



STT-NF

Pemrograman Web

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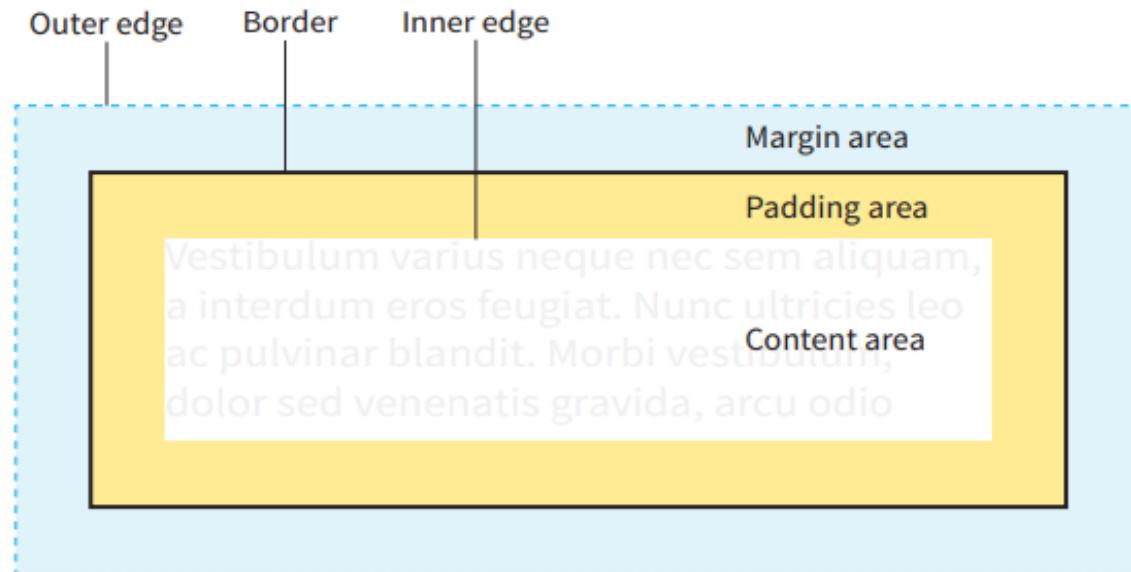
dev.xbata.com

 @rojulman

7. CSS Element Box & Positioning

Setiap elemen dokumen HTML dapat berupa konten yang terdapat dalam sebuah kotak (box) yang memiliki property jarak seperti:

- Width
- Height
- Padding
- Border
- Margin



CSS Box : dimensi

width

Values: *length | percentage | auto*

Default: auto

Applies to: block-level elements and replaced inline elements (such as images)

Inherits: no

box-sizing

Values: content-box | border-box

Default: content-box

Applies to: all elements

Inherits: no

height

Values: *length | percentage | auto*

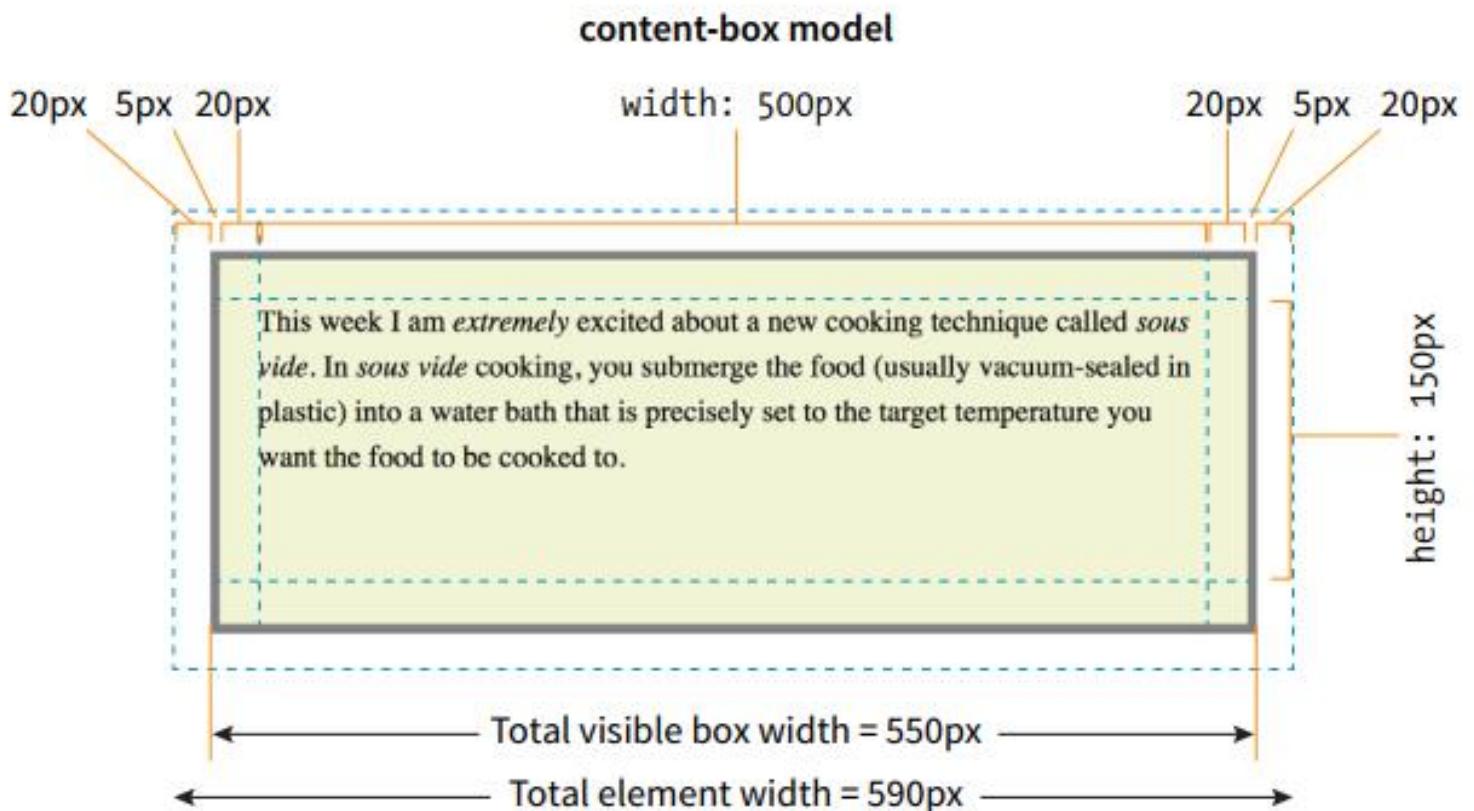
Default: auto

Applies to: block-level elements and replaced inline elements (such as images)

Inherits: no

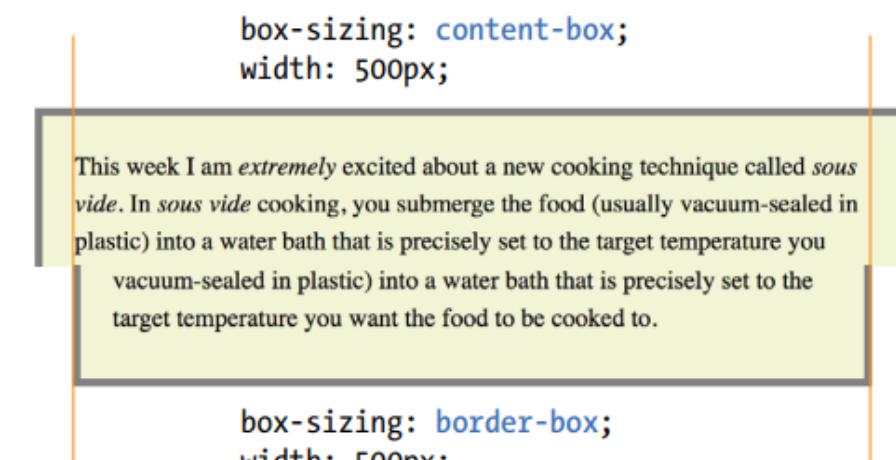
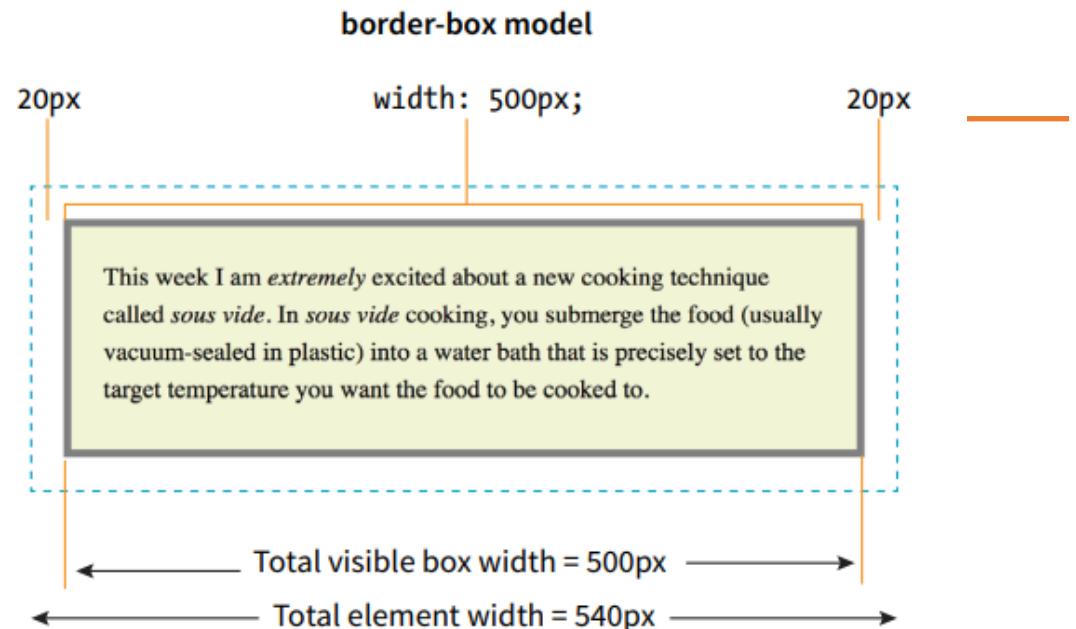
CSS Box - Border

```
p {  
background: #f2f5d5;  
width: 500px;  
height: 150px;  
padding: 20px;  
border: 5px solid gray;  
margin: 20px;  
}
```



CSS Box – Sizing

```
p {  
  ...  
  box-sizing: border-box;  
  width: 500px;  
  height: 150px;  
}
```



CSS – Padding Positioning

padding-top, padding-right, padding-bottom, padding-left

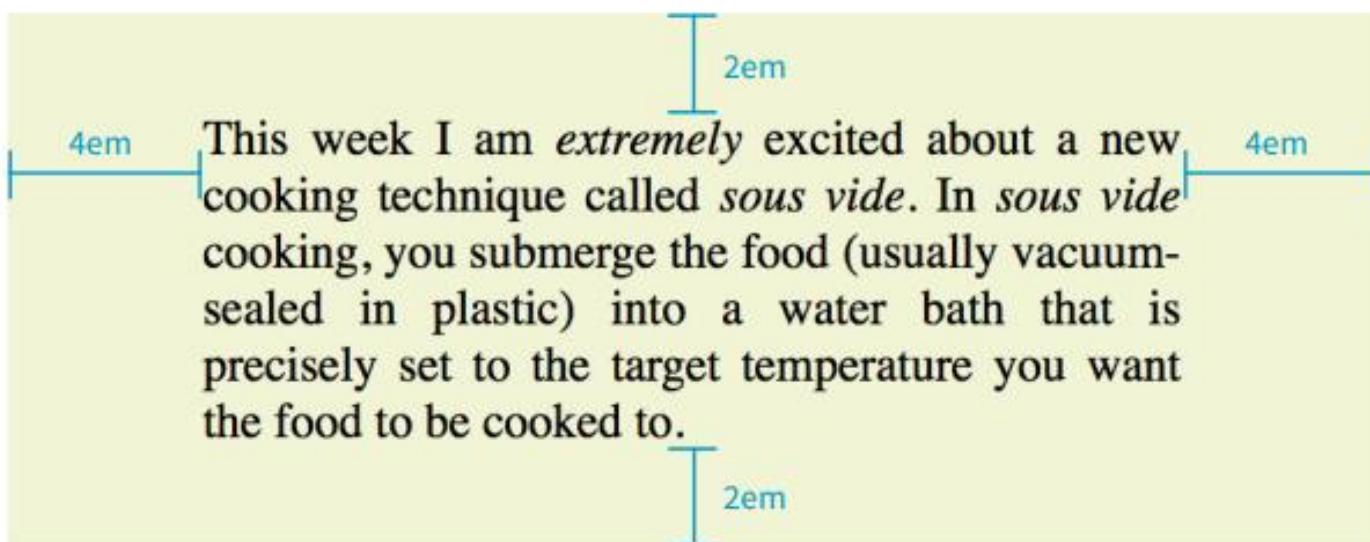
Values: *length | percentage*

Default: 0

Applies to: all elements

Inherits: no

```
blockquote {  
    padding-top: 2em;  
    padding-right: 4em;  
    padding-bottom: 2em;  
    padding-left: 4em;  
    background-color: #D098D4; /* light green */  
}
```



padding

Values: *length | percentage*

Default: 0

Applies to: all elements

Inherits: no



CSS – Padding Positioning

Penerapan Padding (4 elemen arah jarum jam: top, right, bottom, left) bisa dilakukan dengan format berikut ini:

- 1 Nilai

```
padding: 10px ; /* semua 4 elemen bernilai 10px */
```

- 2 Nilai

```
padding: 10px 6px; /* nilai top dan bottom 10px, left dan right: 6px */
```

- 3 Nilai

```
padding: 10px 6px 4px; /* nilai top 10px, nilai left dan right 6px, nilai bottom: 4px */
```

- 4 Nilai

```
padding: 10px 6px 4px 10px; /* berturut2 nilai searah jarum jam: top, right, bottom, left */
```

CSS – Border Style

border-top-style, **border-right-style**,
border-bottom-style, **border-left-style**

Values: none | solid | hidden | dotted | dashed | double | groove | ridge | inset | outset

Default: none

Applies to: all elements

Inherits: no

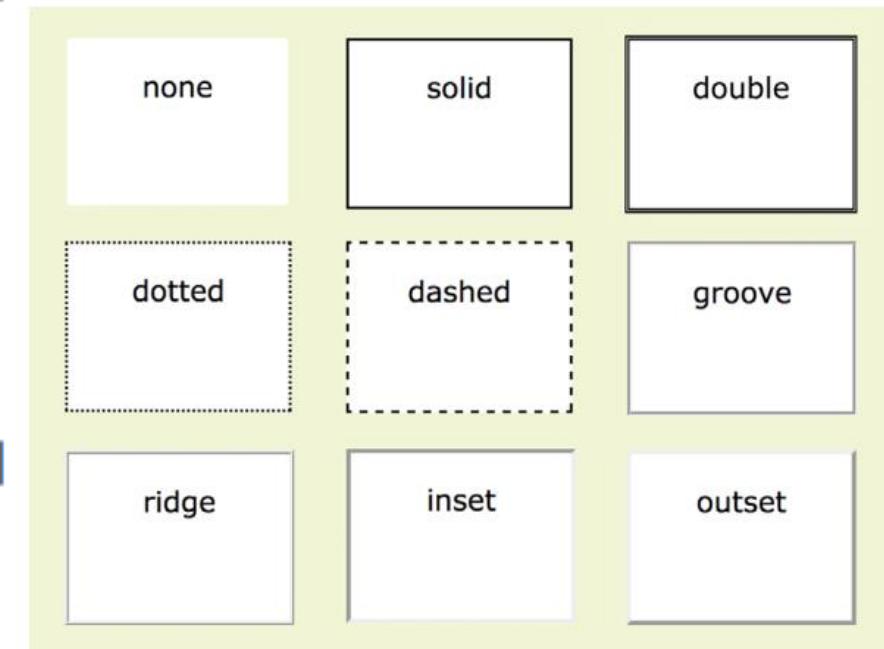
border-style

Values: none | solid | hidden | dotted | dashed | double | groove | ridge | inset | outset

Default: none

Applies to: all elements

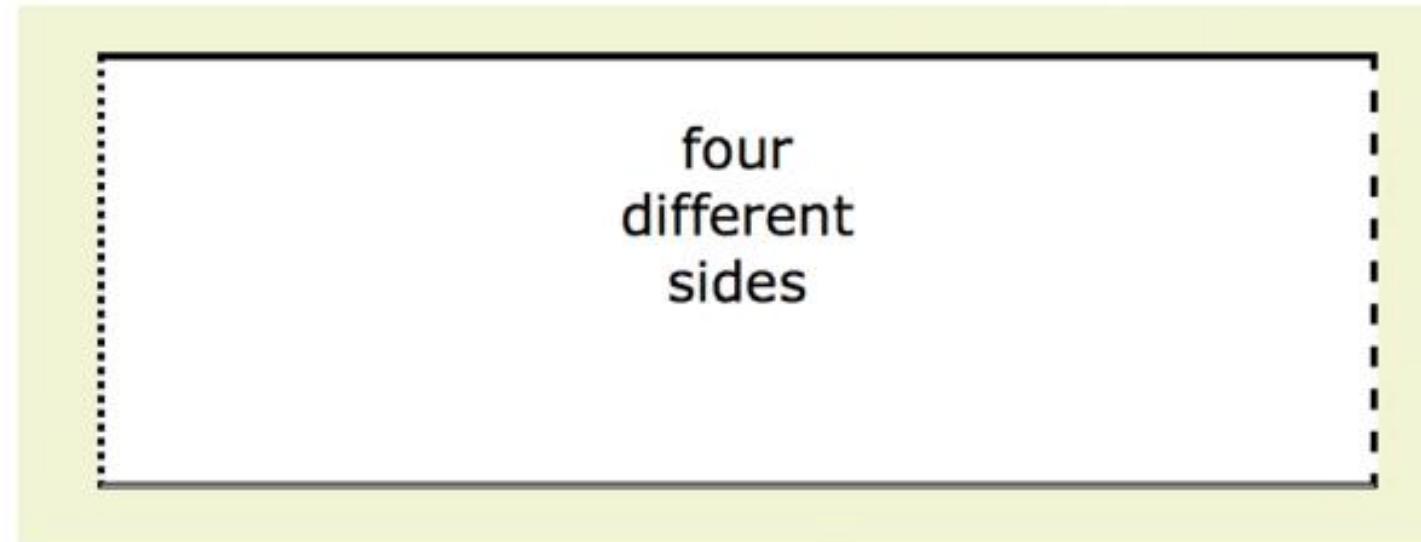
Inherits: no



CSS – Border Style

Penerapan Nilai Border-Style urutan sesuai arah jarum jam: top, right, bottom, left

border-style: solid dashed double dotted;



CSS – Border Width

Digunakan untuk menentukan ketebalan dari border

border-top-width, **border-right-width**,
border-bottom-width, **border-left-width**

Values: *length | thin | medium | thick*

Default: medium

Applies to: all elements

Inherits: no

border-width

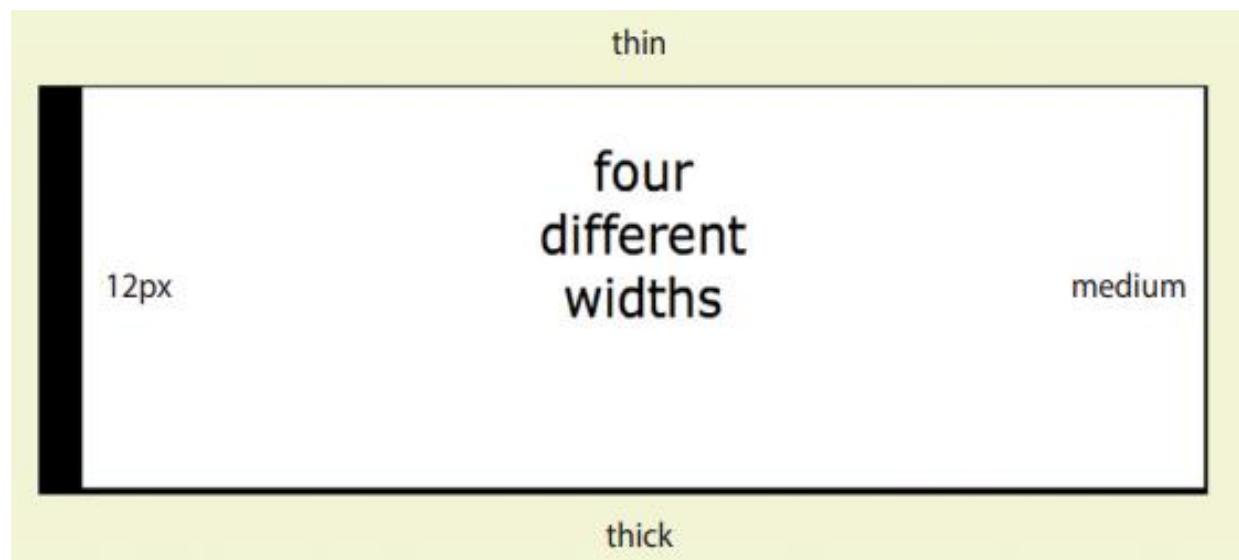
Values: *length | thin | medium | thick*

Default: medium

Applies to: all elements

Inherits: no

```
div#help {  
    border-width: thin medium thick 12px;  
    border-style: solid;  
    width: 300px;  
    height: 100px;  
}
```



CSS – Border Color

Digunakan untuk menentukan warna border

**border-top-color, border-right-color,
border-bottom-color, border-left-color**

Values: color name or RGB/HSL value | transparent

Default: the value of the color property for the element

Applies to: all elements

Inherits: no

border-color

Values: color name or RGB/HSL value | transparent

Default: the value of the color property for the element

Applies to: all elements

Inherits: no

```
div#special {  
    border-color: maroon aqua;  
    border-style: solid;  
    border-width: 6px;  
    width: 300px;  
    height: 100px;  
}
```

maroon on the top and bottom;
aqua on the sides

CSS – Kombinasi Style, Border,Color

Digunakan untuk memadukan style, border dan color elemen HTML

border-top, border-right, border-bottom, border-left

Values: *border-style border-width border-color*

Default: defaults for each property

Applies to: all elements

Inherits: no

```
h1 { border-left: red .5em solid; }      /* left border only */  
h2 { border-bottom: 1px solid; }           /* bottom border only */  
p.example { border: 2px dotted #663; }     /* all four sides */
```

border

Values: *border-style border-width border-color*

Default: defaults for each property

Applies to: all elements

Inherits: no

CSS – Rounded Corner

Digunakan untuk styling pojok kotak / box elemen HTML

border-top-left-radius, **border-top-right-radius**,
border-bottom-right-radius, **border-bottom-left-radius**

Values: *length | percentage*

Default: 0

Applies to: all elements

Inherits: no

```
p {  
    width: 200px;  
    height: 100px;  
    background: darkorange;  
}
```



border-radius: 1em;



border-radius: 50px;



border-top-right-radius: 50px;

CSS – Margin

Digunakan untuk menentukan besaran margin elemen HTML

margin-top, margin-right, margin-bottom, margin-left

Values: *length | percentage | auto*

Default: auto

Applies to: all elements

Inherits: no

margin

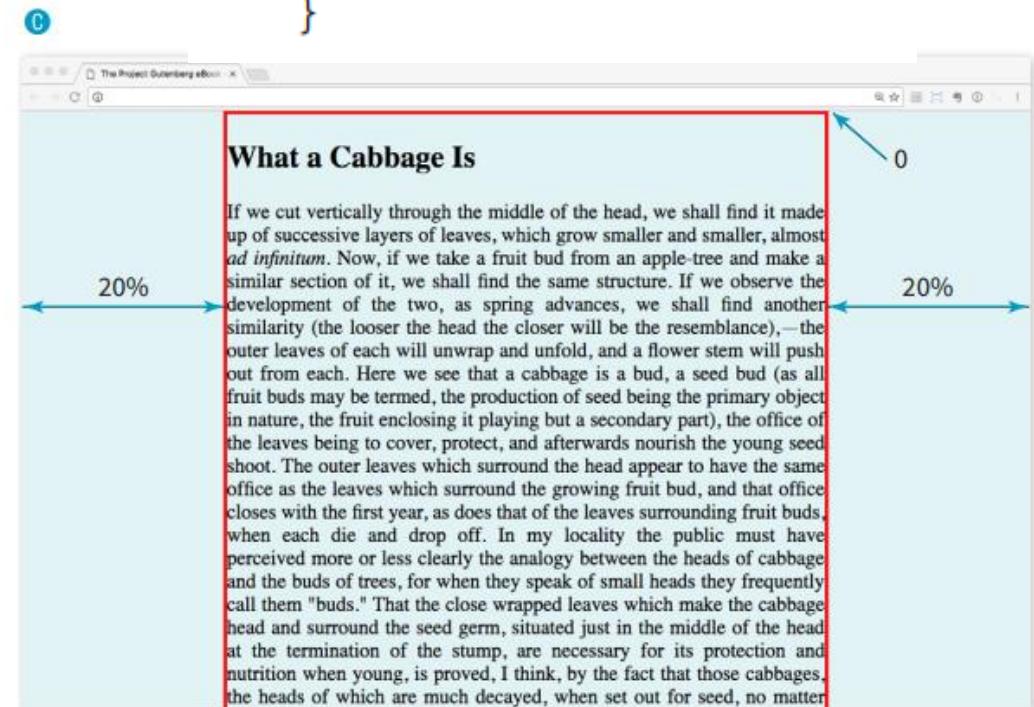
Values: *length | percentage | auto*

Default: auto

Applies to: all elements

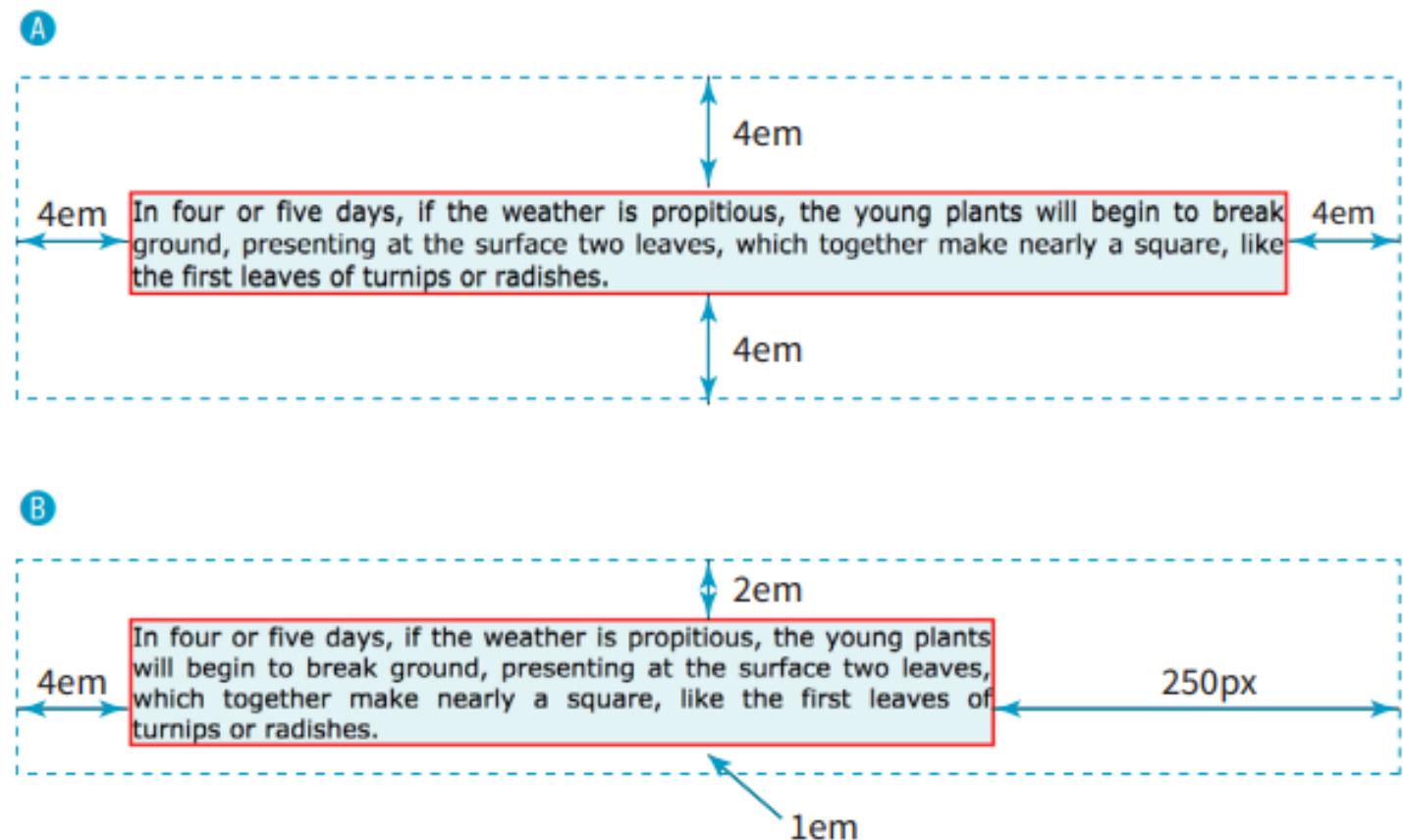
Inherits: no

```
c body {  
    margin: 0 20%;  
    border: 3px solid red;  
    background-color: #e2f3f5;  
}
```



Digunakan untuk menentukan besaran margin elemen HTML

```
A p#A {  
    margin: 4em;  
    border: 2px solid red;  
    background: #e2f3f5;  
}  
  
B p#B {  
    margin-top: 2em;  
    margin-right: 250px;  
    margin-bottom: 1em;  
    margin-left: 4em;  
    border: 2px solid red;  
    background: #e2f3f5;  
}
```



CSS – Box Properties

Property	Description
border	A shorthand property that combines border properties
border-top border-right border-bottom border-left	Combines border properties for each side of the element
border-color	Shorthand property for specifying the color of borders
border-top-color border-right-color border-bottom-color border-left-color	Specifies the border color for each side of the element
border-image	Adds an image inside the border area
border-image-outset	How far the border image should be positioned away from the border area.
border-image-repeat	The manner in which the image fills the sides of the border
border-image-slice	The points at which the border image should be divided into corners and sides
border-image-source	The location of the image file to be used for the border image

CSS – Box Properties

Property	Description
border-image-width	The width of the space the border image should occupy
border-radius	Shorthand property for rounding the corners of the visible element box
border-top-left-radius border-top-right-radius border-bottom-right-radius border-bottom-left-radius	Specifies the radius curve for each individual corner
border-style	Shorthand property for specifying the style of borders
border-top-style border-right-style border-bottom-style border-left-style	Specifies the border style for each side of the element
border-width	Shorthand property for specifying the width of borders
border-top-width border-right-width border-bottom-width border-left-width	Specifies the border width for each side of the element
box-sizing	Specifies whether width and height dimensions apply to the content box or the border box
box-shadow	Adds a drop shadow around the visible element box
display	Defines the type of element box an element generates
height	Specifies the height of the element's content box or border box
margin	Shorthand property for specifying margin space around an element
margin-top margin-right margin-bottom margin-left	Specifies the margin amount for each side of the element

CSS – Box Properties

Property	Description
max-height	Specifies the maximum height of an element
max-width	Specifies the maximum width of an element
min-height	Specifies the minimum height of an element
min-width	Specifies the minimum width of an element
outline	Shorthand property for adding an outline around an element
outline-color	Sets the color of the outline
outline-offset	Sets space between an outline and the outer edge of the border
outline-style	Sets the style of the outline
outline-width	Sets the width of the outline
overflow	Specifies how to handle content that doesn't fit in the content area
padding	Shorthand property for specifying space between the content area and the border
padding-top padding-right padding-bottom padding-left	Specifies the padding amount for each side of the element
width	Specifies the width of an element's content box or border box

CSS – Box Properties

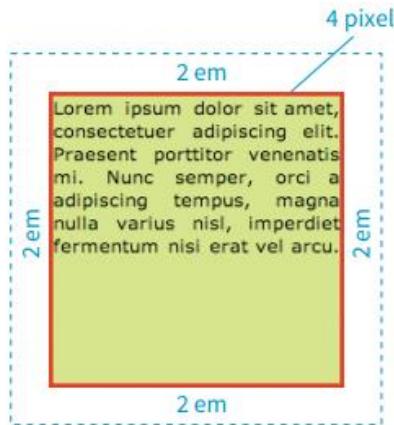
Lorem ipsum dolor sit amet,
 consectetur adipiscing elit.
 Praesent porttitor venenatis
 mi. Nunc semper, orci a
 adipiscing tempus, magna
 nulla varius nisl, imperdier
 fermentum nisi erat vel arcu.

All of the samples in this exercise start out styled as shown here and share the properties listed below.

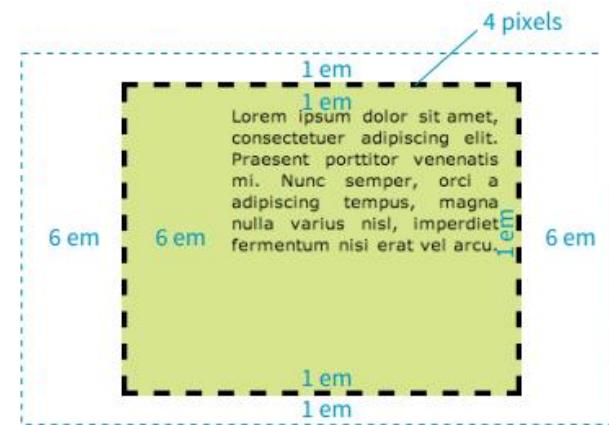
```
p { background-color: #C2F670;  
width: 200px;  
height: 200px; }
```



C



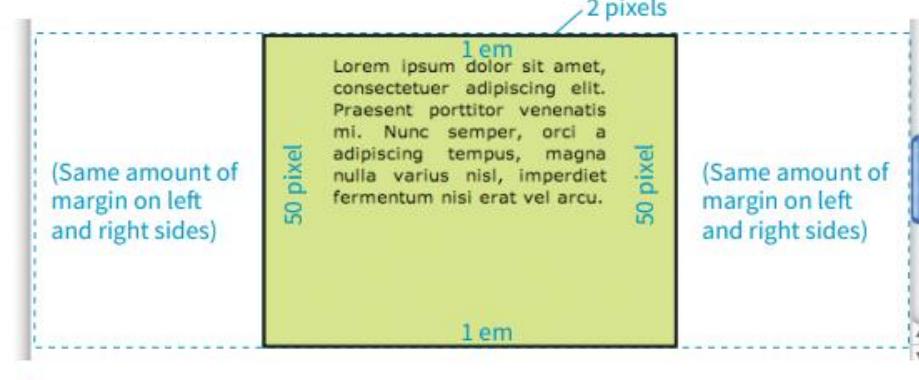
D



E



B

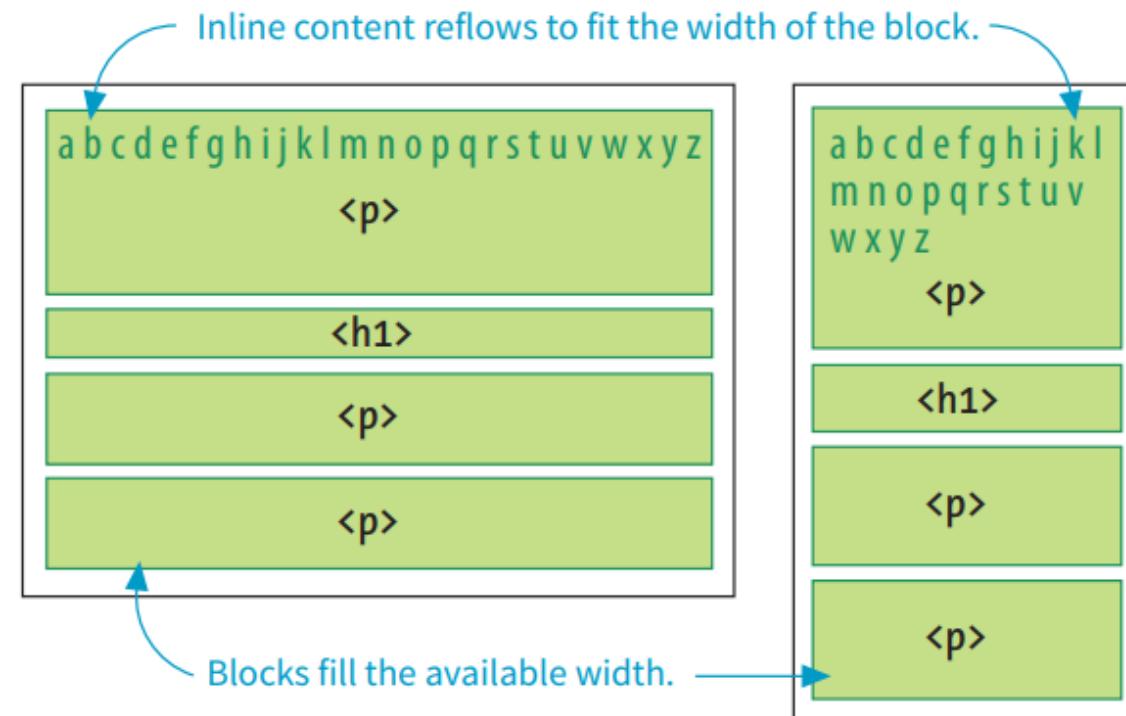


F

- Pada bagian ini akan dipelajari CSS untuk mengatur urutan aliran (flow) dari elemen dokumen ditampilkan
- Normal Flow:

Urutan elemen HTML:

1. Paragraph
2. Heading 1
3. Paragraph
4. Paragraph



CSS – Floating (1)

Digunakan memindahkan / menggeser elemen HTML dari kiri atau kanan

float

Values: left | right | none

Default: none

Applies to: all elements

Inherits: no

THE MARKUP

```
<p> After the cream is frozen rather  
stiff,...
```

THE STYLES

```
img {  
    float: right;  
}
```

CSS – Floating (2)

Digunakan memindahkan / menggeser elemen HTML ke kiri atau kanan

THE MARKUP

```
<p> After  
stiff,...
```

THE STYLES

```
img {  
  float: right;  
}
```

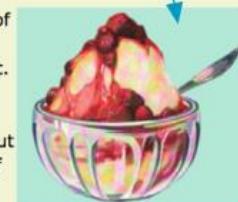
Inline image in the normal flow



After the cream is frozen rather stiff, prepare a tub or bucket of coarsely chopped ice, with one-half less salt than you use for freezing. To each ten pounds of ice allow one quart of rock salt. Sprinkle a little rock salt in the bottom of your bucket or tub, then put over a layer of cracked ice, another layer of salt and cracked ice, and on this stand your mold, which is not filled, but is covered with a lid, and pack it all around, leaving the top, of course, to pack later on. Take your freezer near this tub. Remove the lid from the mold, and pack in the cream, smoothing it down until you have filled it to overflowing. Smooth the top with a spatula or limber knife, put over a sheet of waxed paper and adjust the lid.

Space next to image is held clear

Inline image floated to the right



After the cream is frozen rather stiff, prepare a tub or bucket of coarsely chopped ice, with one-half less salt than you use for freezing. To each ten pounds of ice allow one quart of rock salt. Sprinkle a little rock salt in the bottom of your bucket or tub, then put over a layer of cracked ice, another layer of salt and cracked ice, and on this stand your mold, which is not filled, but is covered with a lid, and pack it all around, leaving the top, of course, to pack later on. Take your freezer near this tub. Remove the lid from the mold, and pack in the cream, smoothing it down until you have filled it to overflowing. Smooth the top with a spatula or limber knife, put over a sheet of waxed paper and adjust the lid.

Image moves over, and text wraps around it

CSS – Floating (3)

Digunakan memindahkan / menggeser elemen HTML ke kiri atau kanan

```
img {  
    float: right;  
    margin: 1em;  
}
```

Indicates outer margin edge
(dotted line does not appear in the browser)

After the cream is frozen rather stiff, prepare a tub or bucket of coarsely chopped ice, with one-half less salt than you use for freezing. To each ten pounds of ice allow one quart of rock salt. Sprinkle a little rock salt in the bottom of your bucket or tub, then put over a layer of cracked ice, another layer of salt and cracked ice, and on this stand your mold, which is not filled, but is covered with a lid, and pack it all around, leaving the top, of course, to pack later on. Take your freezer near this tub. Remove the lid from the mold, and pack in the cream, smoothing it down until you have filled it to overflowing. Smooth the top with a spatula or limber knife, put over a sheet of waxed paper and adjust the lid.



CSS – Floating Inline

Digunakan memindahkan / menggeser elemen HTML ke kiri atau kanan

THE MARKUP

```
<p><span class="tip">TIP: Make sure that  
has a hole below the top of the mold so  
off.</span>After the cream is frozen rat  
bucket of...</p>
```

THE STYLES

```
span.tip {  
  float: right;  
  margin: 1em;  
  width: 200px;  
  color: #fff;  
  background-color: lightseagreen;  
  padding: 1em;  
}
```

After the cream is frozen rather stiff, prepare a tub or bucket of coarsely chopped ice, with one-half less salt than you use for freezing. To each ten pounds of ice allow one quart of rock salt. Sprinkle a little rock salt in the bottom of your bucket or tub, then put over a layer of cracked ice, another layer of salt and cracked ice, and on this stand your mold, which is not filled, but is covered with a lid, and pack it all around, leaving the top, of course, to pack later on. Take your freezer near this tub. Remove the lid from the mold, and pack in the cream, smoothing it down until you have filled it to overflowing. Smooth the top with a spatula or limber knife, put over a sheet of waxed paper and adjust the lid.

TIP: Make sure that your packing tub or bucket has a hole below the top of the mold so the water will drain off.

CSS – Floating Inline

Digunakan memindahkan / menggeser elemen HTML ke kiri atau kanan

THE STYLES

```
p {  
    border: 2px red solid;  
}  
  
#float {  
    float: left;  
    width: 300px;  
    margin: 1em;  
    background: white;  
}
```

If you wish to pack ice cream and serve it in forms or shapes, it must be molded after the freezing. The handiest of all of these molds is either the brick or the melon mold.

After the cream is frozen rather stiff, prepare a tub or bucket of coarsely chopped ice, with one-half less salt than you use for freezing. To each ten pounds of ice allow one quart of rock salt. Sprinkle a little rock salt in the bottom of your bucket or tub, then put over a layer of cracked ice, another layer of salt and cracked ice, and on this stand your mold, which is not filled, but is covered with a lid, and pack it all around, leaving the top, of course, to pack later on. Take your freezer near this tub.

As cold water is warmer than the ordinary freezing mixture, after you lift the can or mold, wipe off the salt, hold it for a minute under the cold water spigot, then quickly wipe the top and bottom and remove the lid. Loosen the pudding with a limber knife, hold the mold a little slanting, give it a shake, and nine times out of ten it will come out quickly, having the perfect shape of the can or mold. If the cream still sticks and refuses to come out, wipe the mold with a towel wrung from warm water. Hot water spoils the gloss of puddings, and unless you know exactly how to use it, the cream is too much melted to garnish.

Remove the lid from the mold, and pack in the cream, smoothing it down until you have filled it to overflowing. Smooth the top with a spatula or limber knife, put over a sheet of waxed paper and adjust the lid. Have a strip of muslin or cheese cloth dipped in hot paraffin or suet and quickly bind the seam of the lid. This will remove all danger of salt water entering the pudding. Now cover the mold thoroughly with ice and salt.

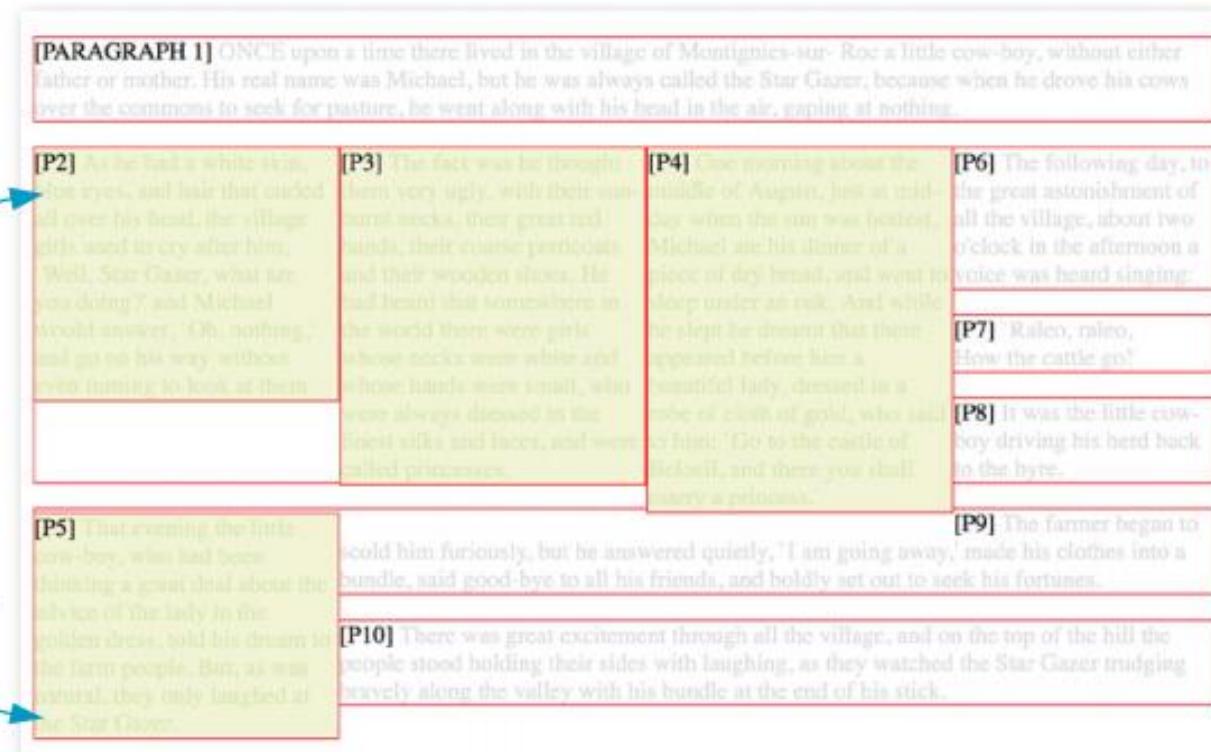
Make sure that your packing tub or bucket has a hole below the top of the mold, so that the salt water will be drained off. If you are packing in small molds, each mold, as fast as it is closed, should be wrapped in wax paper and put down into the salt and ice. These must be filled quickly and packed.

CSS – Float Elemen HTML

Contoh bagaimana Float diimplementasikan dalam dokumen HTML

Elements floated to the same side line up.

If there is not enough room, subsequent elements move down and as far left as possible.



[PARAGRAPH 1] ONCE upon a time there lived in the village of Montignies-sur-Roc a little cow-boy, without either father or mother. His real name was Michael, but he was always called the Star Gazer, because when he drove his cows over the commons to seek for pasture, he went along with his head in the air, gazing at nothing.

[P2] He had a white skin, blue eyes, and hair that curled all over his head; the village girls used to cry after him, "Well, Star Gazer, what are you doing?" and Michael would answer, "Oh, nothing, just go on his way, without even turning to look at them."

[P3] The fact was he thought he had been very ugly, with their sunburnt necks, their great red hands, their coarse prindoles and their wooden shoes. He had heard that somewhere in the world there were girls whose necks were white and whose hands were small, who were always dressed in the finest silks and tisses, and were called princesses.

[P4] One morning about the middle of August, just as Michael was driving his herd of cattle, when the sun was hottest, Michael ate his dinner of a piece of dry bread, and went to sleep under an oak. And while he slept he dreamt that there appeared before him a beautiful lady, dressed in a robe of cloth of gold, who said to him: "Go to the castle of the golden tower, and there you shall marry a princess."

[P6] The following day, to the great astonishment of all the village, about two o'clock in the afternoon a voice was heard singing:

[P7] Raleo, raleo,
How the cattle go!

[P8] It was the little cow-boy driving his herd back to the byre.

[P9] The farmer began to scold him furiously, but he answered quietly, "I am going away, made his clothes into a bundle, said good-bye to all his friends, and boldly set out to seek his fortunes.

[P10] There was great excitement through all the village, and on the top of the hill the people stood holding their sides with laughing, as they watched the Star Gazer trudging heavily along the valley with his bundle at the end of his stick.

THE MARKUP

```
<p>[PARAGRAPH 1] ONCE upon a time...</p>
<p class="float">[P2]...</p>
<p class="float">[P3]...</p>
<p class="float">[P4]...</p>
<p class="float">[P5]...</p>
<p>[P6]...</p>
<p>[P7]...</p>
<p>[P8]...</p>
<p>[P9]...</p>
<p>[P10]...</p>
```

THE STYLES

```
p.float {
  float: left;
  width: 200px;
  margin: 0px;
  background: #F2F5d5;
  color: #DAEAB1;
}
```

CSS - Positioning

- CSS memiliki beberapa metode untuk mengatur posisi suatu elemen HTML
- Posisi dapat diatur dalam 4 kategori:

1. Static (posisi normal / default)

2. Relative

position

3. Absolute

Values: static | relative | absolute | fixed

4. Fixed

Default: static

Applies to: all elements

Inherits: no

<https://css-tricks.com/absolute-relative-fixed-positioning-how-do-they-differ/>

CSS - Positioning

top, right, bottom, left

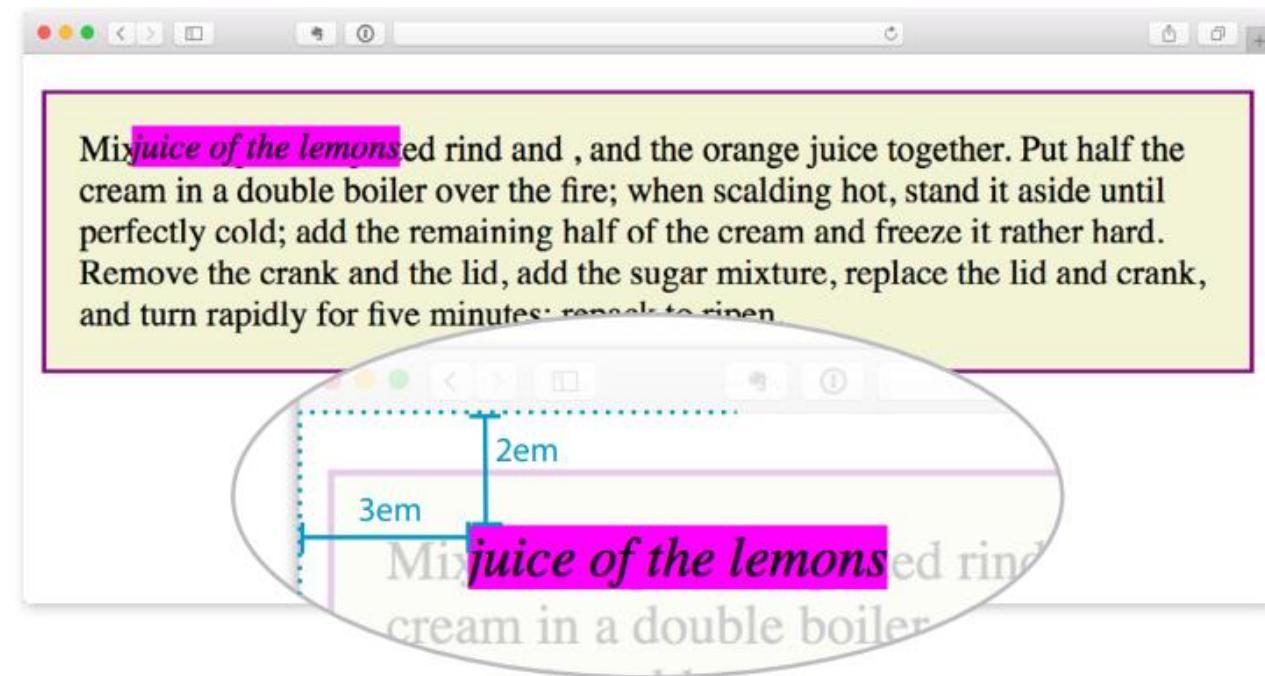
Values: *length | percentage | auto*

Default: *auto*

Applies to: positioned elements (where position value is *relative*, *absolute*, or *fixed*)

Inherits: *no*

```
em {  
    position: absolute;  
    top: 2em;  
    left: 3em;  
    background-color: fuchsia;  
}
```



CSS – Positioning Tag Div

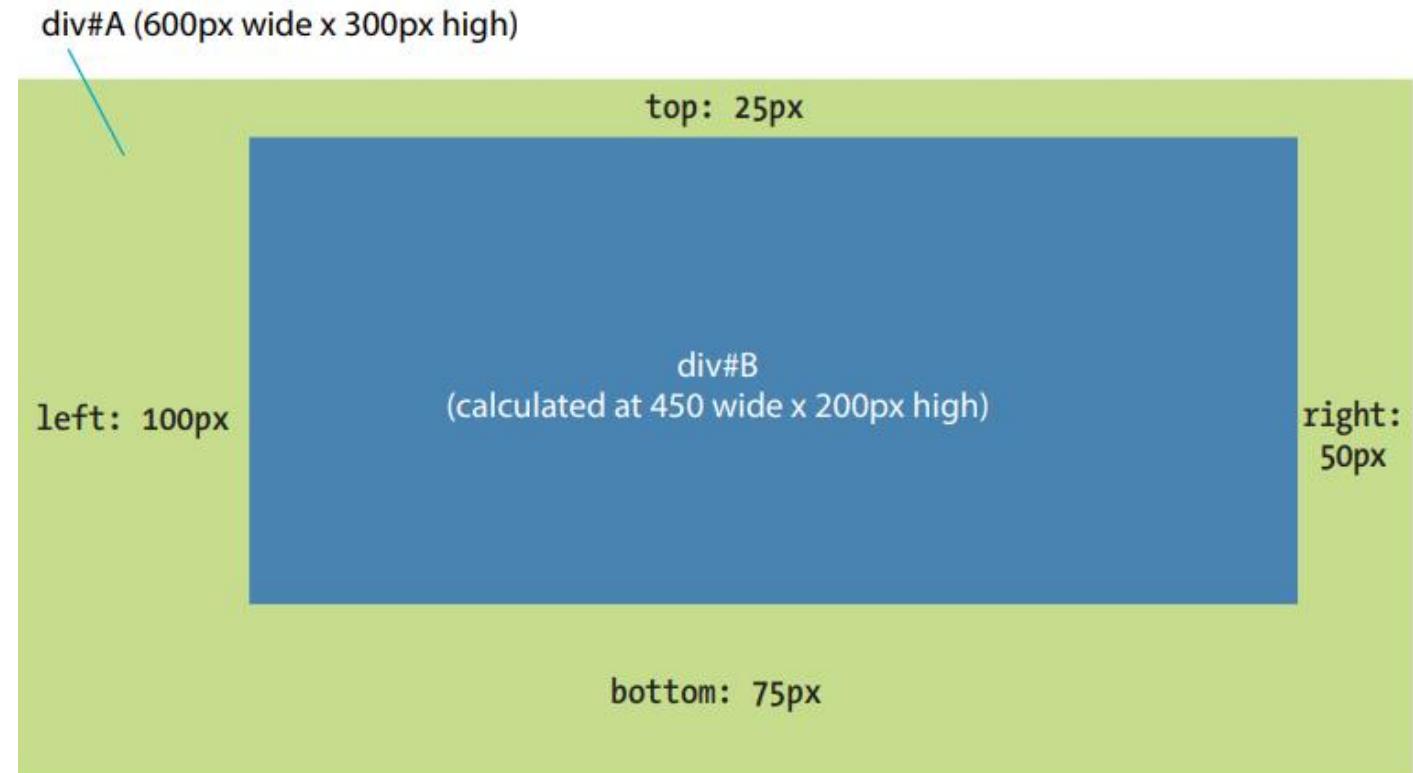
THE MARKUP

```
<div id="A">
  <div id="B">&nbsp;</div>
</div>
```

THE STYLES

```
div#A {
  position: relative; /* creates the containing block */
  width: 600px;
  height: 300px;
  background-color: #C6DE89; /* green */
}

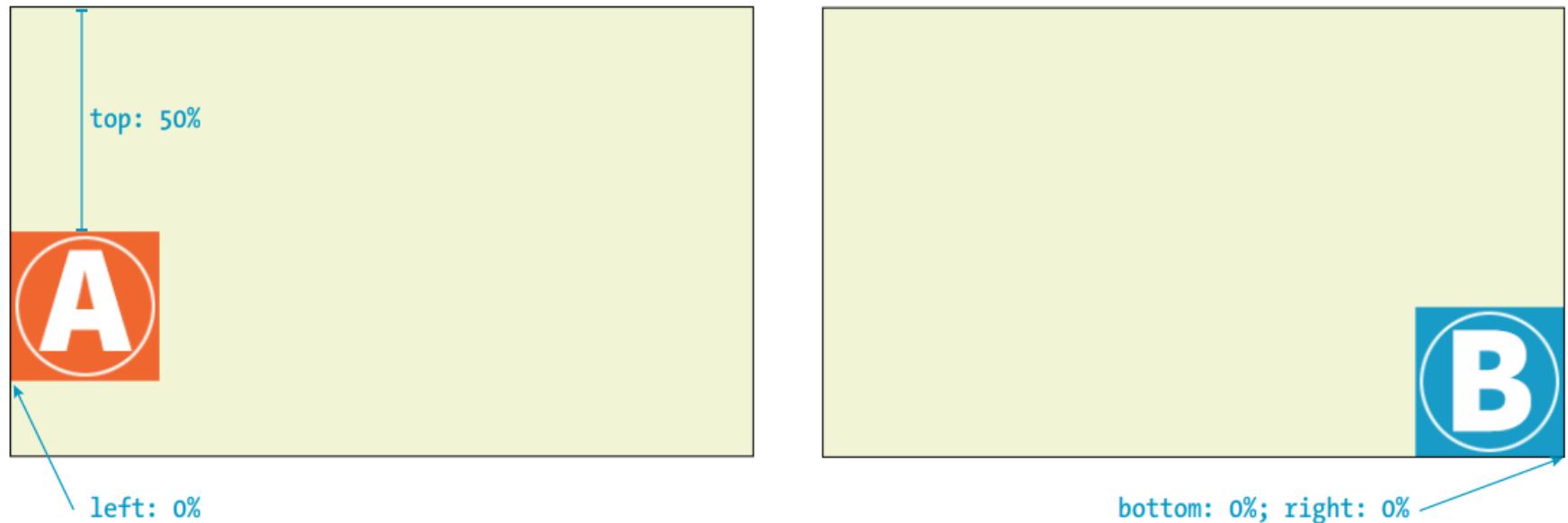
div#B {
  position: absolute;
  top: 25px;
  right: 50px;
  bottom: 75px;
  left: 100px;
  background-color: steelblue;
```



CSS – Positioning Percentage Value

Posisi gambar dapat di letakan dengan aturan nilai persentase

```
img#A {  
    position: absolute;  
    top: 50%;  
    left: 0%;  
}  
  
img#B {  
    position: absolute;  
    bottom: 0%;  
    right: 0%;  
}
```



CSS – Positioning Stack Order

Digunakan untuk mengurutkan elemen HTML secara bertumpuk (stack order)

z-index

Values: *number | auto*

Default: auto

Applies to: positioned elements

Inherits: no

THE MARKUP

```
<p id="A"></p>
<p id="B"></p>
<p id="C"></p>
```

THE STYLES

```
#A {
    z-index: 100;
    position: absolute;
    top: 175px;
    left: 200px;
}
```

CSS – Positioning Stack Order

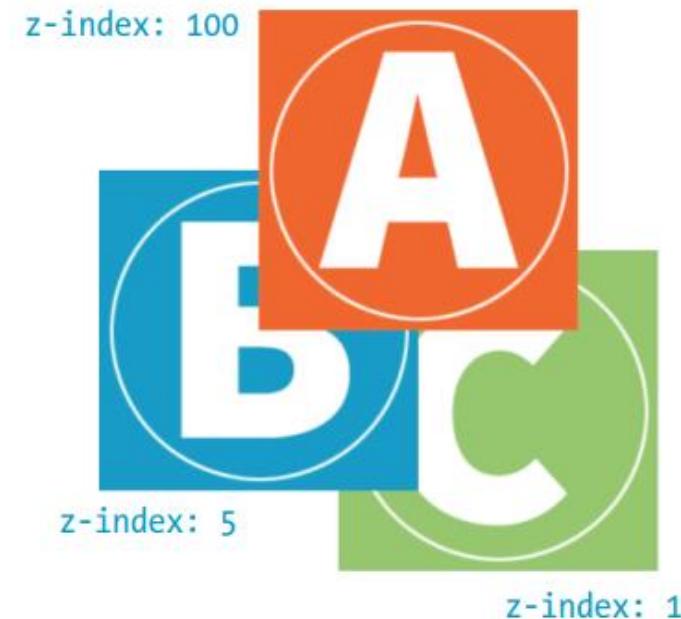
Digunakan untuk mengurutkan elemen HTML secara bertumpuk (stack order)

THE STYLES

```
#A {  
    z-index: 100;  
    position: absolute;  
    top: 175px;  
    left: 200px;  
}  
  
#B {  
    z-index: 5;  
    position: absolute;  
    top: 275px;  
    left: 100px;  
}  
  
#C {  
    z-index: 1;  
    position: absolute;  
    top: 325px;  
    left: 250px;  
}
```



By default, elements later in the document source order stack on top of preceding elements.



You can change the stacking order with the z-index property. Higher values stack on top of lower values.

Praktikum 5.1

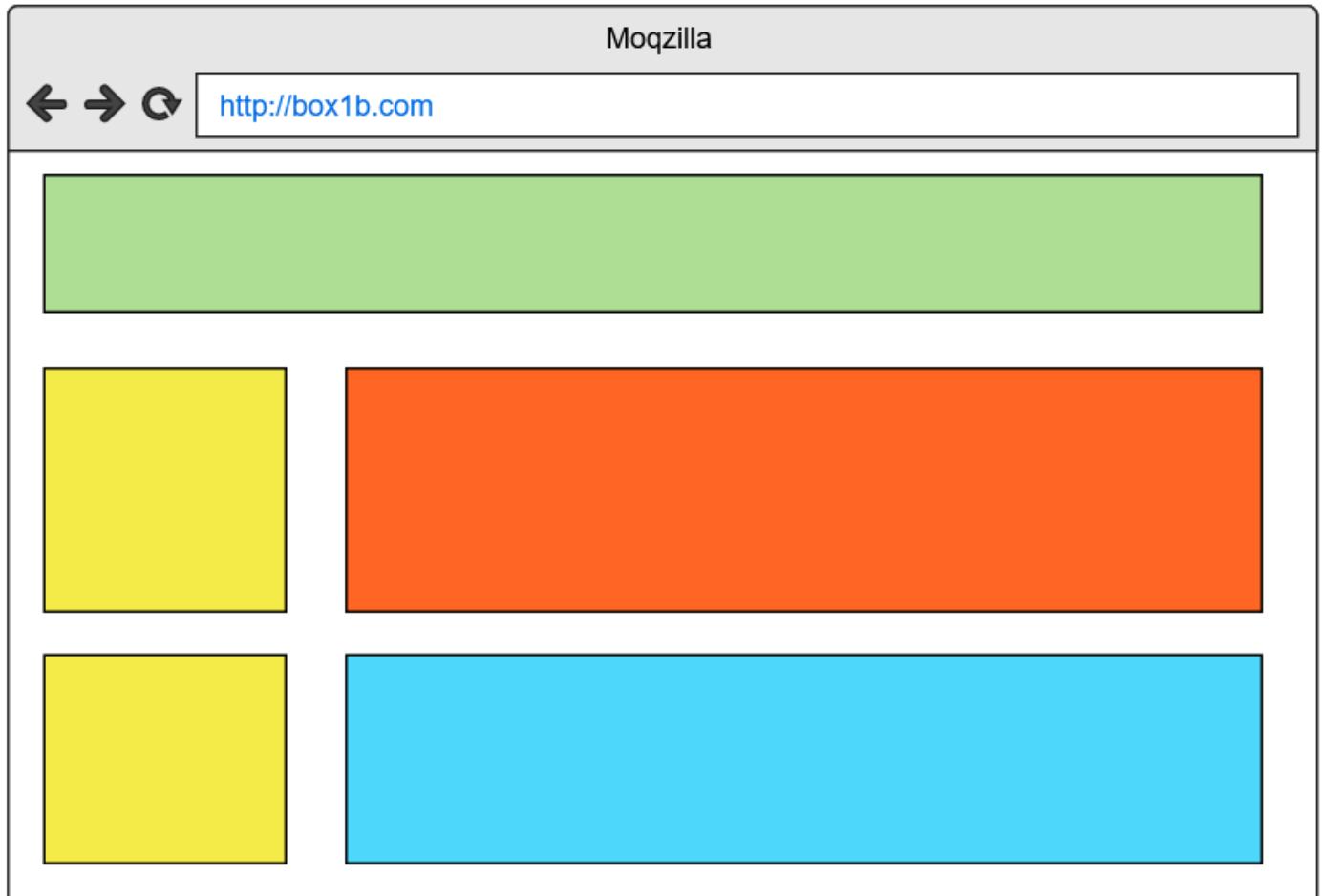
- Buat halaman web Seperti Gambar 5.1
- Gunakan Tag DIV
- Gunakan css style box & positioning



Gambar 5.1

Praktikum 5.2

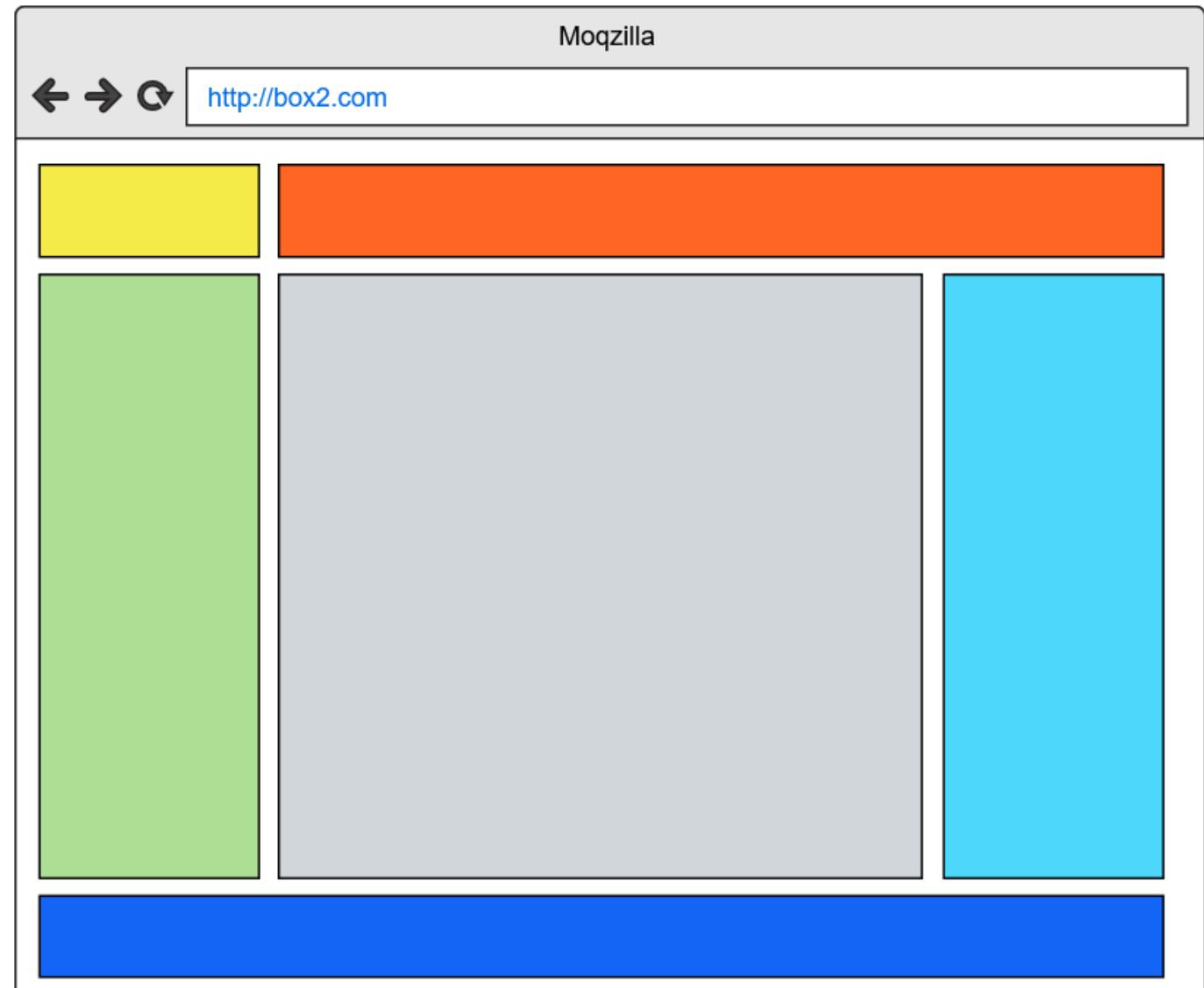
- Buat halaman web Seperti Gambar 5.2
- Gunakan Tag DIV
- Gunakan css style box & positioning



Gambar 5.2

Praktikum 5.3

- Buat halaman web Seperti Gambar 5.3
- Gunakan Tag DIV
- Gunakan css style box & positioning



Gambar 5.3