STT-NF

Pemrograman Web

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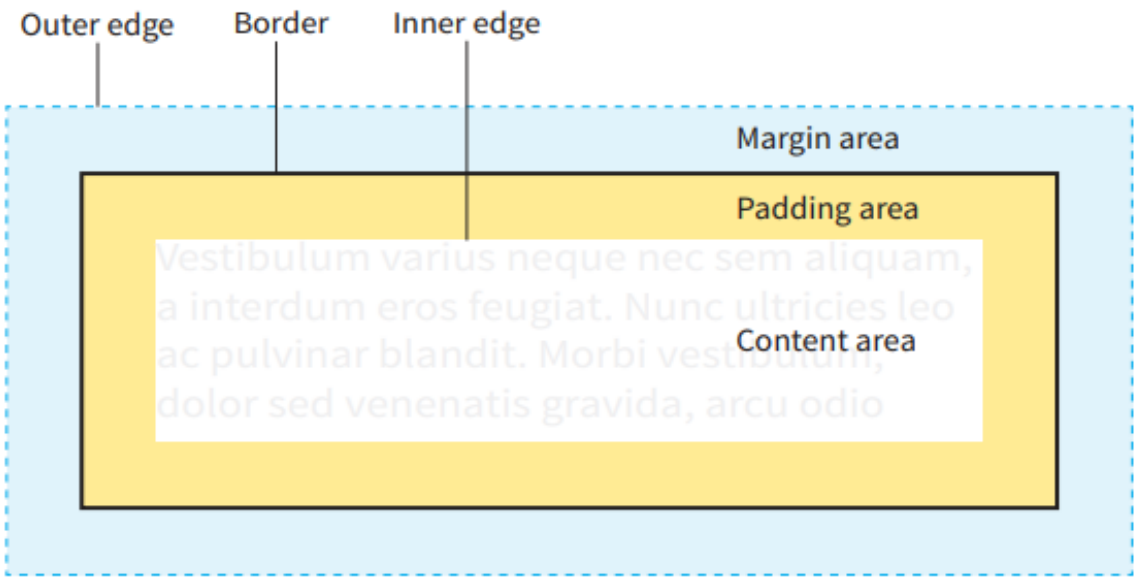
7. CSS Element Box & Positioning

CSS Box

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

height

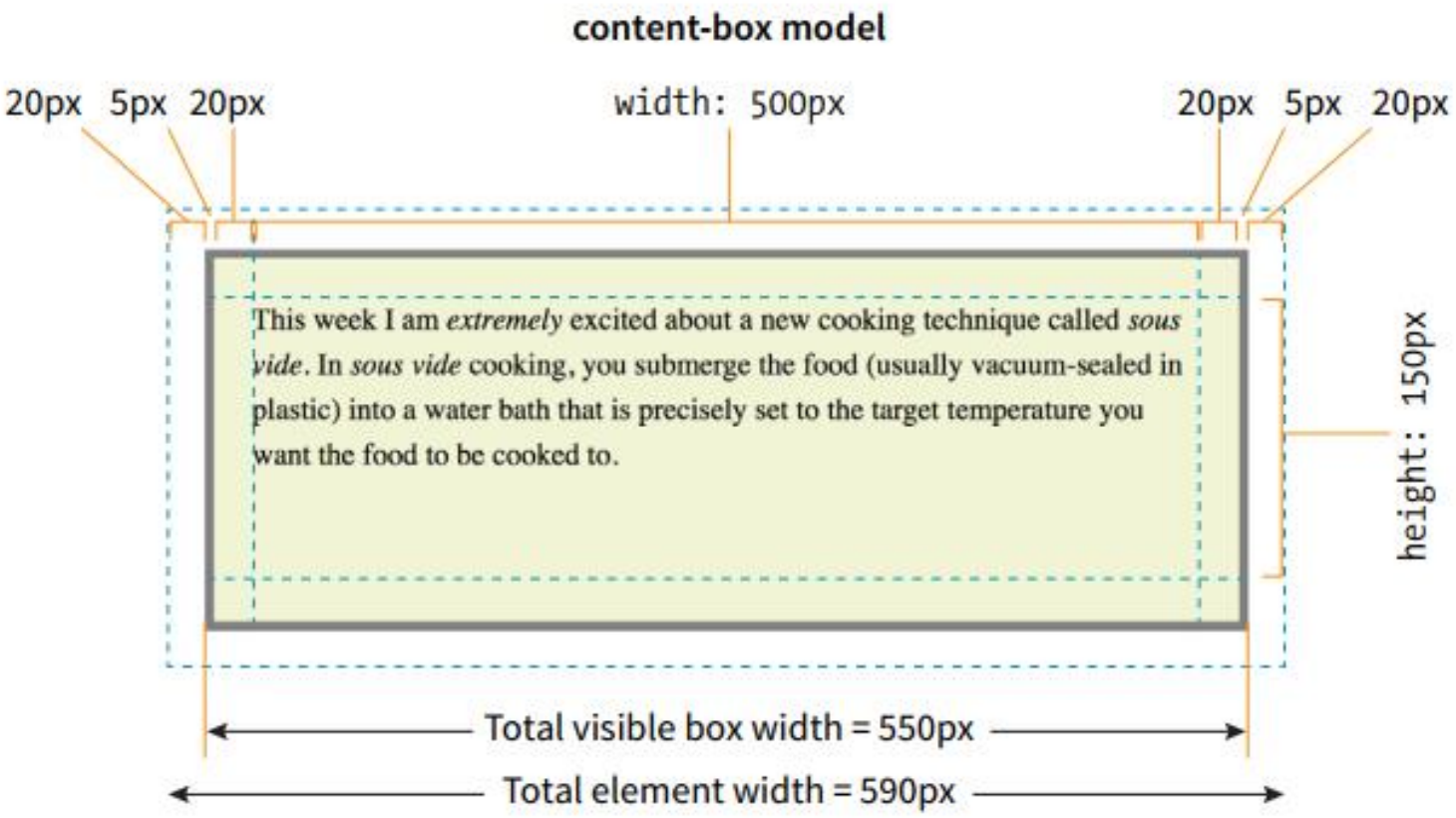
Values:	*length* | *percentage* | auto
Default:	auto
Applies to:	block-level elements and replaced inline elements (such as images)
Inherits:	no

box-sizing

Values:	content-box | border-box
Default:	content-box
Applies to:	all elements
Inherits:	no

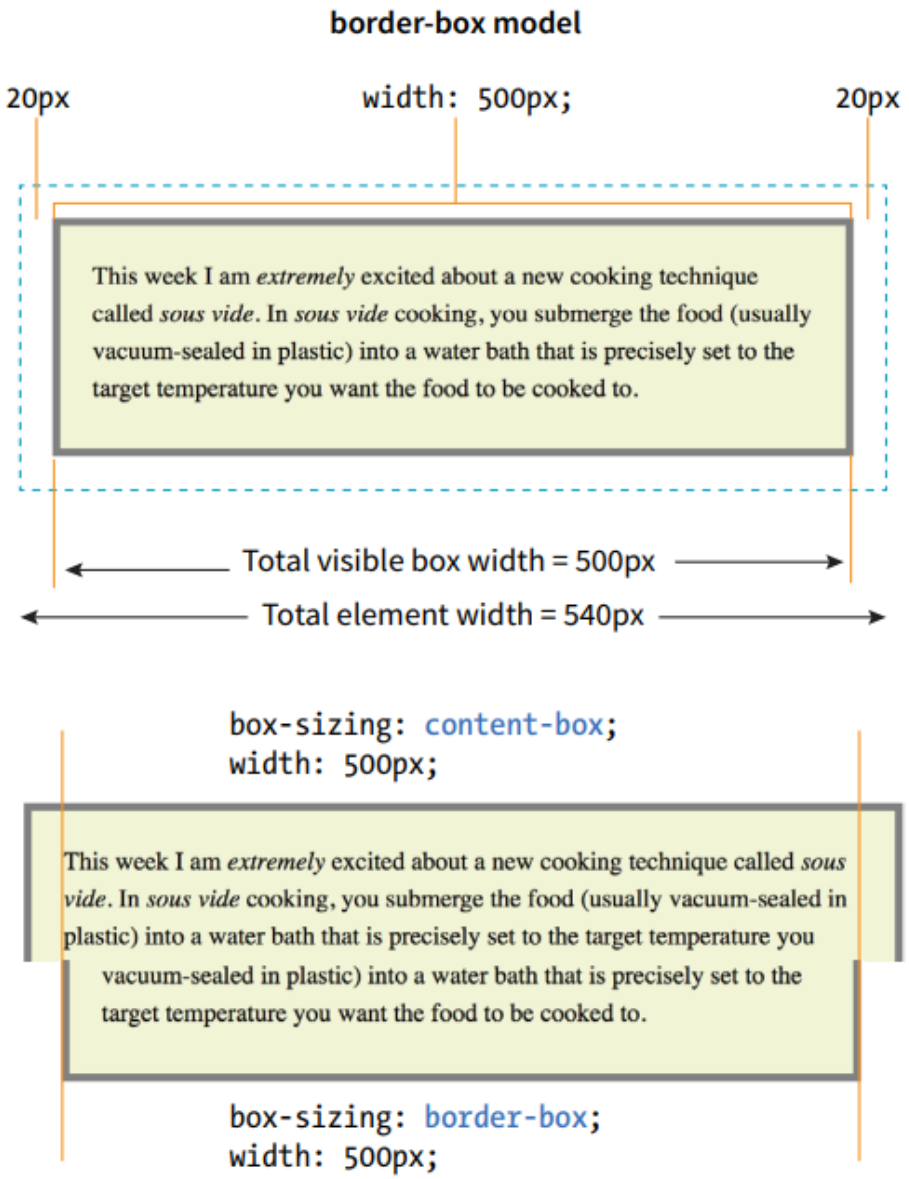
CSS Box - Border

```
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;
}
```

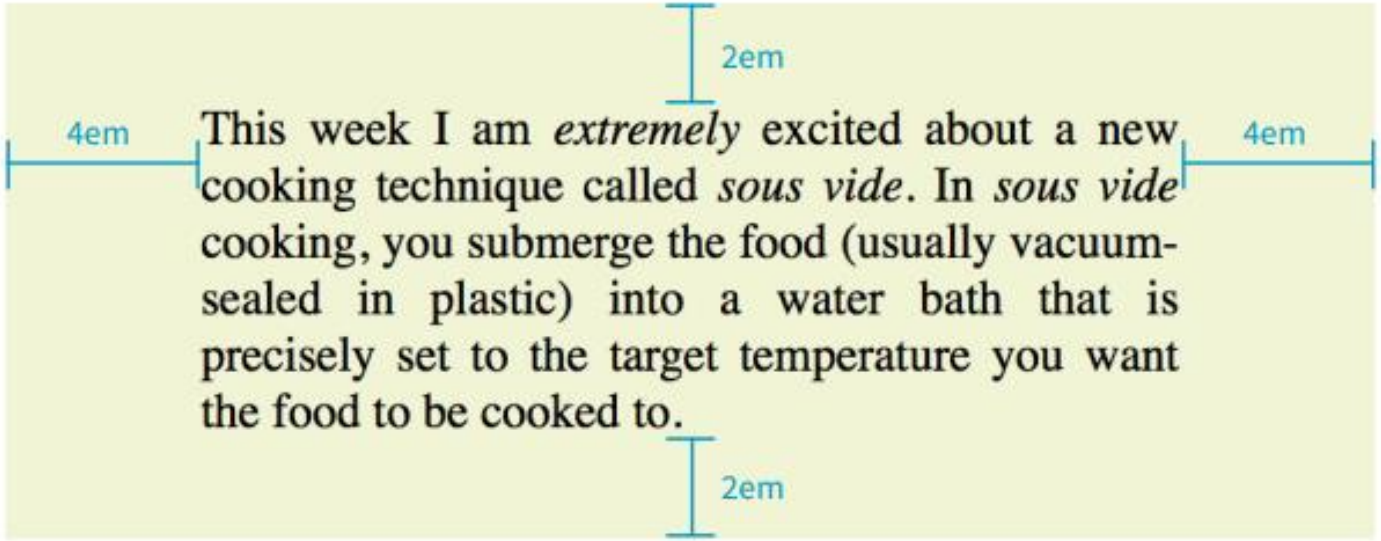


CSS – Padding Positioning

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

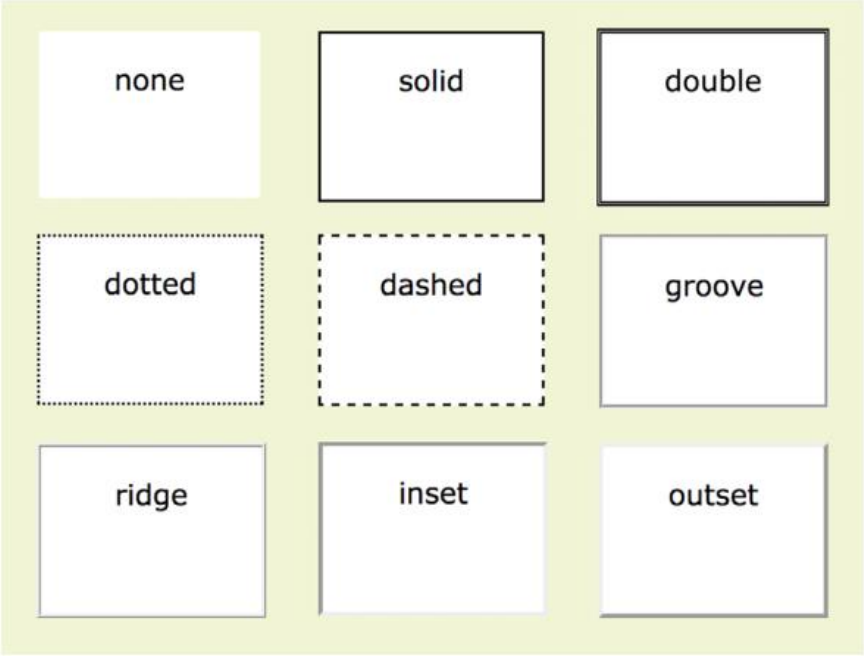
border-style

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

Default: none

Applies to: all elements

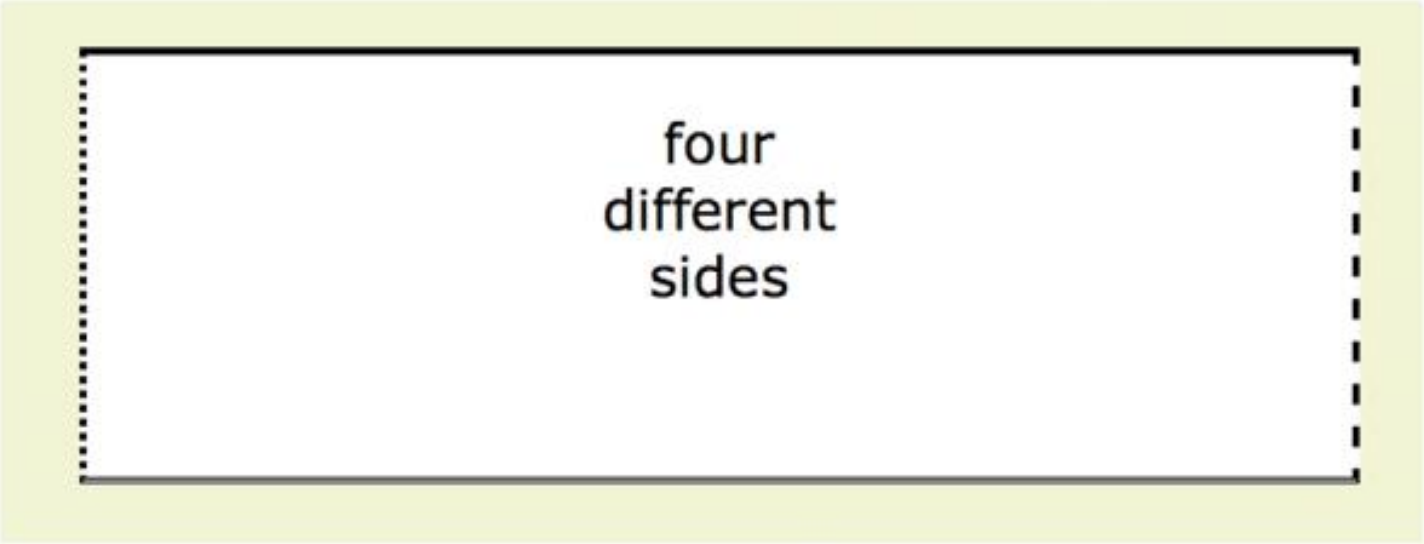
Inherits: no



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

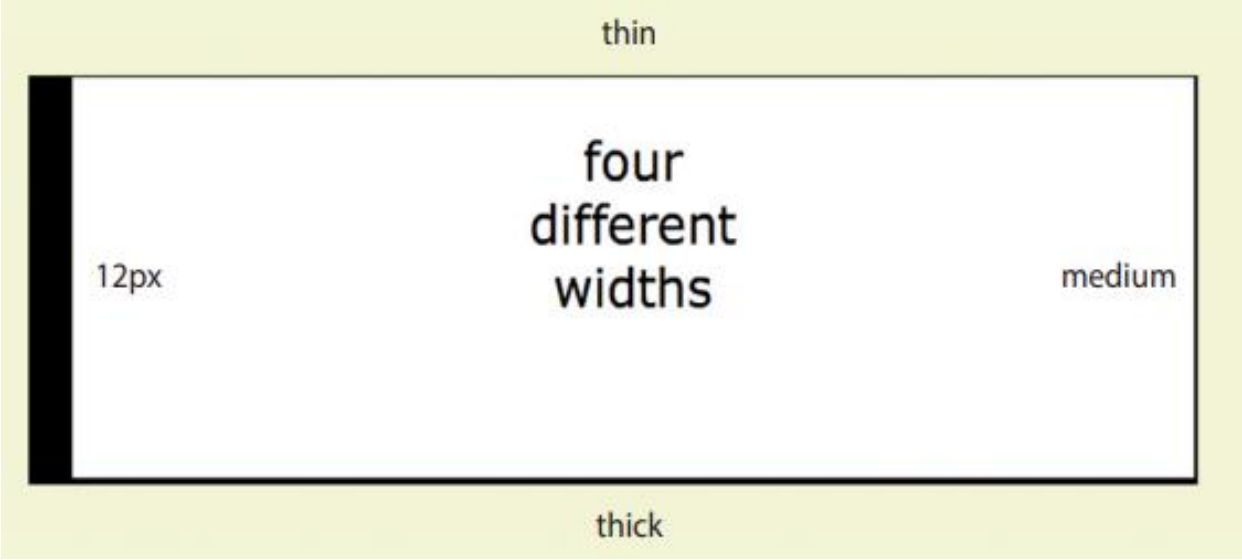
`border-top-width`, `border-right-width`, `border-bottom-width`, `border-left-width`

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`

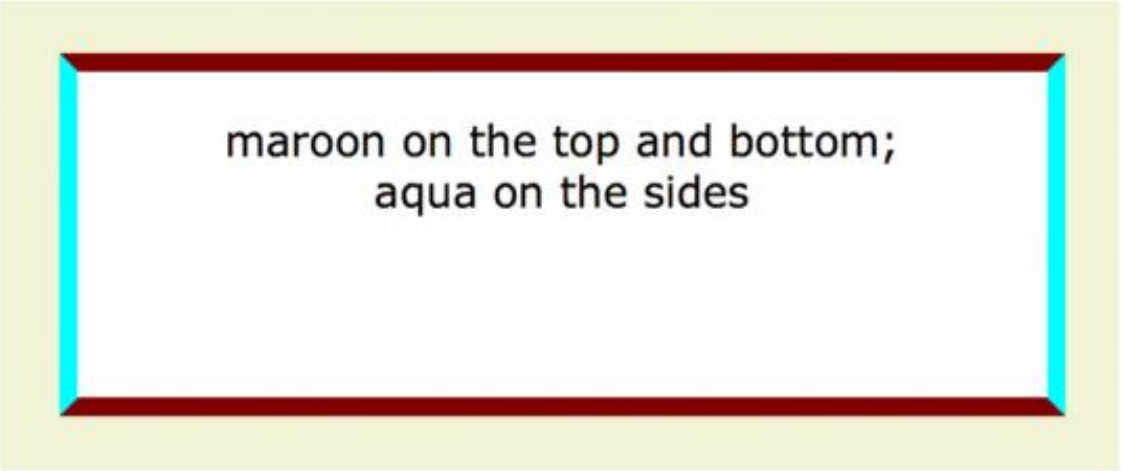
Values: *color name* or *RGB/HSL value* | `transparent`

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;
}
```



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

Values: *1, 2, 3, or 4 length or percentage values*

Default: 0

Applies to: all elements

Inherits: no

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`

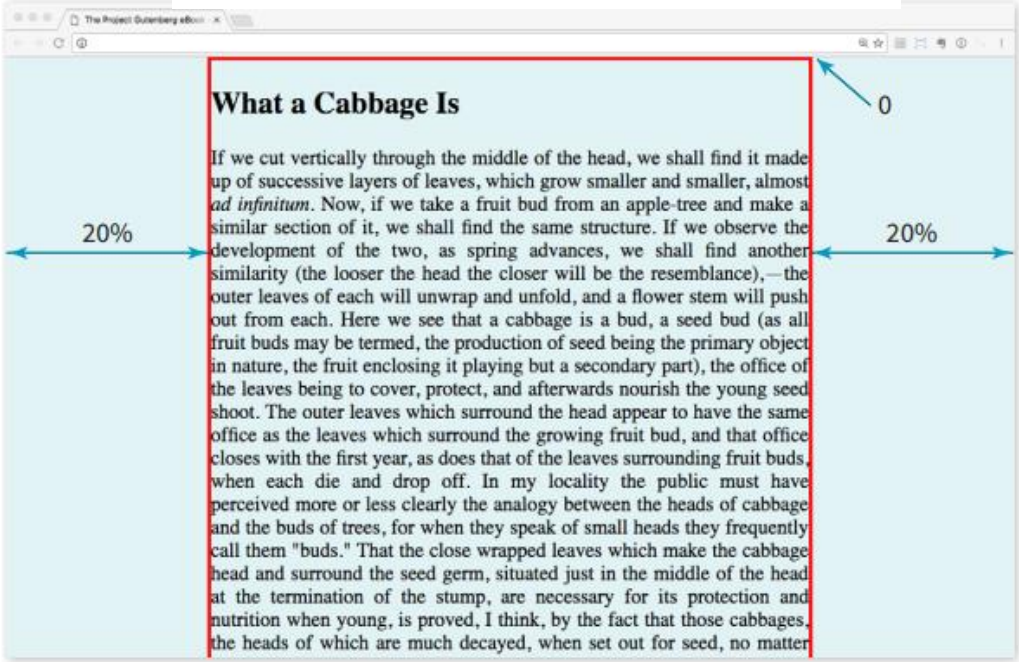
Values: *length* | *percentage* | auto

Default: auto

Applies to: all elements

Inherits: no

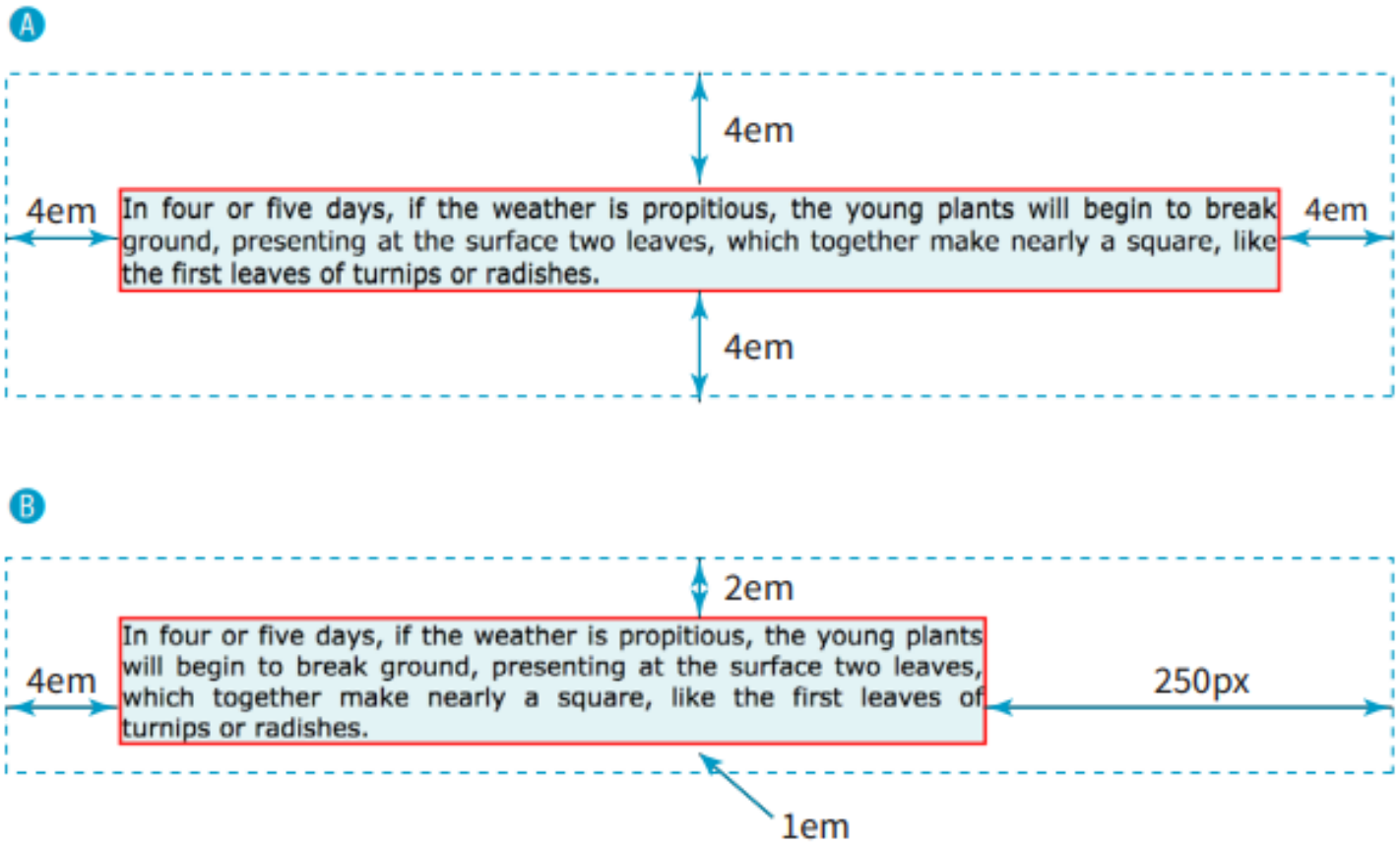
```
body {
  margin: 0 20%;
  border: 3px solid red;
  background-color: #e2f3f5;
}
```



CSS – Margin

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

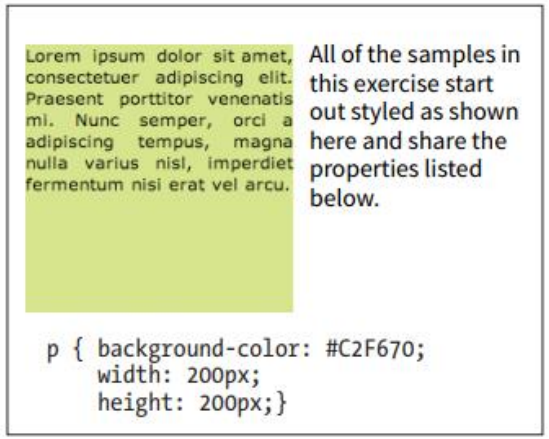
`box-sizing`	Specifies whether width and height dimensions apply to the content box or the border box
`box-shadow`	Adds a drop shadow around the visible element box
`display`	Defines the type of element box an element generates
`height`	Specifies the height of the element's content box or border box
`margin`	Shorthand property for specifying margin space around an element

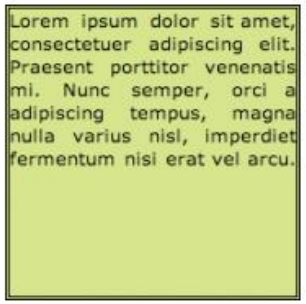
`margin-top`
`margin-right`
`margin-bottom`
`margin-left`
	Specifies the margin amount for each side of the element

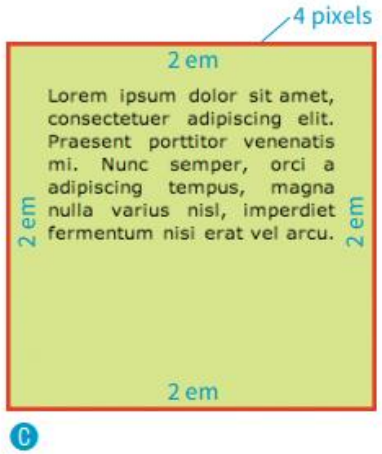
CSS – Box Properties

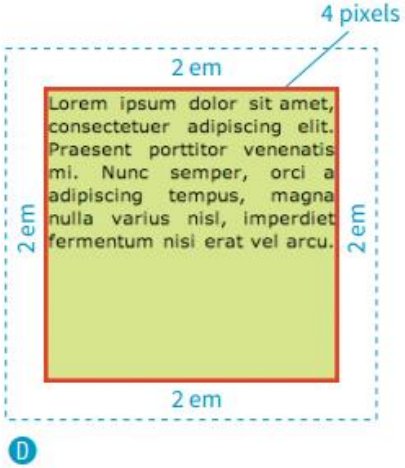
Property	Description
max-height	Specifies the maximum height of an element
max-width	Specifies the maximum width of an element
min-height	Specifies the minimum height of an element
min-width	Specifies the minimum width of an element
outline	Shorthand property for adding an outline around an element
outline-color	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

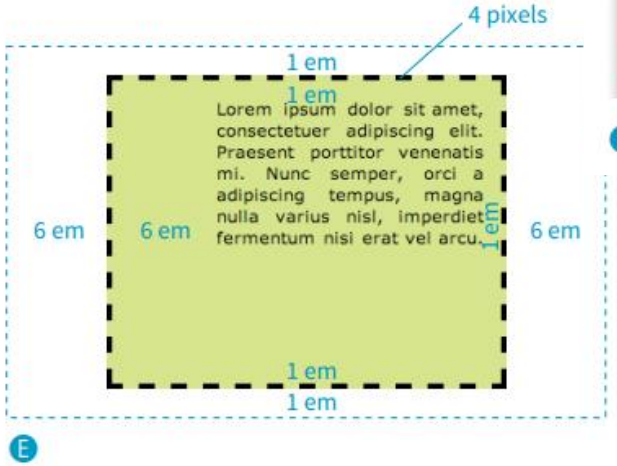
CSS – Box Properties

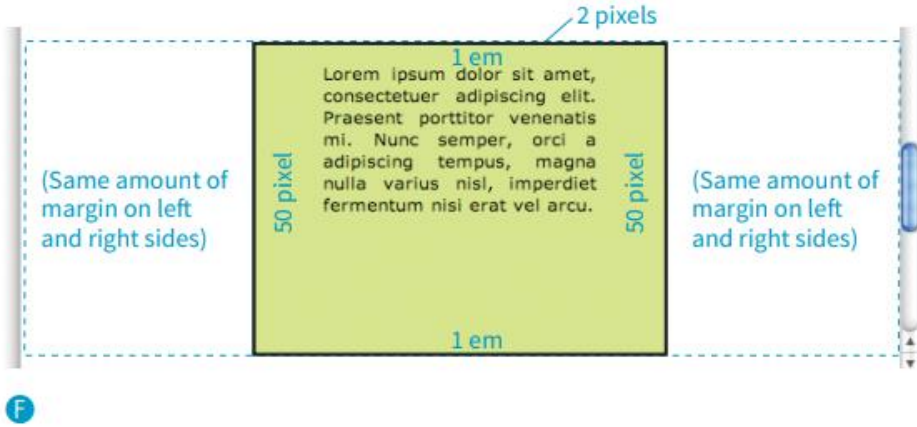










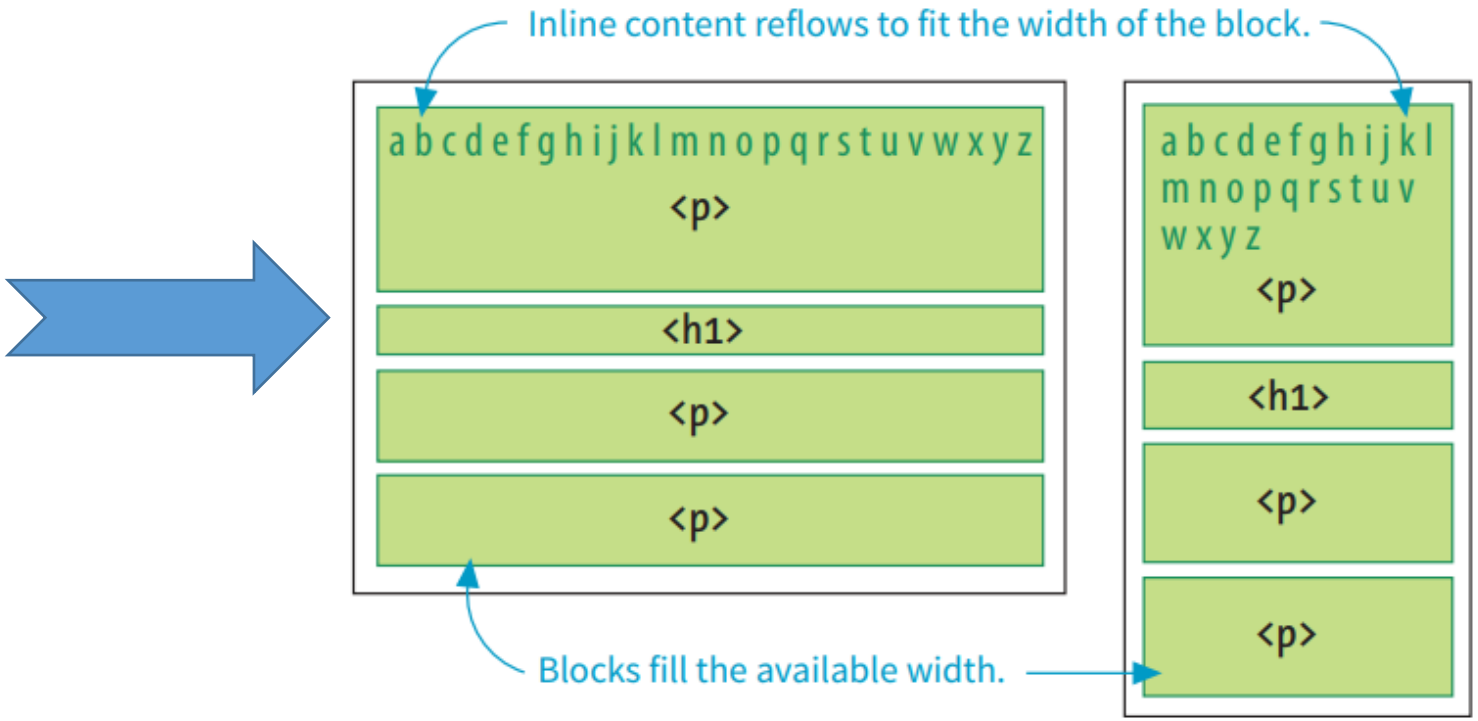


CSS Floating Elemen HTML

- 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><img src="icecreambowl.png" alt=""> 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><img src="icecreambowl.png" alt=""> After
stiff,…
```

THE STYLES

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

Inline image in the normal flow

Space next to image is held clear

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.

Inline image floated to the right

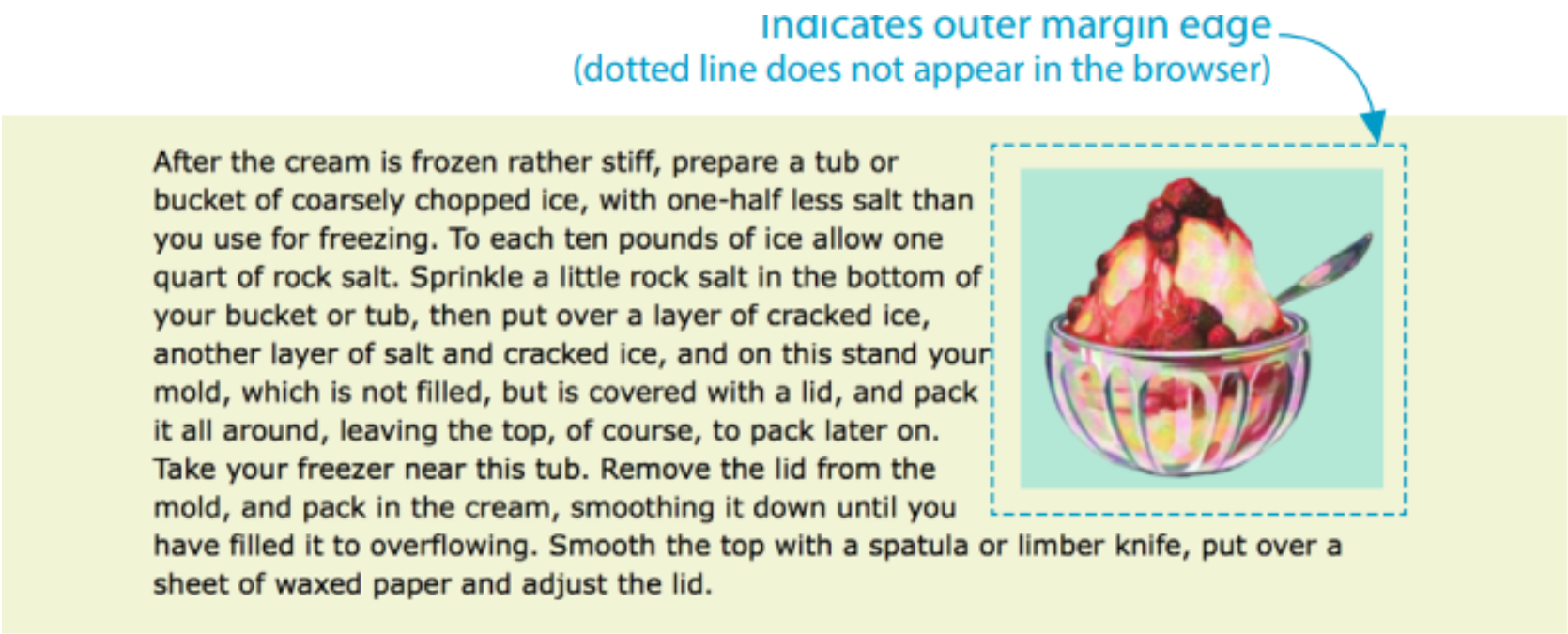
Image moves over, and text wraps around it

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 (3)

Digunakan memindahkan / menggeser elemen HTML ke kiri atau kanan

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



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.

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.

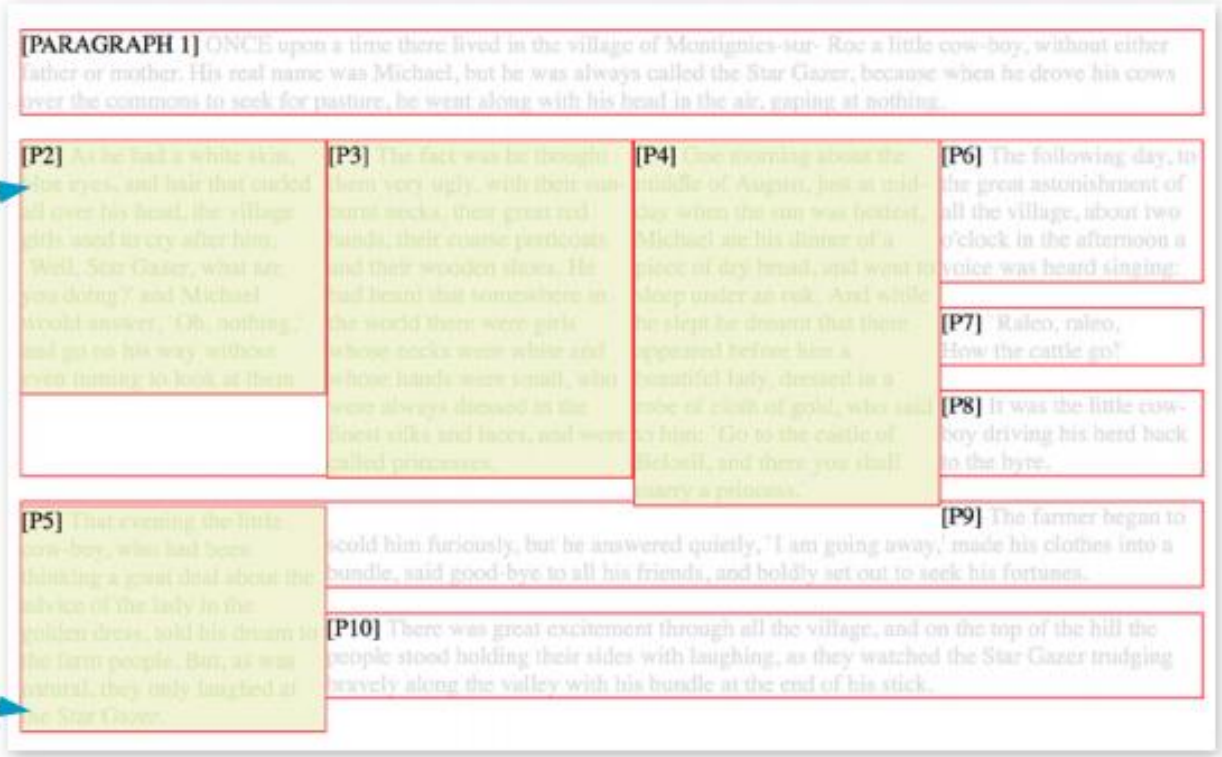
As cold water is warmer than the ordinary freezing mixture, after you lift the can or mold, wipe off the salt, hold it for a minute under the cold water spigot, then quickly wipe the top and bottom and remove the lid. Loosen the pudding with a limber knife, hold the mold a little slanting, give it a 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.

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.



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
  3. Absolute
  4. Fixed

position

Values:	static | relative | absolute | fixed
Default:	static
Applies to:	all elements
Inherits:	no

CSS - Positioning

`top`, `right`, `bottom`, `left`

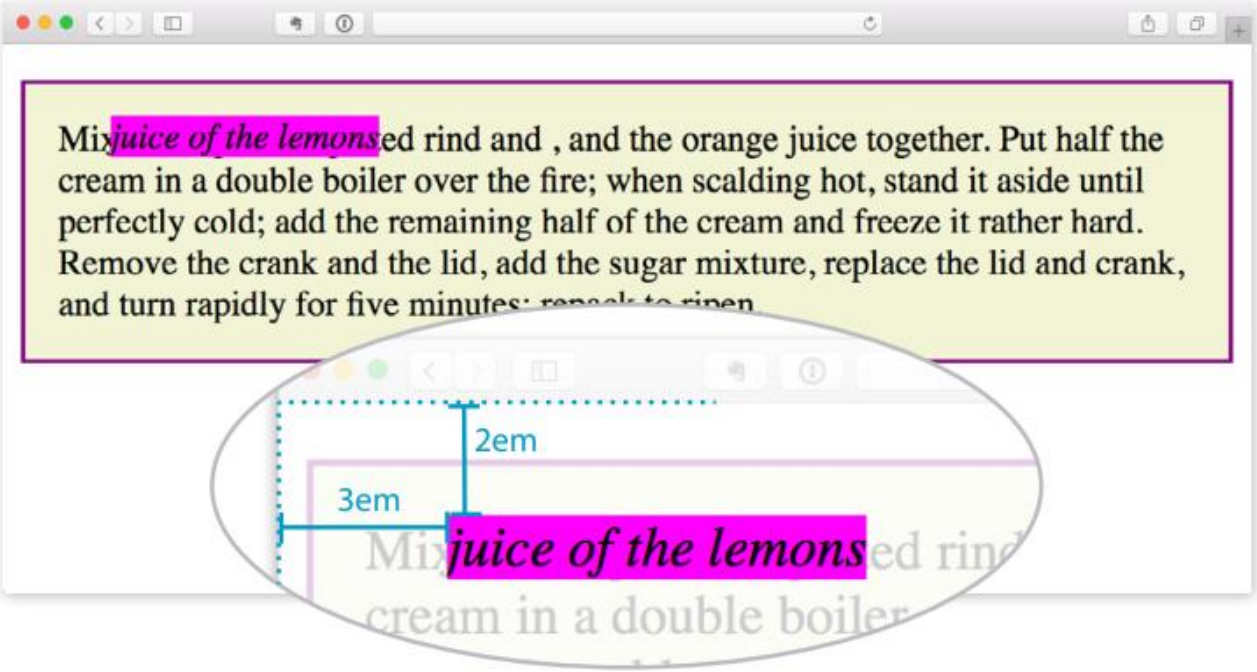
Values: *length* | *percentage* | auto

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;
}
```



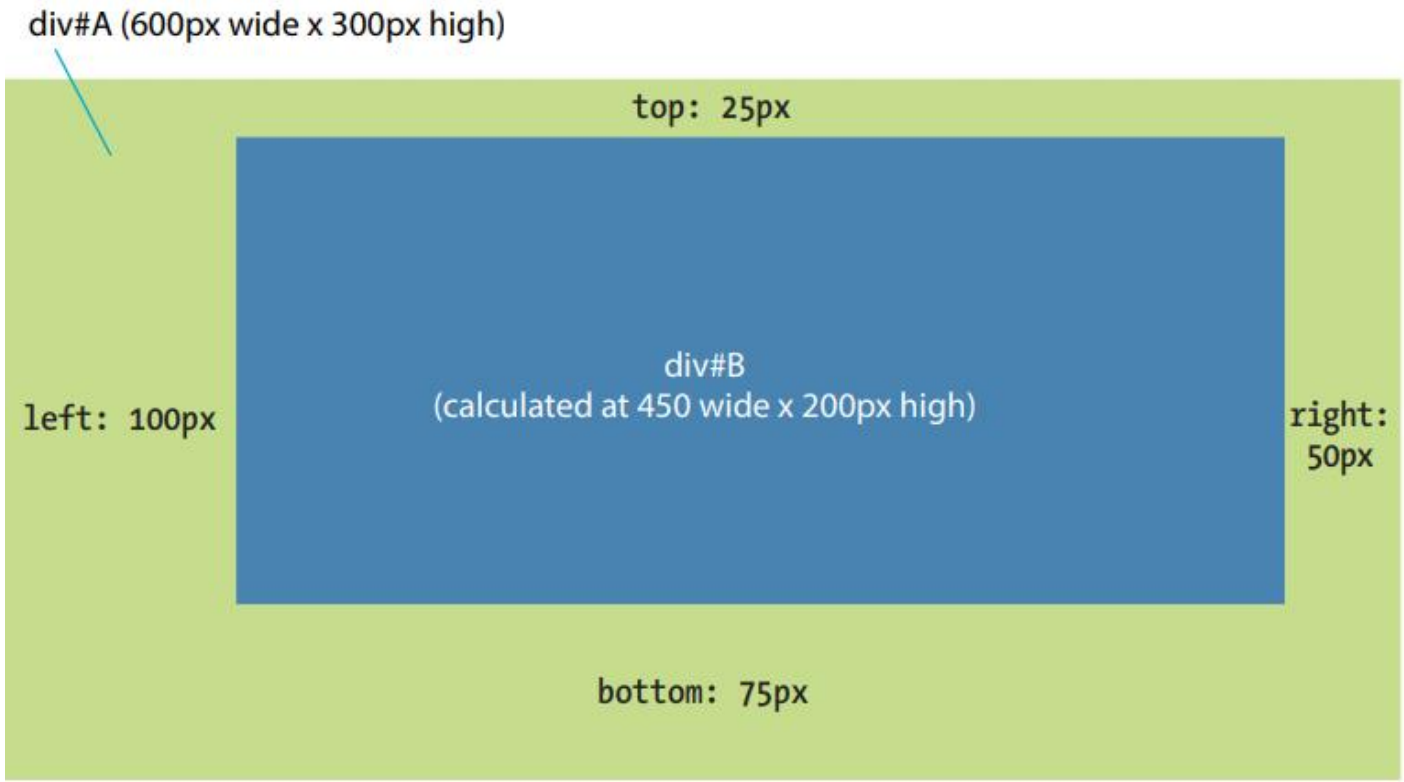
CSS – Positioning Tag Div

THE MARKUP

```
<div id="A">
  <div id="B"> </div>
</div>
```

THE STYLES

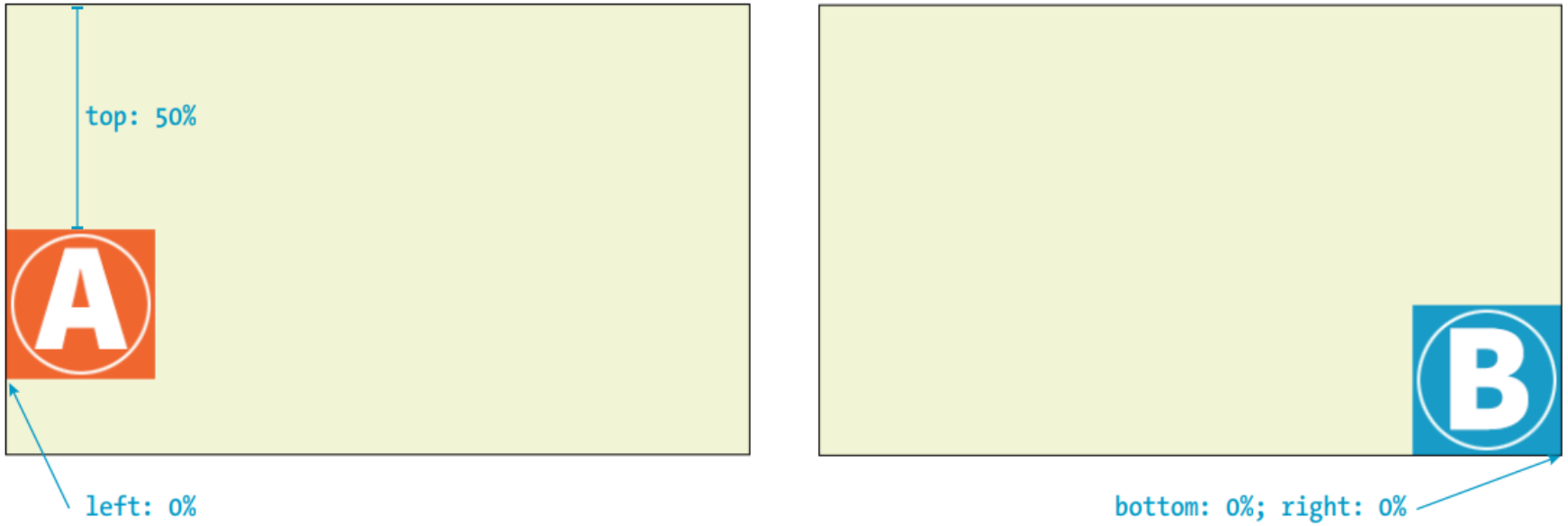
```
div#A {
  position: relative;   /* creates the containing block */
  width: 600px;
  height: 300px;
  background-color: #C6DE89; /* green */
}

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"><img src="A.gif" alt="A"></p>
<p id="B"><img src="B.gif" alt="B"></p>
<p id="C"><img src="C.gif" alt="C"></p>
```

THE STYLES

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

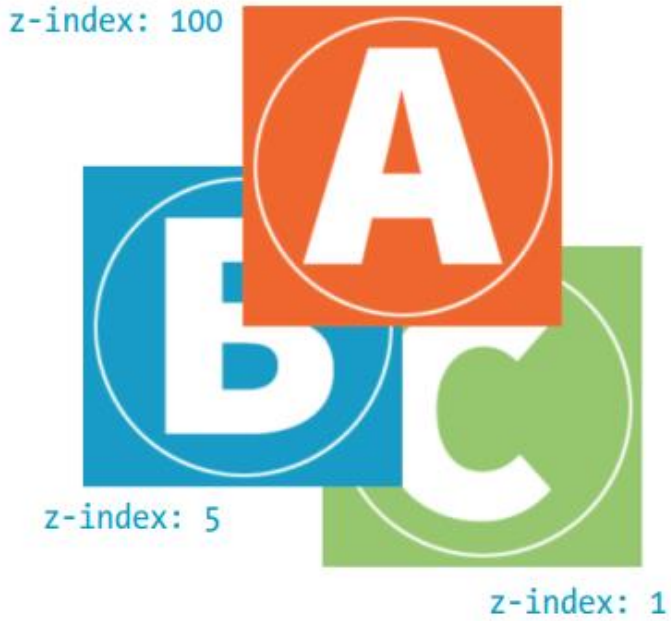
CSS – Positioning Stack Order

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;
}
```

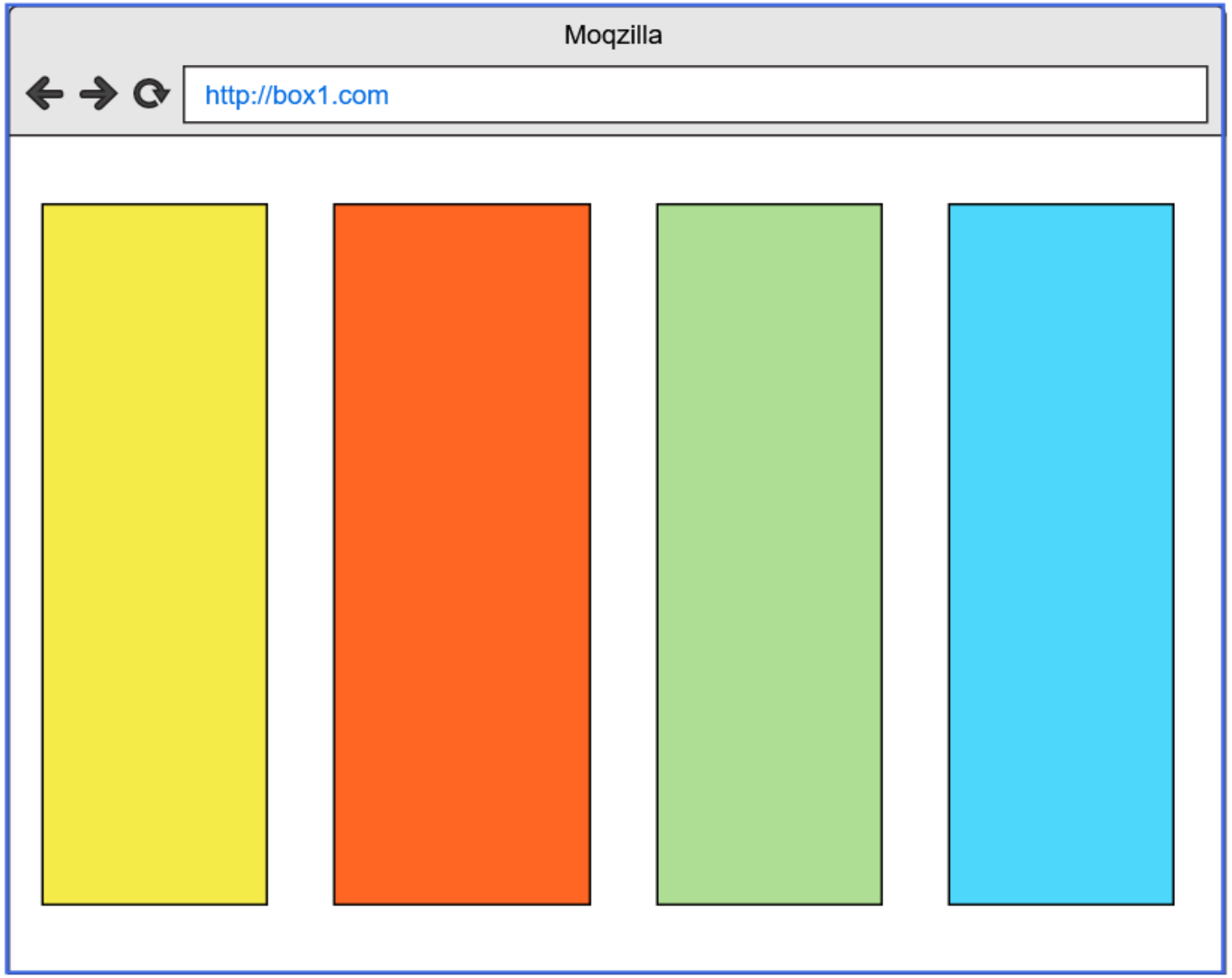
By default, elements later in the document source order stack on top of preceding elements.



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

Praktikum 5.1

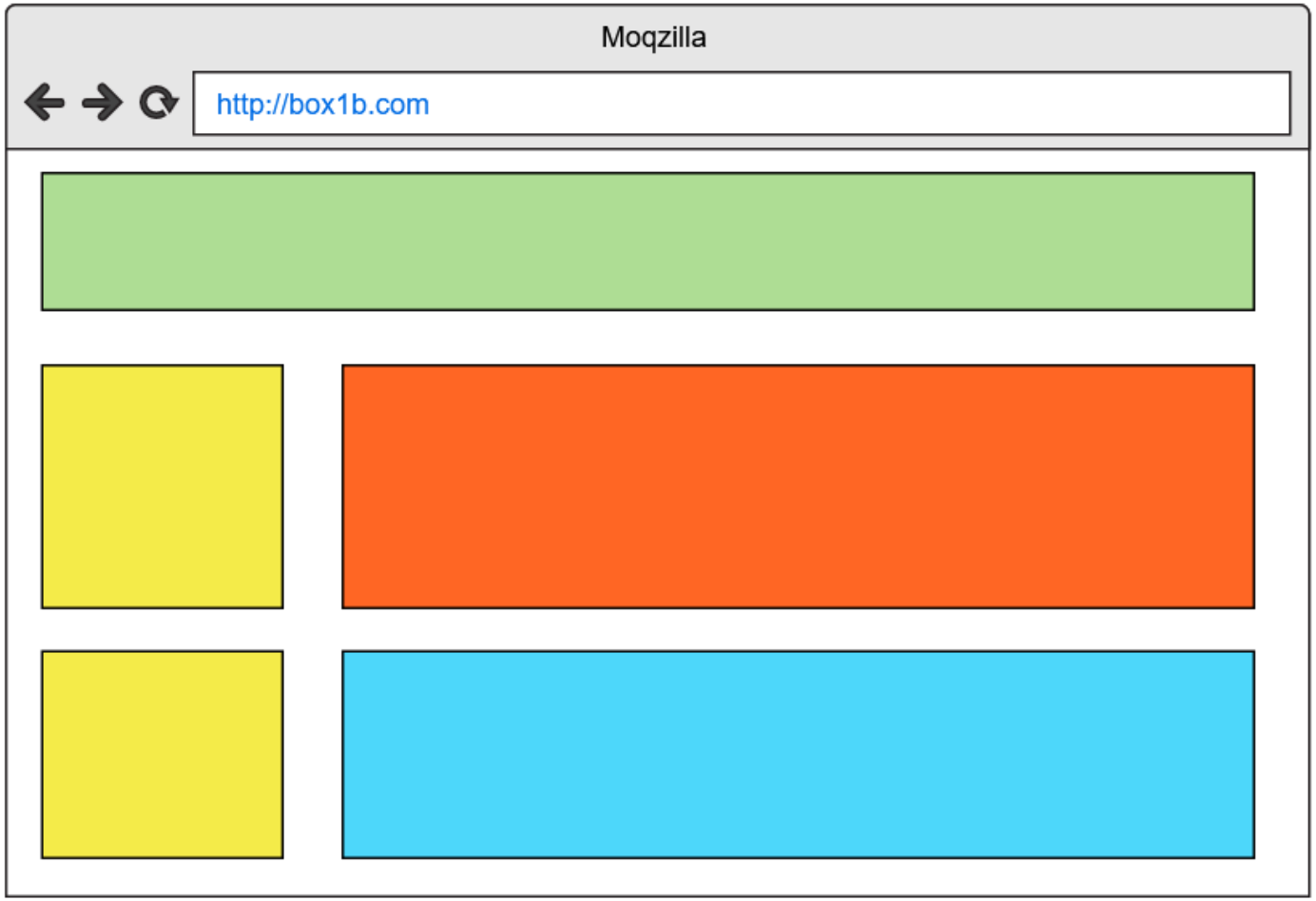
- Buat halaman web Seperti Gambar 5.1
- Gunakan Tag DIV
- Gunakan css style box & positioning



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