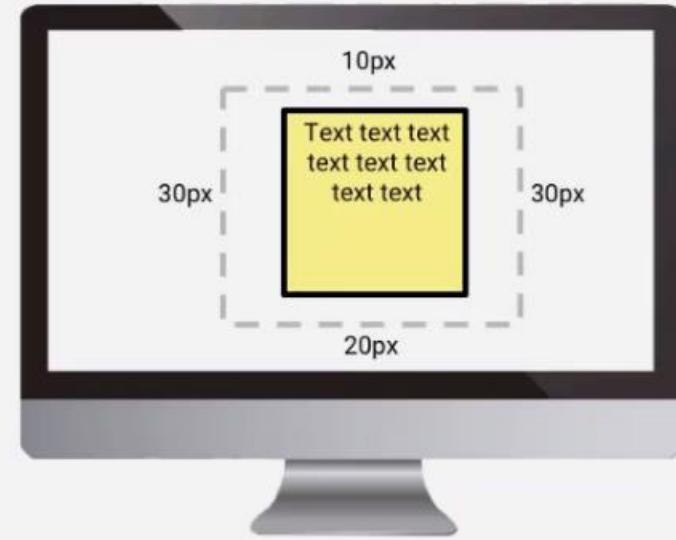
```
<div class="a" >
  <p> Text ... text
    </p>
</div>
<p> Text ... text </p>
```

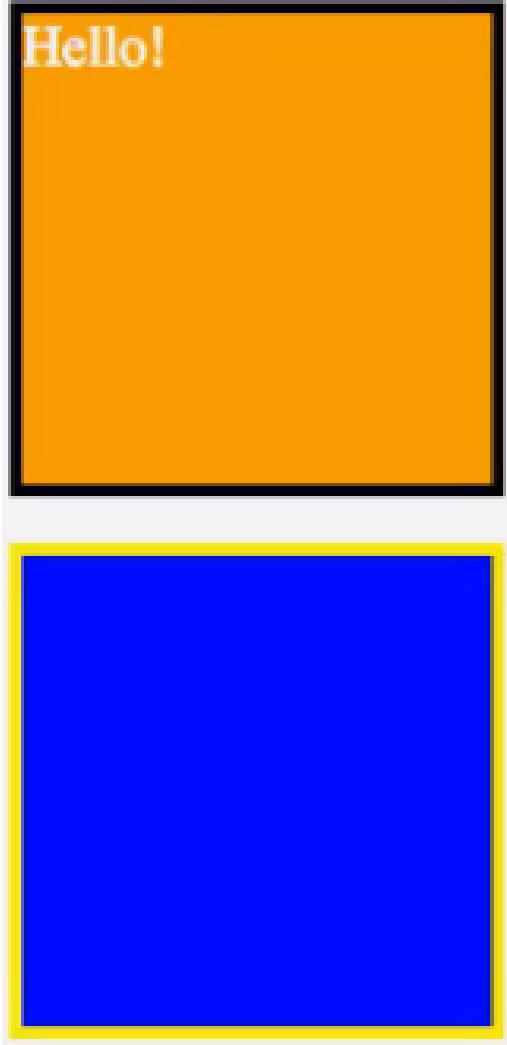
```
div{  
    height: 300px;  
    width: 200px;  
    float: left;  
}  
.a {  
    background-color: yellow;  
    border: 5px solid black;  
    padding: 10px;  
    margin: 10px;  
    margin-right: 30px;  
}
```

`margin: 30px 10px;`



`margin: 10px 30px 20px;`



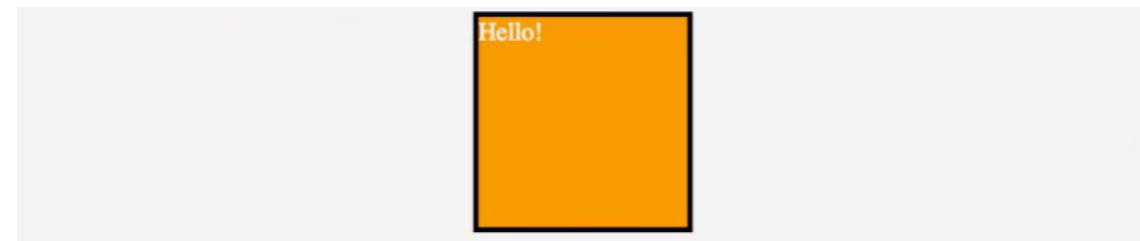


Can apply a negative value

Margin-left: auto

Margin-right: auto

Margin: 0 auto || 50 auto

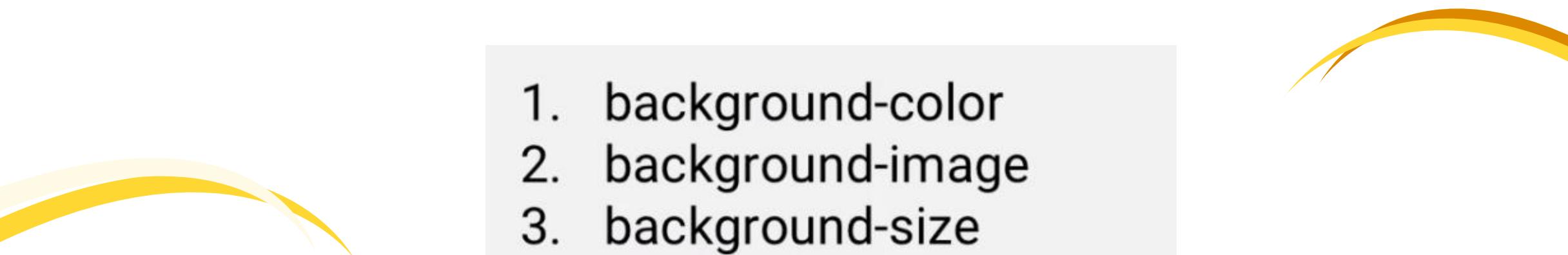


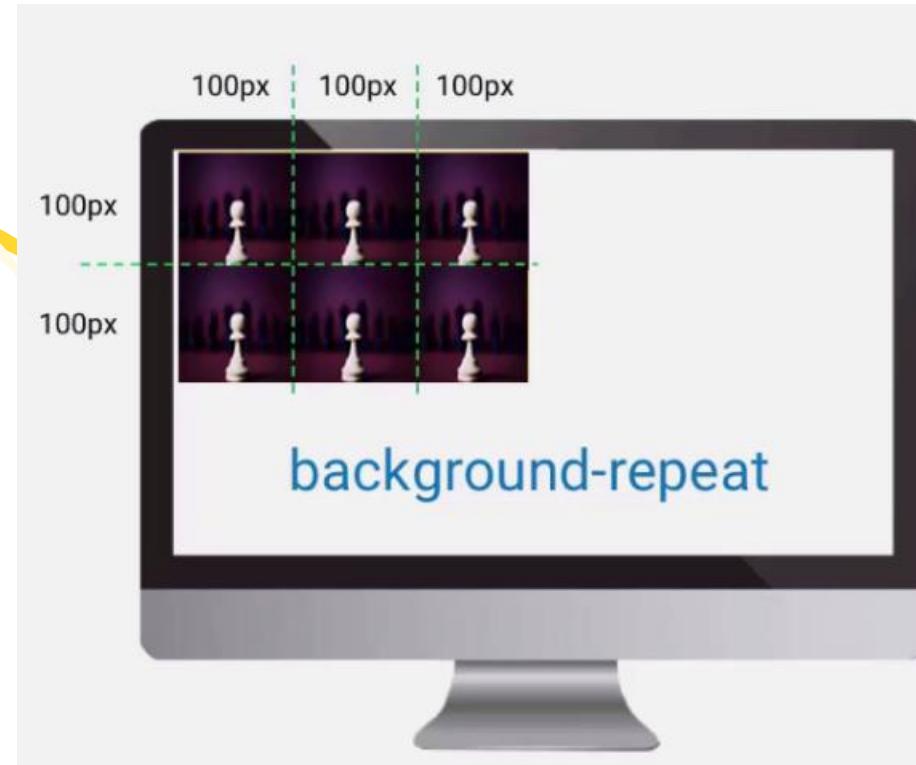
Can apply a negative value

Margin-bottom: Block 1

Marge-top: Block 2

To see what happens

- 
1. background-color
 2. background-image
 3. background-size
 4. background-repeat
 5. background-position
 6. background-attachment

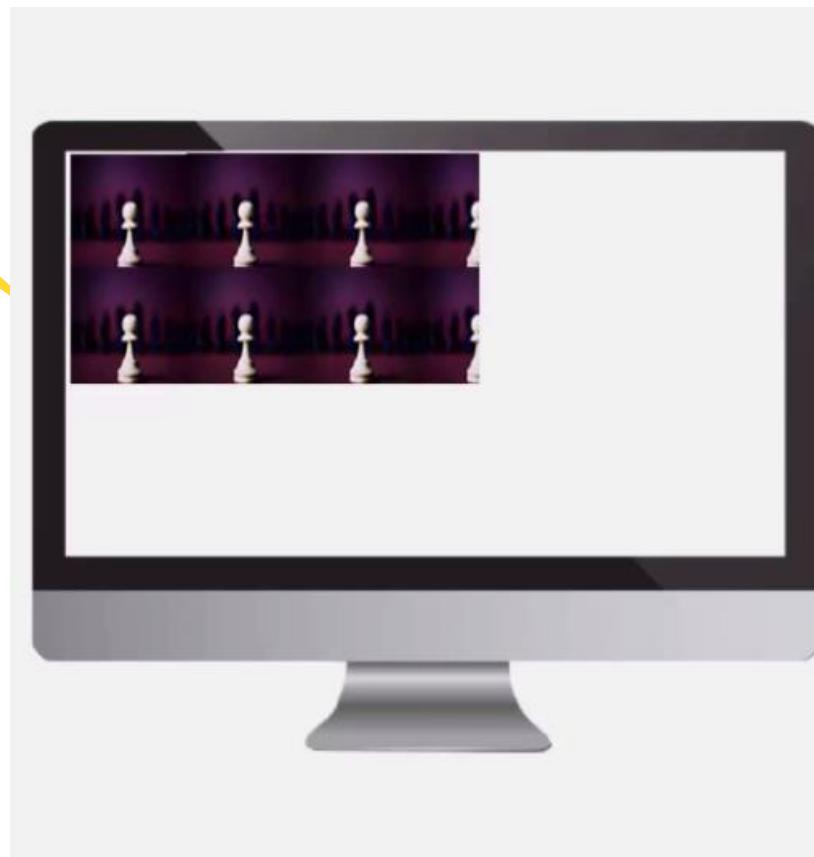


HTML

```
<div class="A" > </div>
```

CSS

```
div{  
    height: 200px;  
    width: 300px;  
}  
.A{  
    background-color: orange;  
    background-image: url(figure.jpg);  
    background-size: 100px 100px;  
}
```



HTML

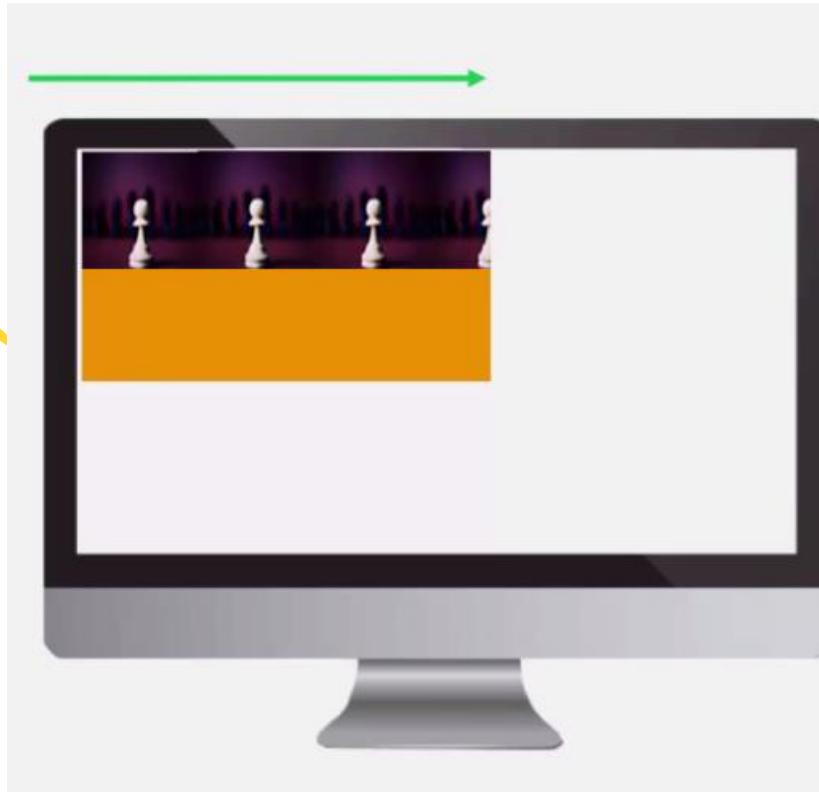
```
<div class="A" > </div>
```

CSS

```
div{  
    height: 200px;  
    width: 350px;  
}  
.A{  
    background-color: orange;  
    background-image: url(figure.jpg);  
    background-size: 100px 100px;  
    background-repeat: no-repeat;  
}
```

Background-repeat

Non-repeat, repeat-x, repeat y



HTML

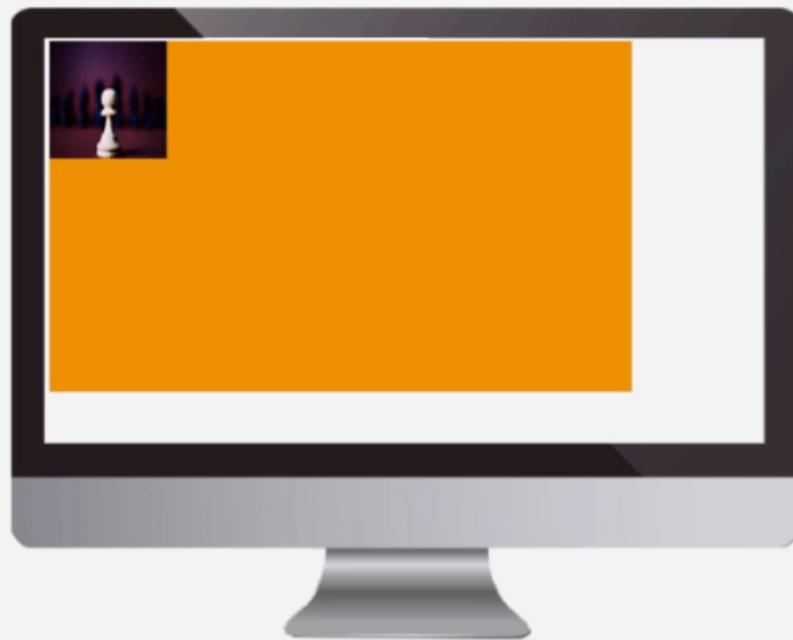
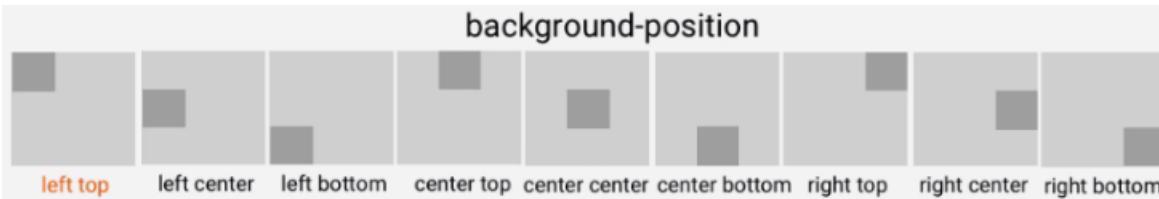
```
<div class="A" > </div>
```

CSS

```
div{  
    height: 200px;  
    width: 350px;  
}  
.A{  
    background-color: orange;  
    background-image: url(figure.jpg);  
    background-size: 100px 100px;  
    background-repeat: repeat-x;  
}
```

Background-repeat

Non-repeat, repeat-x, repeat y



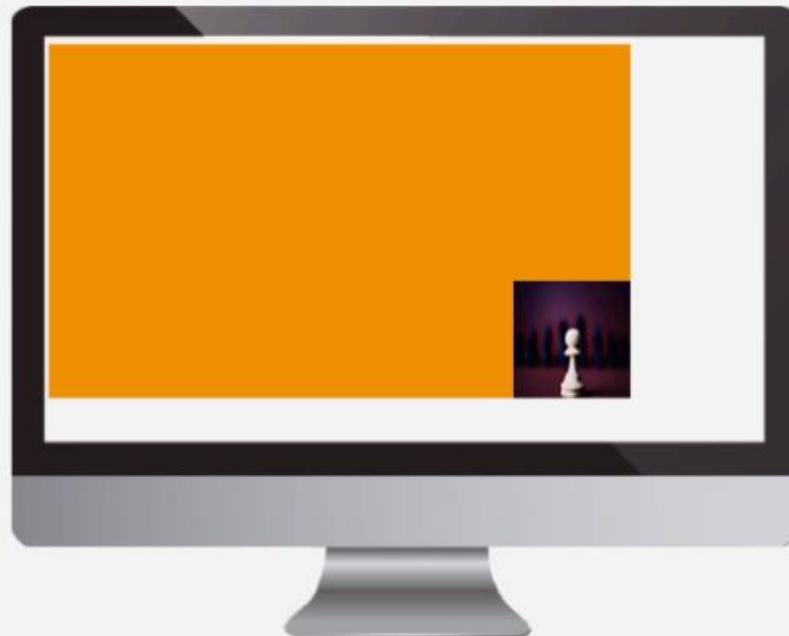
HTML

```
<div class="A" > </div>
```

CSS

```
div{  
    height: 300px;  
    width: 500px;  
}  
.A{  
    background-color: orange;  
    background-image: url(pawn.jpg);  
    background-size: 100px 100px;  
    background-repeat: no-repeat;  
    background-position: left top;  
}
```

background-attachment



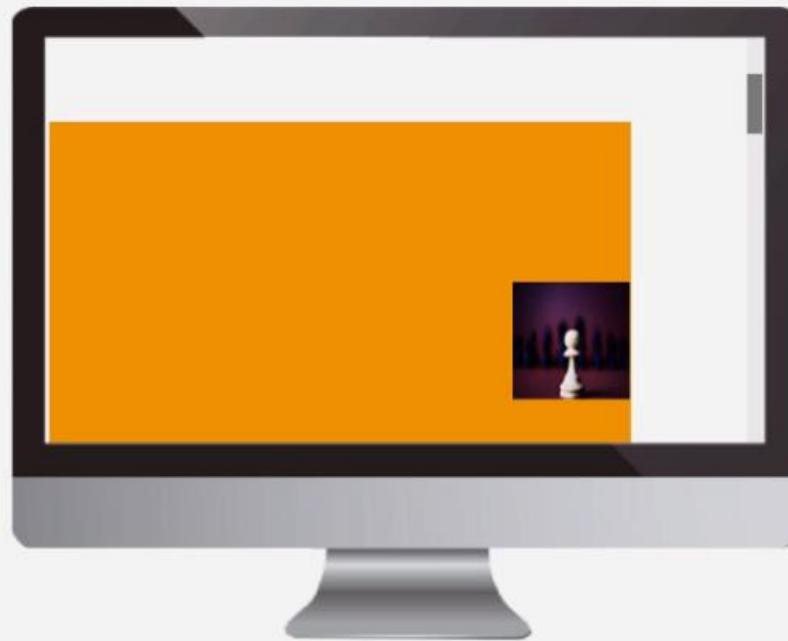
HTML

```
<div class="A" > </div>
```

CSS

```
div{  
    height: 300px;  
    width: 500px;  
}  
.A{  
    background-color: orange;  
    background-image: url(pawn.jpg);  
    background-size: 100px 100px;  
    background-repeat: no-repeat;  
    background-position: right bottom;  
    background-attachment: fixed;  
}
```

background-attachment

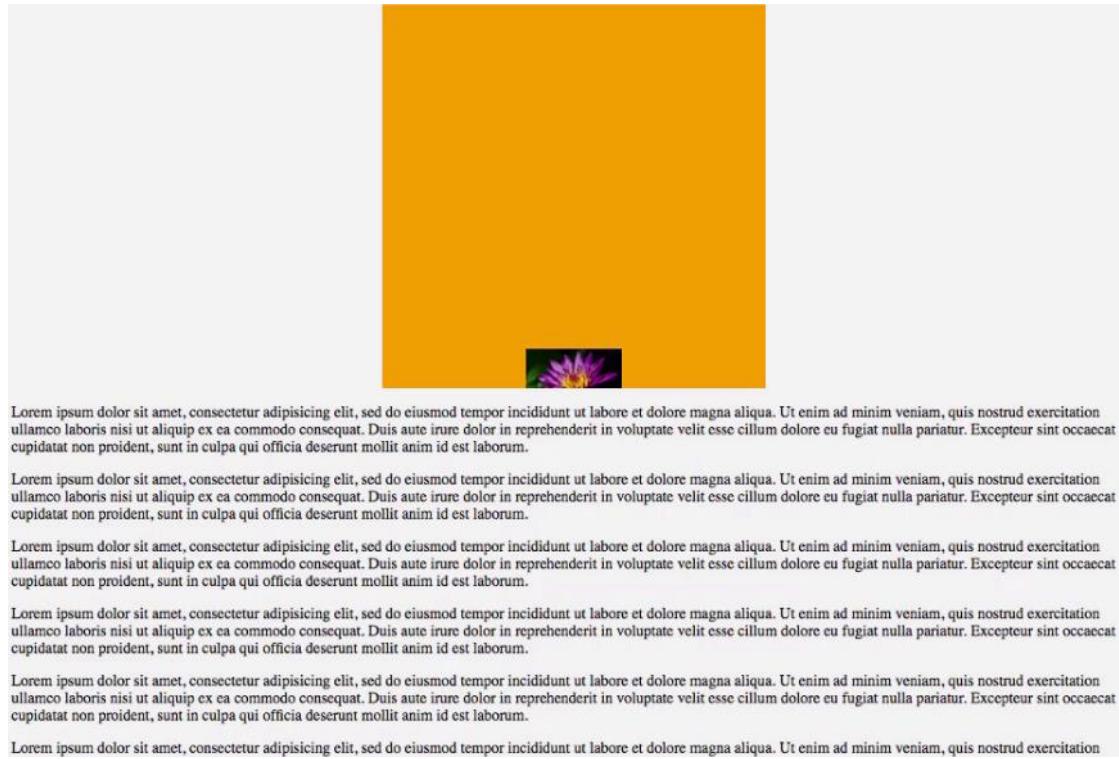


HTML

```
<div class="A" > </div>
```

CSS

```
div{  
    height: 300px;  
    width: 500px;  
}  
.A{  
    background-color: orange;  
    background-image: url(pawn.jpg);  
    background-size: 100px 100px;  
    background-repeat: no-repeat;  
    background-position: right bottom;  
    background-attachment: fixed;  
}
```



Background-Size: 100px
Background-Position: center center
Background-Attachment: Fix
Margin: 0 Auto

Div class block

Multiple p tags



position: static
absolute
relative
fixed



1. Static

`position: static` is the **default value**. Whether we declare it or not, elements are positioned in a normal order on the webpage. Let's give an example:

position: static

Normal flow

HTML

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
}
.a {
    background-color: orange;
}
.b {
    background-color: green;
}
.c {
    background-color: blue;
}
```



2. Relative

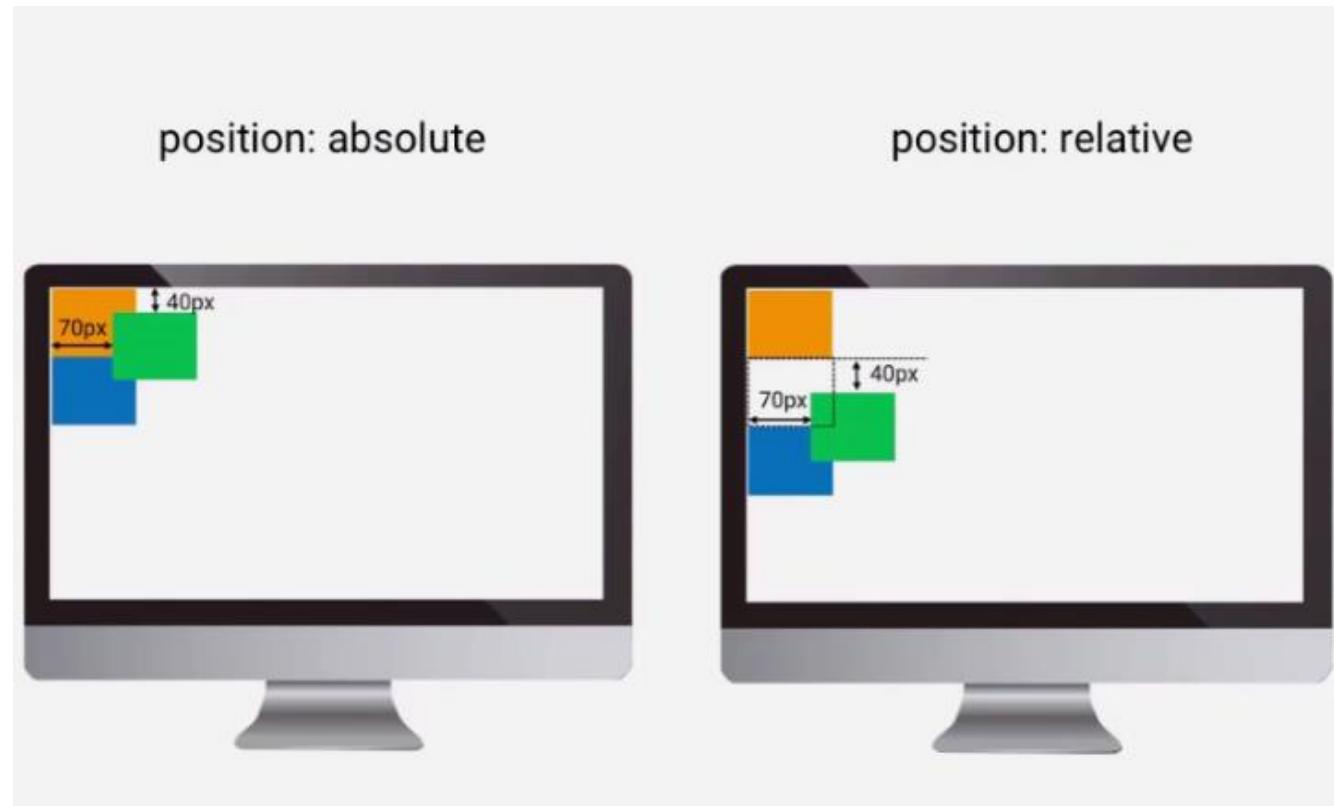
`position: relative`: An element's new position relative to its normal position.

Starting with `position: relative` and for all **non-static** position values, we are able to change an element's **default** position by using the **helper properties** that I've mentioned above.

The diagram shows a computer monitor displaying three colored boxes: orange, green, and blue. The orange box is at the top, the green box is in the middle, and the blue box is at the bottom. A dashed box highlights the green and blue boxes. A horizontal double-headed arrow between the green and blue boxes is labeled '70px'. A vertical double-headed arrow between the green and blue boxes is labeled '40px'. The text 'position: relative' is displayed above the monitor.

```
HTML
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>

CSS
div{
    height: 100px;
    width: 100px;
}
.a {
    background-color: orange;
}
.b {
    background-color: green;
    position: relative;
    left: 70px;
    top: 40px;
}
.c {
    background-color: blue;
}
```





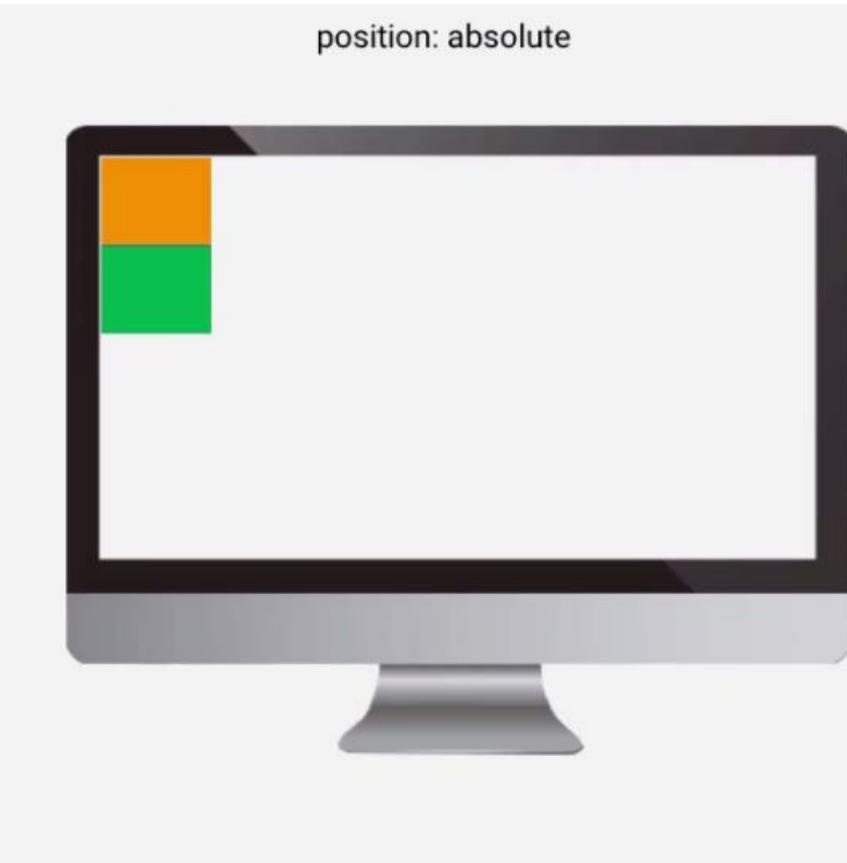
3. Absolute



In `position: relative`, the element is positioned **relative to itself**. However, an **absolutely** positioned element is **relative to its parent**.

An element with `position: absolute` is removed from the normal document flow. It is positioned automatically to the starting point (**top-left corner**) of its parent element. If it doesn't have any parent elements, then the initial document `<html>` will be its parent.

Since `position: absolute` removes the element from the document flow, other elements **are affected** and behave as the element is removed completely from the webpage.



position: absolute

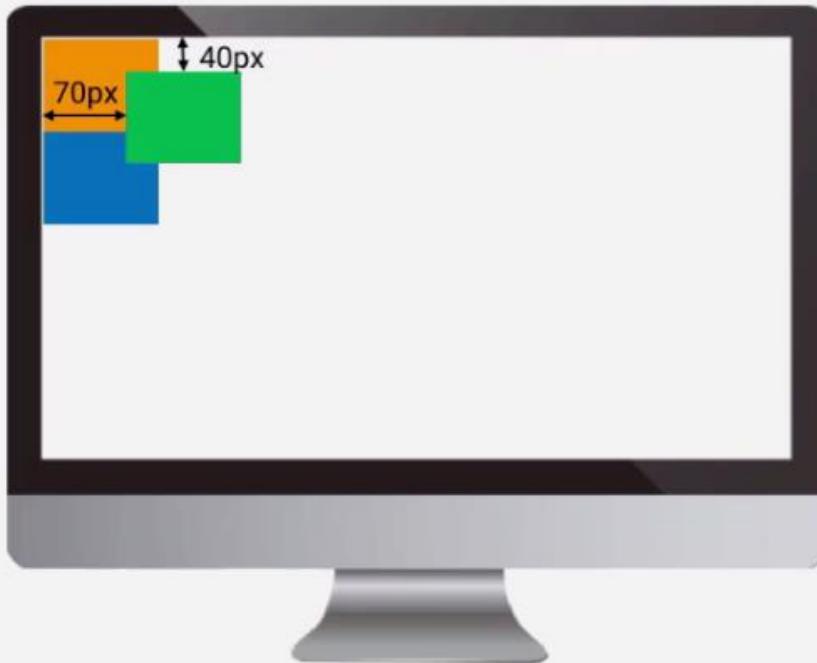
HTML

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
}
.a {
    background-color: orange;
}
.b {
    background-color: green;
    position: absolute;
}
.c {
    background-color: blue;
}
```

position: absolute



HTML

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

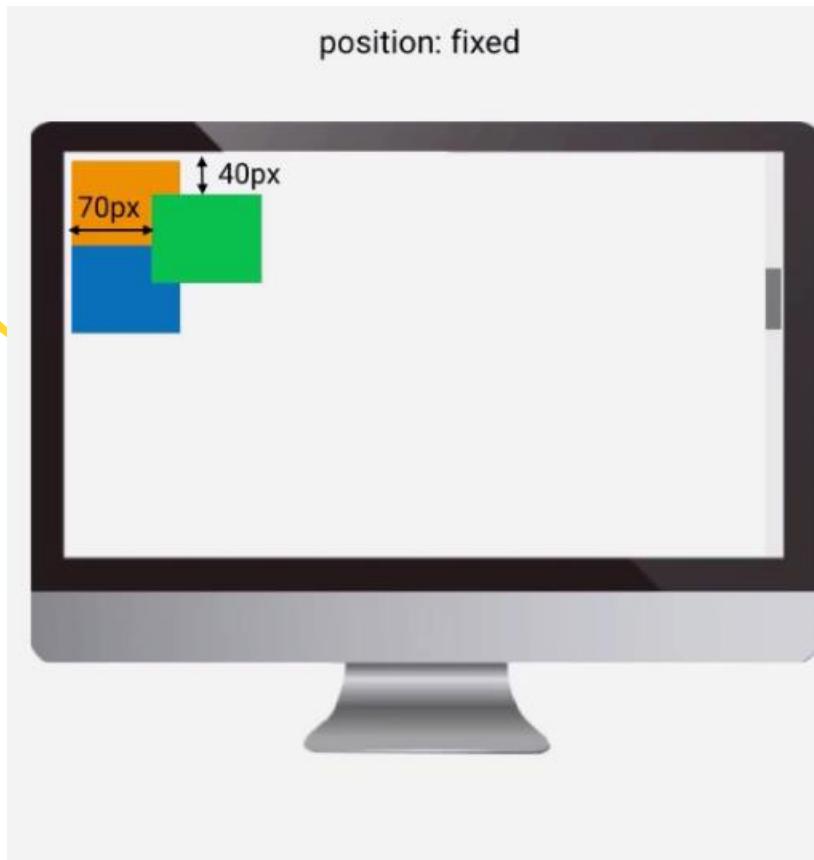
```
div{
    height: 100px;
    width: 100px;
}
.a {
    background-color: orange;
}
.b {
    background-color: green;
    position: absolute;
    left: 70px;
    top: 40px;
}
.c {
    background-color: blue;
}
```



4. Fixed

Like `position: absolute`, fixed positioned elements are also removed from the normal document flow. The differences are:

- They are **only relative to the <html> document**, not any other parents.
- They are **not affected by scrolling**.



position: fixed

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

HTML

```
div{ height: 100px; width: 100px; }
.a { background-color: orange; }
.b { background-color: green; position: fixed; left: 70px; top: 40px; }
.c { background-color: blue; }
```

CSS

position: fixed

70px

40px

HTML

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
}
.a {
    background-color: orange;
}
.b {
    background-color: green;
    position: fixed;
    left: 70px;
    top: 40px;
}
.c {
    background-color: blue;
}
```

Google search box



HTML

```
<div class="a" >
  <div class="b" > </div>
</div>
```

CSS

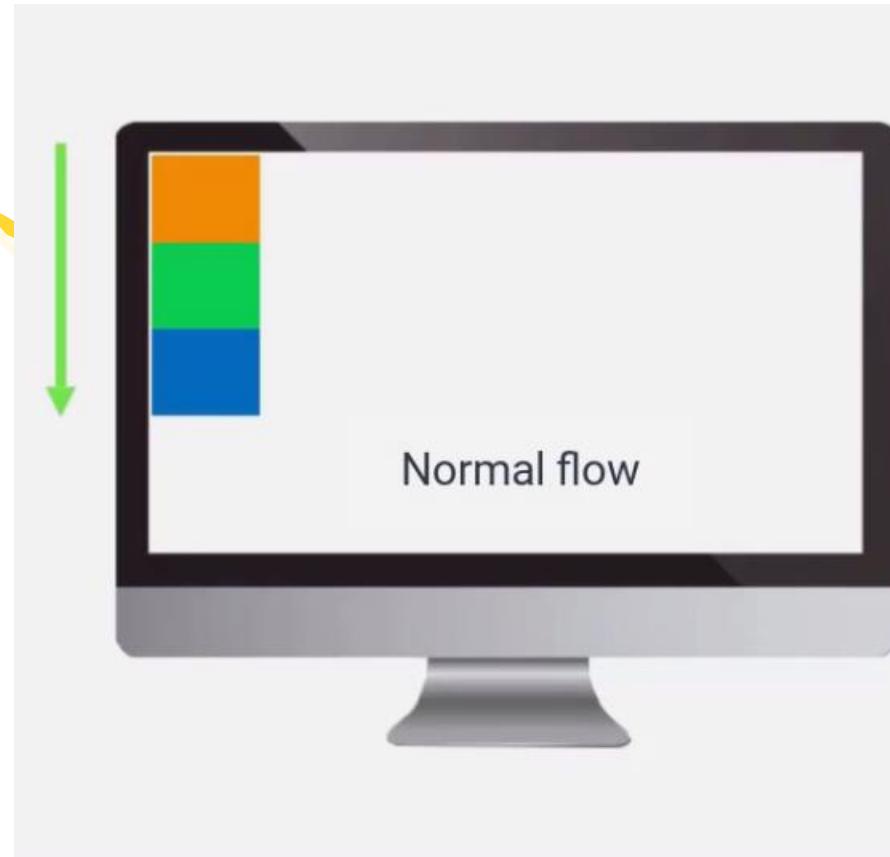
```
.a {
  height: 400px;
  width: 400px;
  background-color: orange;
  position: relative;
  left: 70px;
  top: 40px;
}

.b {
  height: 100px;
  width: 100px;
  background-color: green;
  position: absolute;
  left: 70px;
  top: 40px;
}
```

Google search box



z-index: number



HTML

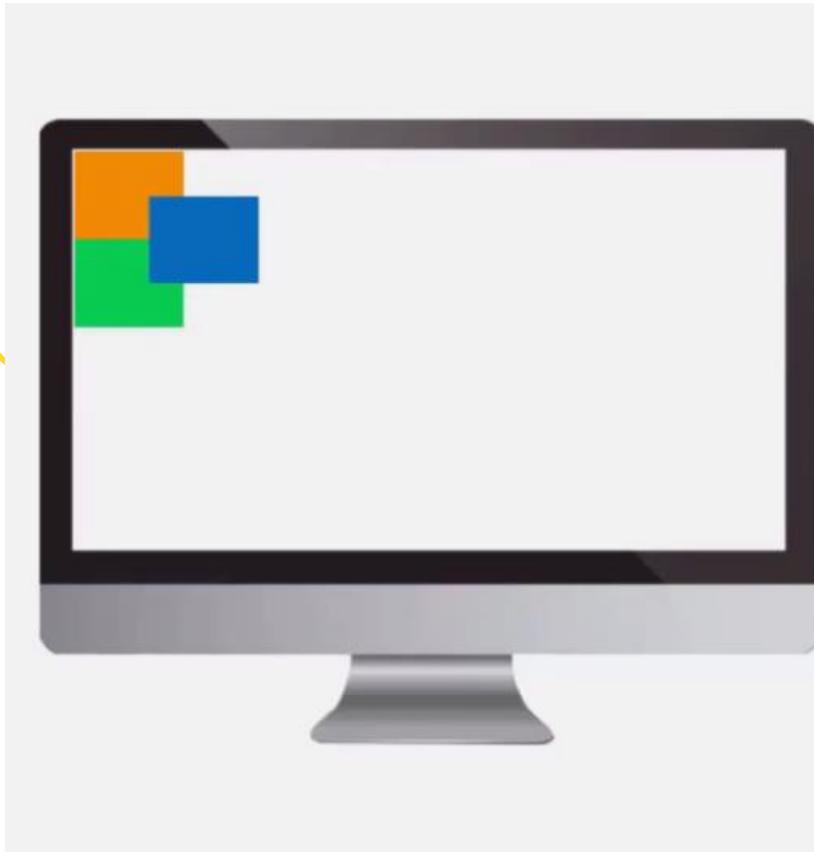
```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
}
.a{
    background-color: orange;
}
.b{
    background-color: green;
}
.c{
    background-color: blue;
}
```

Divide webpage to multiple layers with z-index

Go with position

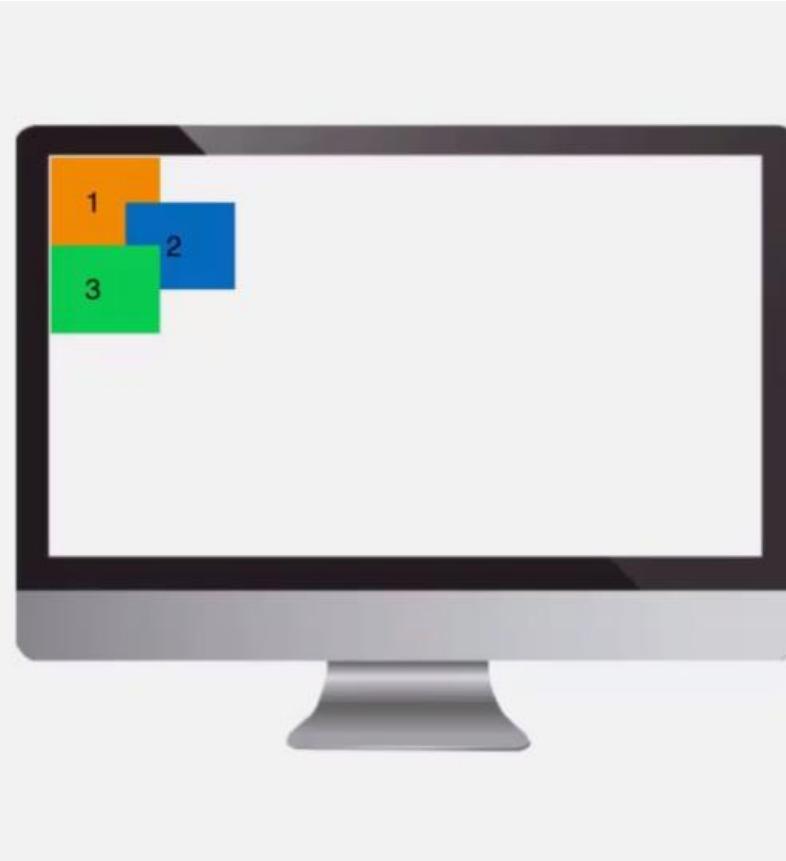


HTML

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
    position: relative;
}
.a{
    background-color: orange;
}
.b{
    background-color: green;
}
.c{
    background-color: blue;
    left: 70px;
    bottom: 150px;
}
```



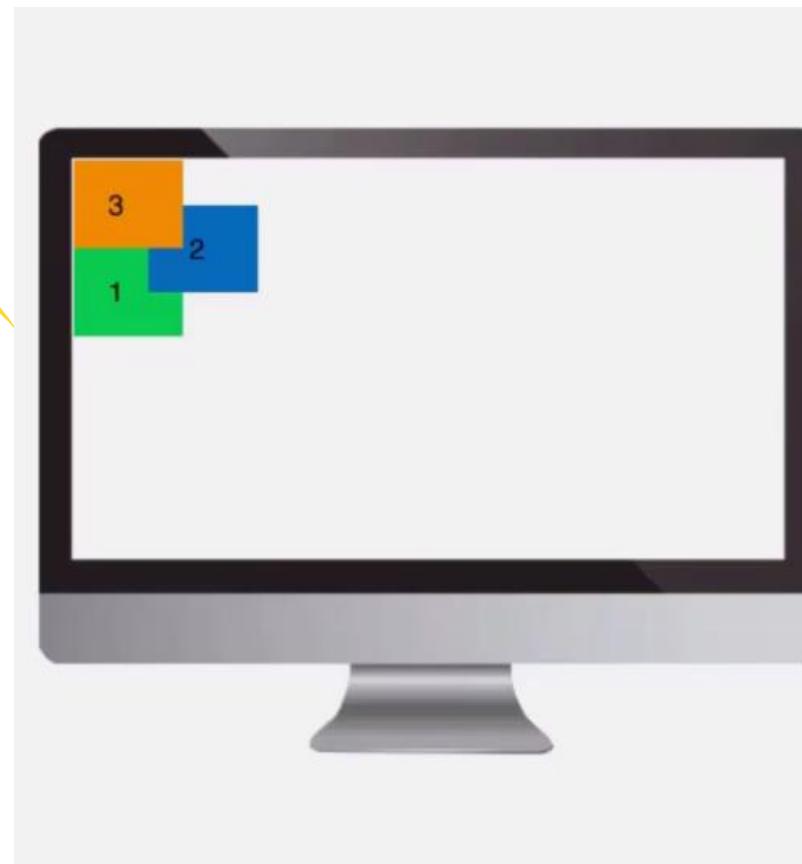
The image shows a computer monitor displaying three overlapping colored squares. The top square is orange and has the number '1' in white. The middle square is green and has the number '3' in white. The bottom square is blue and has the number '2' in white. This visual representation illustrates the concept of Z-Index in CSS, where the blue square (z-index: 2) is positioned above the green square (z-index: 3), which is positioned above the orange square (z-index: 1).

HTML

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
    position: relative;
}
.a{
    background-color: orange;
    z-index: 1;
}
.b{
    background-color: green;
    z-index: 3;
}
.c{
    background-color: blue;
    left: 70px;
    bottom: 150px;
    z-index: 2;
}
```



The image shows a computer monitor displaying three overlapping colored boxes. The orange box (z-index: 3) is at the top, the green box (z-index: 1) is in the middle, and the blue box (z-index: 2) is partially visible behind them. This visual representation demonstrates the stacking order of elements based on their z-index values.

HTML

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
    position: relative;
}
.a{
    background-color: orange;
    z-index: 3;
}
.b{
    background-color: green;
    z-index: 1;
}
.c{
    background-color: blue;
    left: 70px;
    bottom: 150px;
    z-index: 2;
}
```

Normal flow

```
HTML
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>

CSS
div{
    height: 100px;
    width: 100px;
    display: block;
}
.a{
    background-color: orange;
}
.b{
    background-color: green;
}
.c{
    background-color: blue;
}
```



HTML

```
<div class="a" > </div>
<div class="b" > </div>
<div class="c" > </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
    display: inline-block;
}
.a{
    background-color: orange;
}
.b{
    background-color: green;
}
.c{
    background-color: blue;
}
```



HTML

```
<div class="a"> Text </div>
<div class="b"> Text </div>
<div class="c"> Text </div>
```

CSS

```
div{
    height: 100px;
    width: 100px;
    display: inline;
}

.a {
    background-color: orange;
}

.b {
    background-color: green;
}

.c {
    background-color: blue;
}
```

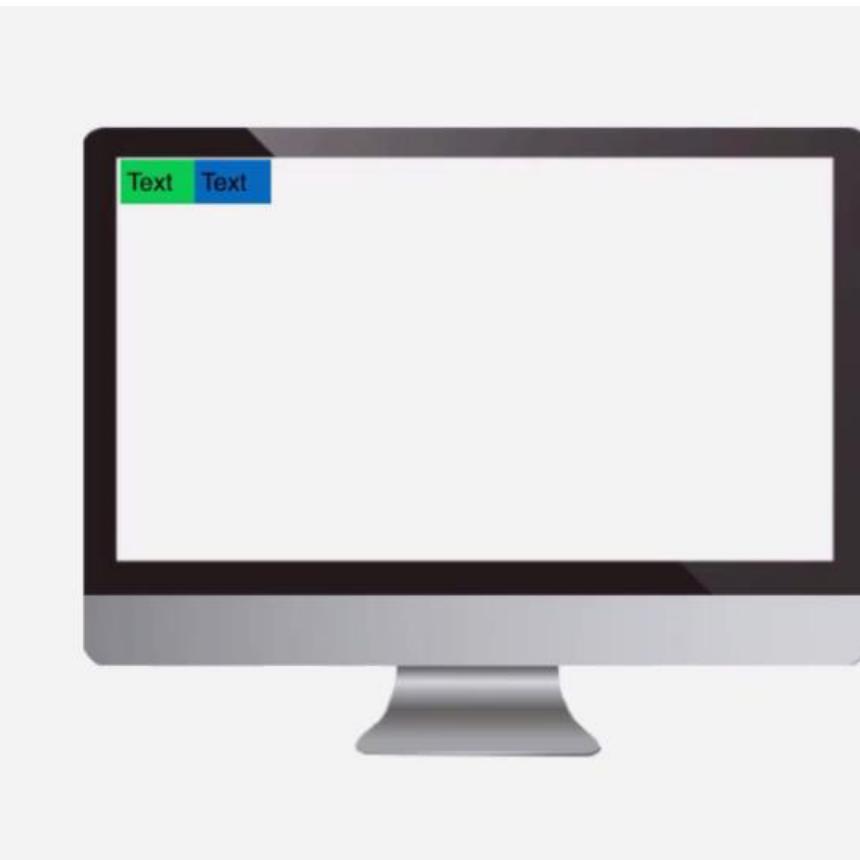


HTML

```
<div class="a"> Text </div>
<div class="b"> Text </div>
<div class="c"> Text </div>
```

CSS

```
div{
    height:100px;
    width:100px;
    display: inline;
}
.a{
    background-color: orange;
}
.b{
    background-color: green;
}
.c{
    background-color: blue;
}
```



HTML

```
<div class="a" > Text </div>
<div class="b" > Text </div>
<div class="c" > Text </div>
```

CSS

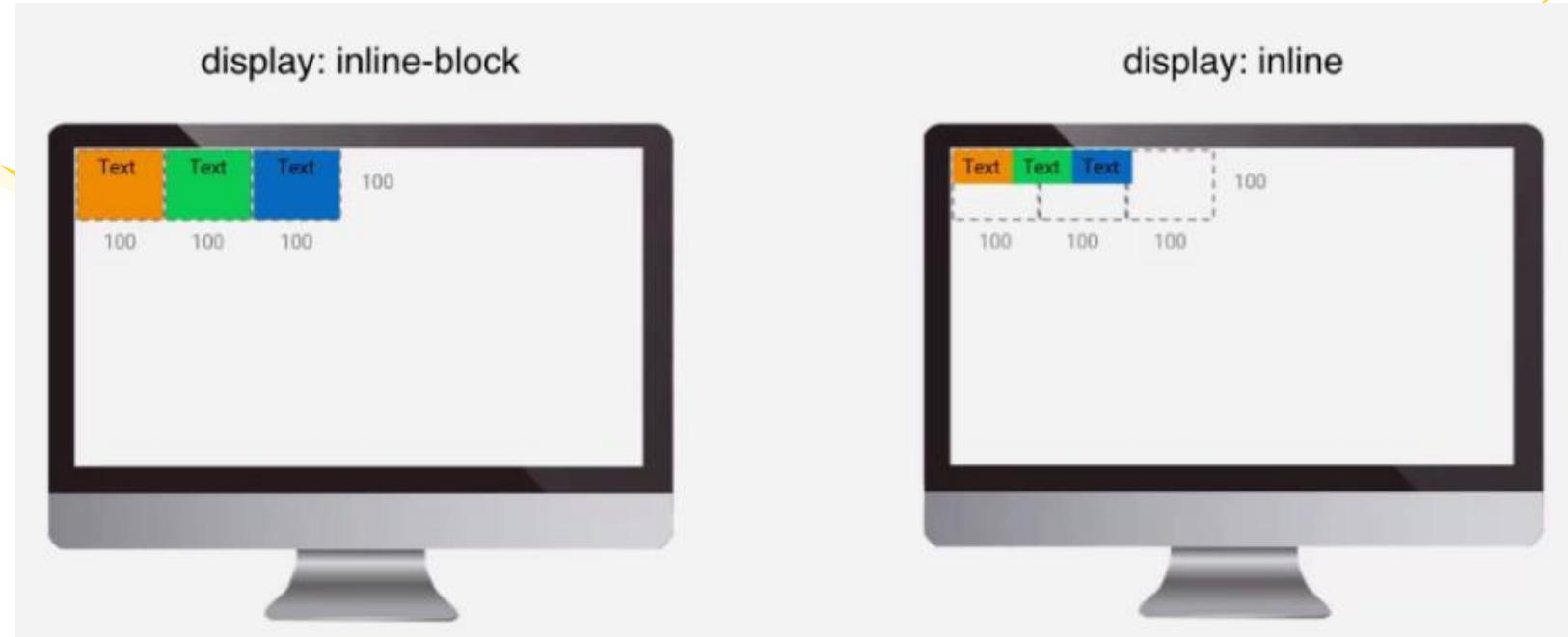
```
div{
    height: 100px;
    width: 100px;
    display: inline;
}

.a {
    background-color: orange;
    display: none;
}

.b {
    background-color: green;
}

.c {
    background-color: blue;
}
```





Technology

Consulting

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format code: Edit > Line > Reindent

copy line: Ctrl Shift D

delete row: Ctrl X