

## # Combinator Selector

It defines the selection

Date: \_\_\_\_\_  
Page No.: \_\_\_\_\_

by \_\_\_\_\_

blending {

mix-blend-mode: multiply;

}

→ used to blend the background color.

In animation -

@ keyframes car {  
from {

width: 200px;

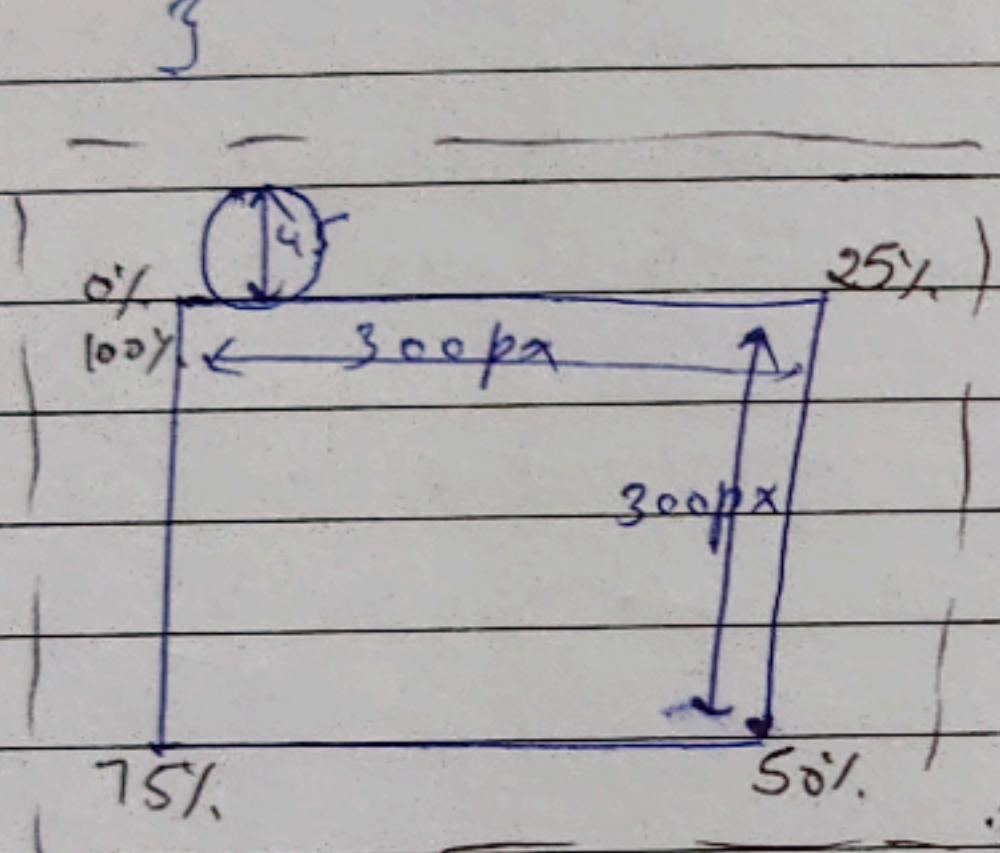
}

to {

width: 1400px;

bg-color: blue;

}



@ keyframes ball {

0% { transform: translate(0px);  
}

25% {

transform: translate(305px, 0px);  
}

50% {

transform: translate(305px, 350px);  
}

75% {

transform: translate(-50px, 350px);  
}

100% {

transform: translate(-50px, 0px);  
}

```
animation-duration: 5s;  
animation-iteration-count: infinite;  
animation-timing-function: ease;  
(start slow end fast)           ease-in;  
(start fast end slow)          ease-out;  
(starting and end slow, between fast) ease-in-out;  
(steps(10));                  steps;
```

Media query - When open website in Mobile, then  
also it should look good.

```
@ media screen and(max-width: 768px) {  
    navBar {  
        height: 100vh;  
        width: 40%;  
        flex-direction: column;  
    }  
    .navbar-logo {  
        display: none;  
    }  
    .navBar .navItems {  
        flex-direction: column;  
    }  
}
```

i { → used to give shadow to the container

↳ box-shadow: 0px 0px 5px black;  
filter: drop-shadow(0px 0px 5px black);  
property function

↳ to give shadow to the shape

Date. :  
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. container {

height : 600px;

width : 600px;

border : 1px solid;

margin : 0px auto;

display : grid;

grid-template-areas: " A A B B B B "

" C D E F F F "

" C G H I I I I "

" J L M J J J J J "

" I K L M M M M "

}

Transition - Unidirectional

Animation - ~~is~~ Multidirectional & continuous  
transition

Two ways to create animation in CSS

1. from and to
2. percentage

Step-1 Create animation name

To design that animation we have to use

@keyframes identifier

@keyframes car {

from {

}

to {

}

Rotate is two dimensional property  
→ Shorthand for X and Y

scale ()

Below 1 size decrease (can't pass negative)

Above 1 size increase

Translate property

Shorthand for translate X and translate Y

transform: rotate(30deg);

0 → disappear

: scale(2); 1 → same size

↓ 2 → Ted size   
cannot be -ve

→ but can pass 2.5, 1.5

: translate(100px, 300px)

↑ ↓  
x y - this can be -ve

100 days CSS .com

i.e.

transition-duration: 5s;

]

i: hover {

    transform: rotate(150deg);

}

Grid system -

• box {

    height: 60px; grid-area: A;

    }

## # Combinator Selector

It defines the relationship b

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To provide area name we have property  
grid-area : A ;

A	2	3	4	5
A	B	B	C	C
D	E	E	F	
G	H	H	I	

Transformation - Changing the state immediately

Transition - Changing the state over the time

Transform property

It is used to change the state immediately

Functions

rotate()

rotateX('angle')

rotateY('angle')

rotateZ('angle')

scale()

scaleX()

scaleY()

scaleZ()

skew()

skewX()

skewY()

translate()

translateX()

translateY()

translateZ()

align items  
align content

Justify - container - Manage the space on main axis  
align content - Manage the space on cross axis

Order - <sup>for</sup> Flex items not for container

Flex flow - shorthand property of flex direction  
and flex wrap

- accepts the value of two properties separated by space

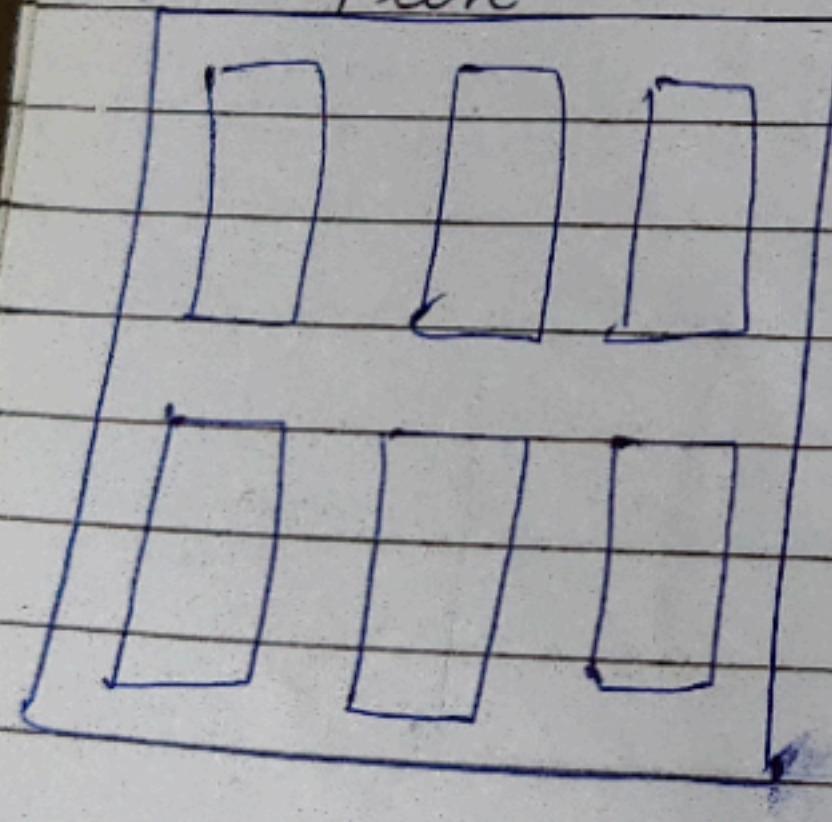
flex-flow : row wrap.

align-self - accepts same value as align items.

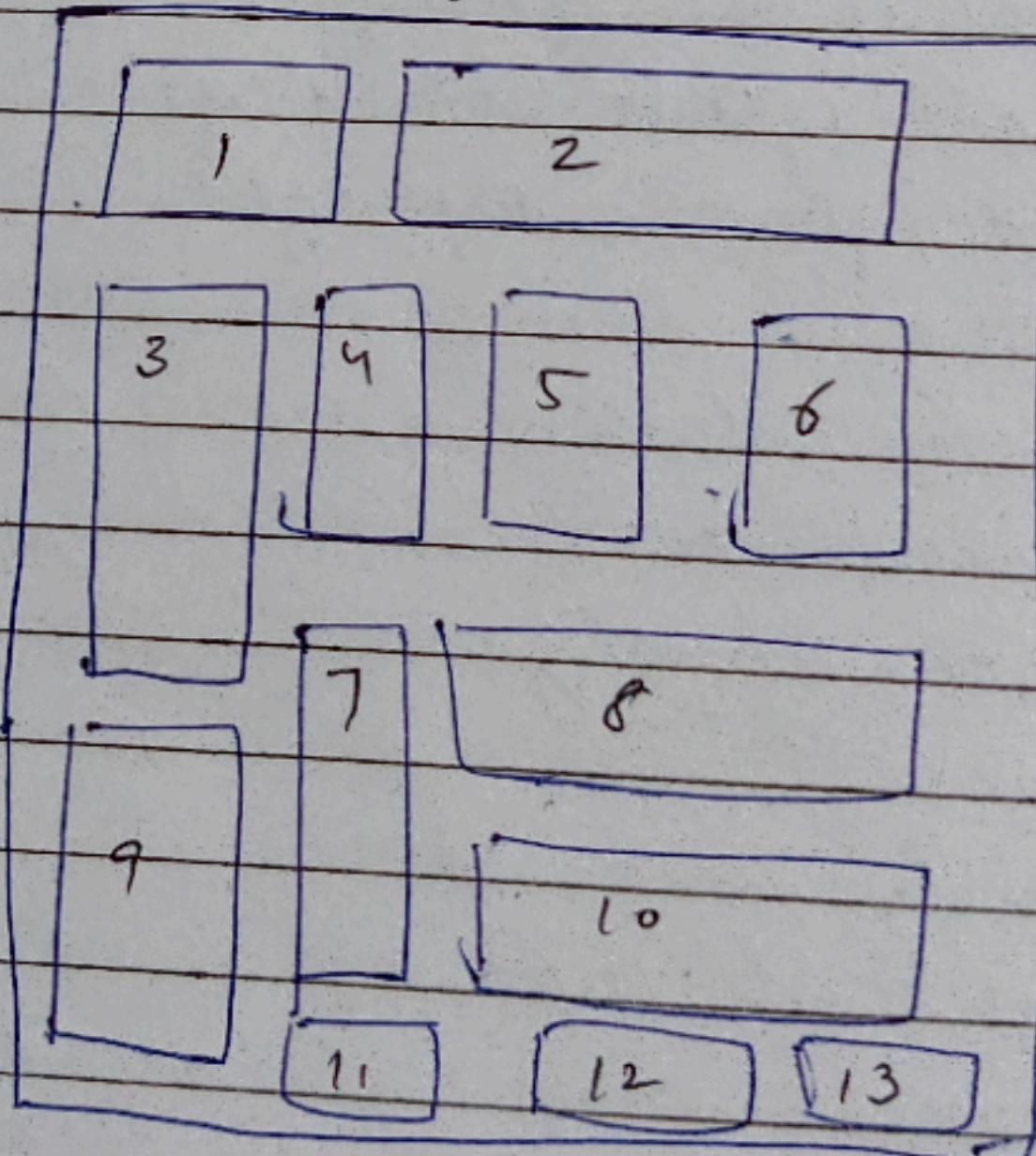
grid - By using ~~the~~ grid, we can arrange elements in multi direction.

→ Grid is a 2 dimensional layout which is used to arrange the elements in both the directions.

Flex



Grid



## # Combinator Selector

It defines the relations

Date: \_\_\_\_\_  
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Flex direction property, we can use to change the direction of flex element.

In this, 4 values -

column

column-reverse

row-reverse

row

wrap

no-wrap

- reverse

It is responsive, not let their child to go out of dimension.

\* The flex wrap property - It will define the wrapping style of the flex container. It has two values - wrap, wrap-reverse, nowrap

- To utilize the space in flex container we have two properties
    - 1) Justify content
    - 2) Align-items
- Both are opposite to each other.

Align-content

6 values in justify content → will work on main axis & align will work on cross axis

- start / flex-start / left
- end / flex-end / right
- center
- space-between
- space-around
- space-evenly

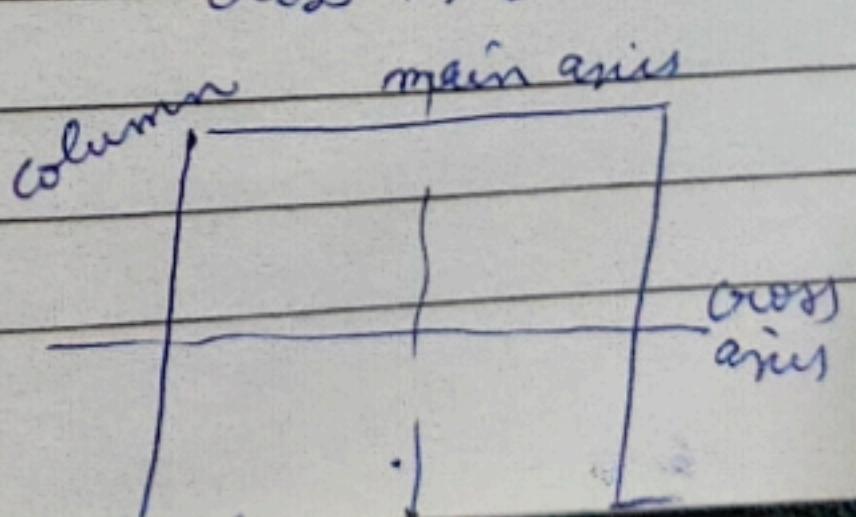
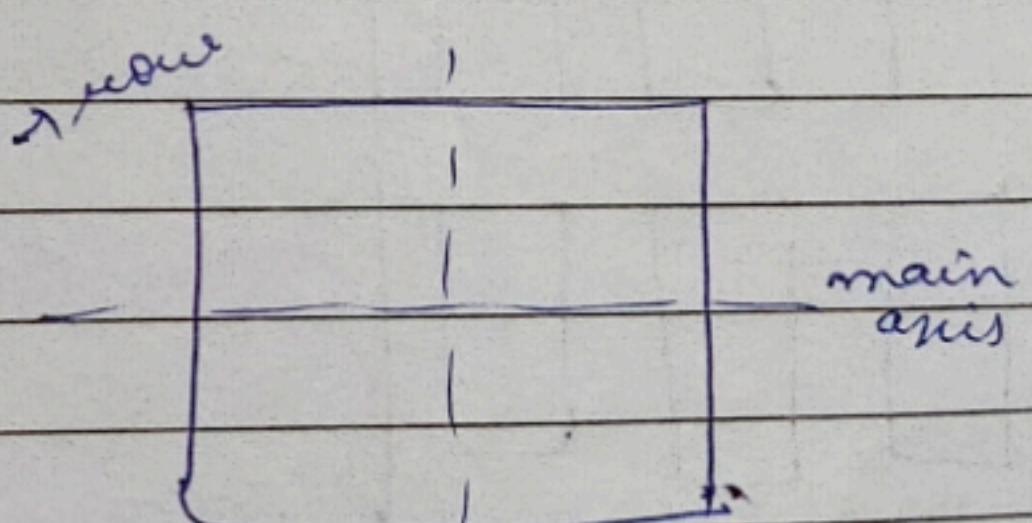
for column direction

Vertical main

Horizontal - cross

Vertical - cross

horizontal - main ] for row direction



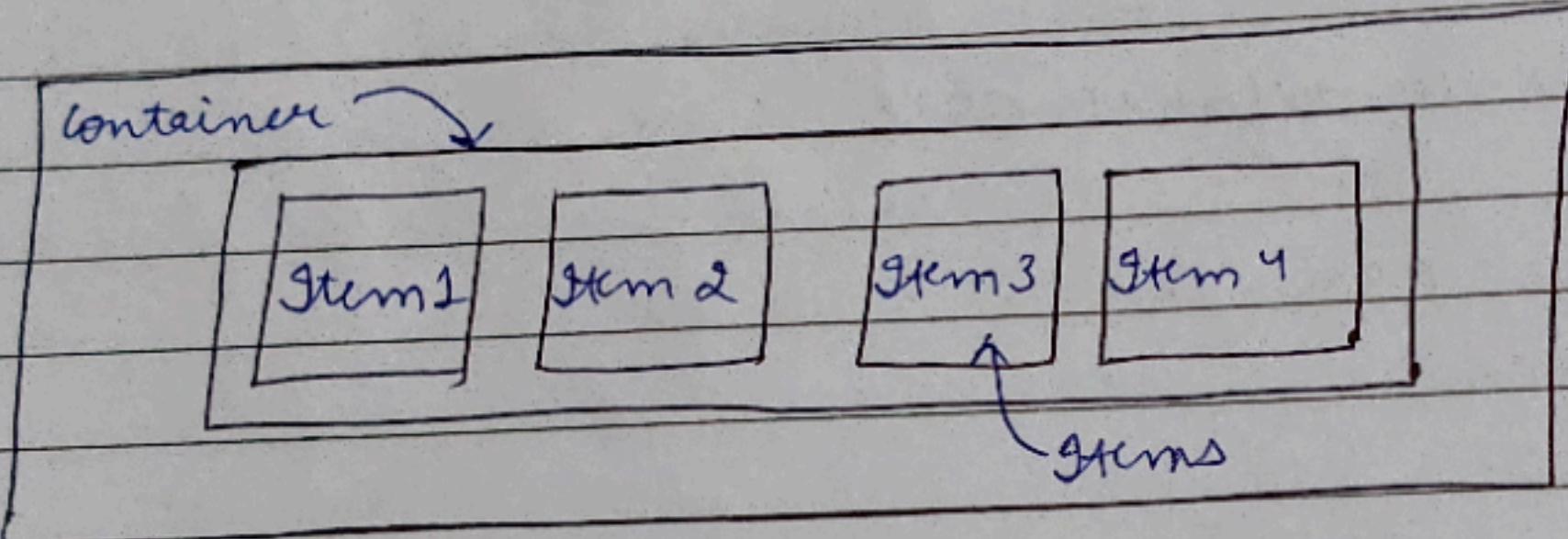
Absolute - It will take the reference of its nearest parent, but the parent should have the position relative.

By default body have position relative

Sticky - Position sticky is scrollable upto the certain point, once it reached that point it will become fix.

Fixed - This property is used to fix the element on user interface.

### Flex Box



property

→ Flex is ~~with~~ the one dimensional layout, it is used to arrange the elements in one direction either in x axis or y axis

To arrange the elements we have two properties

1. Flex
- 2.

→ The default direction flex is row  
To arrange the element give flex to its parent

## # Combinator Selector

It delimits relations

Date :  
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Box sizing - This property will specify the sizing of the element. It has two values i.e. border box, content box.

The default value for this property is content box.

\* For every web pages there is a space between website and border.

To remove this

```
* {  
padding: 0;  
margin: 0;  
box-sizing: border box;  
}
```

This is default CSS

Positions in CSS -

Five positions in CSS

- Static
- Relative
- Fixed
- Absolute
- Sticky

Static - Position static is fix on the web page.

We can't change that position.

Relative - It takes the reference of its current position.

Auto - for center, work only with x axis  
only for horizontal width is fix

Border box -  
3 properties  
border width  
border color  
border style

→ For border style we have 5 properties

dashed

dotted

double

groove

solid

hidden

Shorthand

border : width ; style ; color

Margin box - It is outside space OR  
The space between two elements

- Margin can be in negative.

margin : top, right, bottom, left;

- We can't pass multiple borders.

Border radius - to make curve

? box shadow -

box sizing {

box-sizing : border-box;

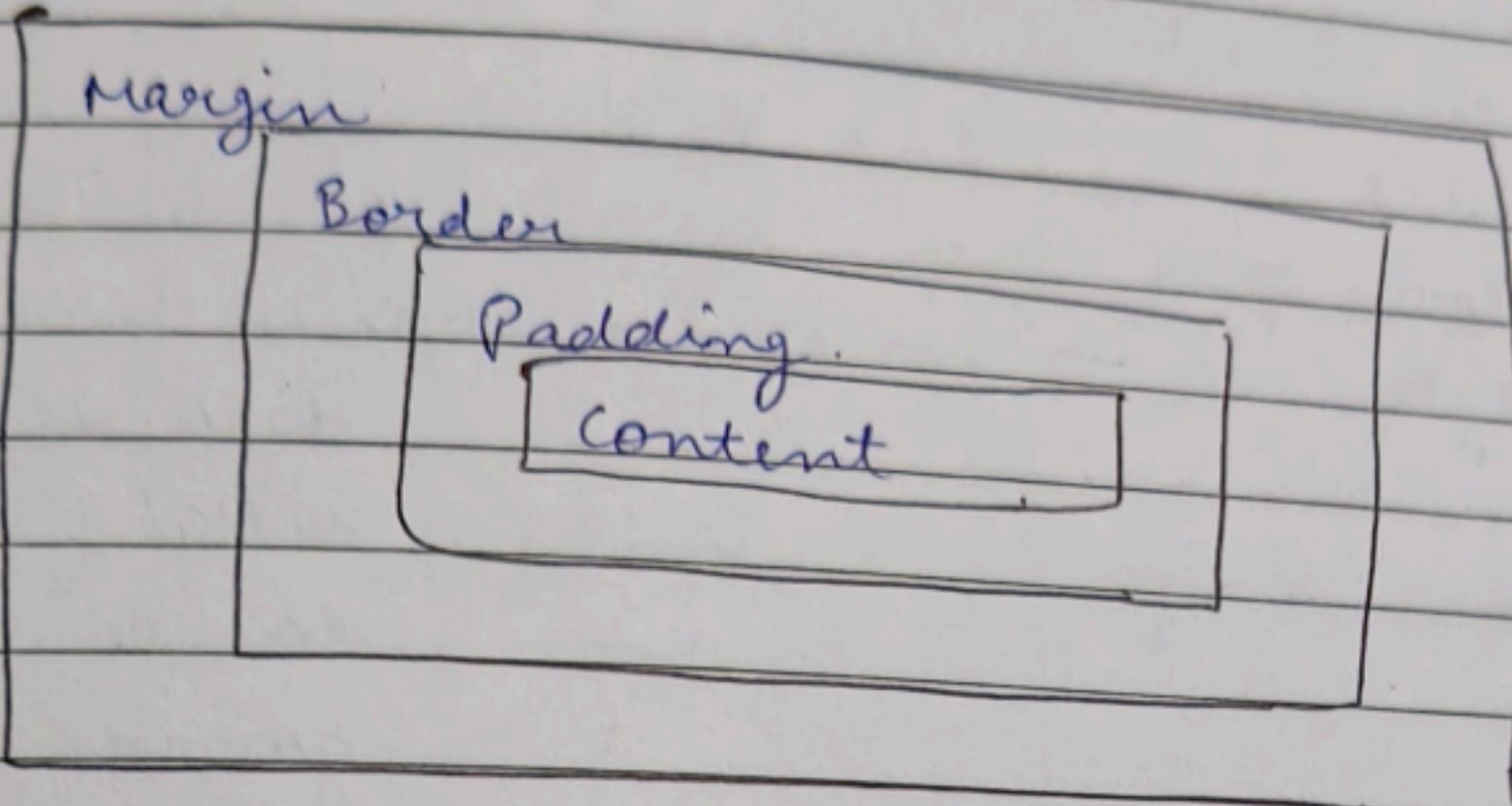
It will contain the padding and border  
in main container -

For every project before starting we should use  
this property.

## # Combinator Selector

It defines the relationship

## Box model in CSS



Box model is a mechanism which wraps around every HTML element.

Content box - A box which is created by giving some specific height and width.

Padding - Internal space OR

It is the space between content and border

`padding-left : 10px;`

`padding-right : 10px;`

`padding-top : 10px;`

`padding-bottom : 10px;`

Shorthand - `padding : top, right, bottom, left;`  
(clockwise) trbl.

When we pass three value second value is for both left & right.

When we pass 2 values first value is for top & bottom and second is for left & right

When we pass 1 value, it is same for all.

We can't pass -ve values for padding

background-size -

Two properties

→ content

→ cover

Make background image fit for the container

Mandatory to pass all

background-image : url(" . / \_\_\_\_\_ ");

background-repeat : no repeat;

background-position : center;

background-size : cover;

Font properties

- Font-size : large / small / medium (Should not be in px)
- Font-weight : bold / bolder / lighter / normal
- Font-style : italic (either use i or em)
- Font-family : font styles
- Font-variant : It is deprecated

For using external font family

@ font-face

Google-Font

↓  
Download- Any font

↓  
Extract in the same folder.

# para {

color: blue;

font-size : larger;

font-family : qspiders;

}

@ font-face {

font-family : qspiders;

src = url(" . / \_\_\_\_\_ ttf");

}

## # Combinator Selector

It defines the selection

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by

### Background property in css -

- Background-image : url("image.jpg")
- Background-repeat : no-repeat/repeat-x/y
- Background-size : cover/100%
- Background-position : right/left/center
- Background-color : single plane color.
- background-color

• The background color property, it can provide the single background color whereas background property can provide multiple background color

To provide multiple colors we can use a function called linear gradient().

Eg - H1 {

background : linear gradient (red, green, yellow)

}

for the direction of color

Top to bottom - Default

Eg - background : linear gradient (to right, red, green, blue)

- to right bottom

- to top right

• Linear gradient - It is used to pass multiple linear color gradients.

• Radial gradient - It is used to provide multiple background color from the center of the element

• Conic gradient - used to provide the color rotated around the centre point.

For text decoration style we have 5 style.

1. dashed
2. dotted
3. double
4. solid
5. wavy

Text decoration (Shorthand property for all)

text-decoration : line || style || color || thickness;

text-indent - give space in starting of paragraph

line-height - give space between line.

word-spacing -

letter spacing - give space b/w letters.

text-align: last = <sup>only</sup> change the last line of paragraph.

overflow - It will create a scroll bar.

If we don't want scroll bar then we use a pseudo element:

:: webkit-scrollbar - used to modify the scroll bar

## # Combinator Selector

It defines the selection

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- Rule should be in degree only (Deg)
- Saturation and lightness should be in percentage (%)
- Hexadecimal is prefix by #

Text-align - It is used to align the text

Have 4 values -

1. start / left
2. end / right
3. center
4. justify

Text-transform -

3 values -

1. capitalize - First letter of every word is capital
2. uppercase - All letters are in upper case.
3. lowercase -

Text shadow - (x, y, spreadness, color)

- Text shadow accepts four parameters
- We can pass multiple shadows also
- Only in x axis and y axis we can pass negative values

Text decoration - used to decorate the text only.

There are 3 values

1. text-decoration-line - line-through, underline, overline
2. text-decoration-color - To change the ~~color~~ color of above 3 lines.
3. text-decoration-style -
4. text-decoration-thickness -

6. To change the <sup>color</sup> of line

Outline-color  $\Rightarrow$  To set color of the input field on clicking.  
Outline offset  $\Rightarrow$  It will give the border outside the input field according to offset value.

Date: \_\_\_\_\_  
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## Text properties in CSS

- Text formatting:
  - color
  - Text-align
  - Text-transform
  - Text-shadow
  - Text-decoration
  - Letter-spacing
  - Word-Spacing
  - Text-indentation

CSS - `input[type="password"]`

```
{  
    outline-color: brown;  
    outline-offset: 10px;  
}
```

- Text effect
  - Text-overflow: clip/ellipsis
  - Word-wrap: break-word
  - Word-break: keep-all ~~keep-break-all~~
  - Writing-mode: horizontal/vertical-rl

There are 6 ways to give color in CSS.

1. Predefined color
2. RGB color (Red, green blue)
3. RGBA & is alpha here
4. HSL (Hue, Saturation, Lightness)
5. HSLA
6. Hexadecimal number

For rgb maximum value is 255

Alpha - Transparent of the color

0 - 1

Minimum value = 0 (Transparency is 100%)  
Maximum value = 1 (Transparency is 0%)

:: first-line - First line pseudo element is used to target the first line of element

Eg - <p> lorem </p>

CSS - p::first-line {  
color: brown;  
}

:: first-letter - It is used to target the first letter of element

Eg - p::first-letter {  
font-size: 200px;  
color: blue;  
}

:: before - It is used to target the content before the element

Eg - p::before {  
content: '@'; → window + dot  
add  
}

:: after - It is used to add the content after the element.

:: selection - It is used to add the style to an element after selecting.

Eg - p::selection {  
color: white;  
background-color: red;

:: marker - It is used to style only for the types of list in the element.

Eg - ol li:nth-child(odd)::marker {  
content: '@';  
font-size: larger;  
color: red;  
}

Focus - It is only for input tag.

First-child - To target first list item.

Pseudo element selector -

input:enabled {  
background-color: blue; }

enabled - Target form elements that are  
enabled

Eg: <input>, <textarea>, <select>, <button>  
→ applied on these tags

disabled - target elements for styling of disabled input field.

input: checked {  
cursor: pointer;  
outline: 3px solid red; }

checked - for radio & checkbox

Pseudo elements - These are used to style the specified parts of the element.

→ These are represented by (::).

Syntax

selector :: pseudo-element {  
property: value;  
3

Mostly used Pseudo elements

:: first-line

:: first-letter

:: before

:: after

:: marker

:: selection

## # Combinator Selector

Q1. Define the relationship b/w

.. with relation to

Date :  
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States of Anchor Tag

For hyperlinks, there are three states

Link	Active	Visited
Blue	Red	Purple
(initial state)	(state blue)	(initial visited)

Pseudo classes are used to style the states of element

These are represented by :

Dynamic pseudo classes

- link
- visited
- active
- focus
- hover

Structural pseudo classes

- first-child
- last-child
- nth-child()
- first-of-type
- last-of-type

UI element pseudo classes

- enabled
- disabled
- checked

link - It is used to change the styling of link state

visited - used to change the styling of visited state

active - used to change the styling of active state.

3. Adjacent sibling selector - It is used to target the <sup>one</sup> HTML element based on its adjacent sibling.

<section>

<div> </div>

<p> </p> <p> </p>

<span> </span>

<p> </p>

</section>

CSS - section div + p { }

section p + p { }

→ It is represented by +

4. General sibling selector - It is used to target all the elements that are next sibling of a specified element.

CSS: section > div ~ p

3. Attribute selector - It is used to target the element by its attribute.

Tagname [ Attributename = Attribute value ]

4. Pseudo class selector - A CSS pseudo class is a keyword added to a selector that specifies a special state of the selected element.

Selector:

pseudo-class {  
    property : value;  
}

2. Combinator selector - It is used to target the HTML element based on its relation.

Types -

1. Descendent selector
2. Child selector
3. Adjacent sibling selector
4. General sibling selector

1. Descendent selector - It is used to target the element based on its ancestors  
 → The descendent selector is represented by space.

```
<section>
  <main>
    <div>   </div>
  </main>
</section>
```

```
CSS - section main div { }
```

2. Child selector - It is used to target the element based on its nearest parent.

- Nearest parent should be different
- It is represented by > symbol.

```
<article>
  <section>
    <main>
      <div>   </div>
    </main>
  </section>
</article>
```

```
CSS main > div { }
```

```
<article>
  <aside>
    <div>   </div>
  </aside>
</article>
```

```
CSS aside > div { }
```

- A road for you to meet more else  
Date: \_\_\_\_\_  
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1. Id selector (#) - It is used to target any html element by its id name.  
→ Id selector is represented by hash (#).
  2. Class selector (.) - It is used to target the multiple elements at the same time (by giving same class name)  
→ It is represented by (.)
  3. Element selector or Tag selector (tag) → No symbol  
It is used to target any html element by its element name or tag name.
  4. Grouping selector - It is used to target multiple elements or group of elements  
→ In grouping selector each element is separated by comma (,). (here we can take all selector)
  5. Universal selector - It is used to target all the elements in html files.  
→ It is represented by (\*).

Priorities of Simple Selector -

First priority - Id selector

Second priority - Class selector

Third priority - Element or Grouping

## Priority of CSS -

- The first priority always given to inline CSS
- Second priority depends on sequence which is close to link tag that will apply first  
Important This override the sequence

Syntax of CSS

selector, property, value.

| | |

P { color: blue; }

Selector - Selectors are used to target the HTML elements in CSS.

→ There are five types of CSS selectors -

1. Simple Selector
2. Combinator Selector
3. Attribute Selector
4. Pseudo class Selector
5. Pseudo Element Selector

1. Simple Selector - A selector which is used to target single HTML element. That selector is known as simple selector.

There are five types of simple selector

1. Id selector (#)
2. Class selector (.)
3. Universal selector (\*)
4. Element selector (tag)
5. Grouping selector (,)

Defn :- 1. And Defn :- 2 ()

(ii) The class selector is represented by (.) dot.

#

Date.:  
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CSS (Cascading Style Sheet)

- It is used to create attractive web pages.
- It is used to style or design the web page.

(i) History of CSS

→ Nalon Niim Li proposed the idea in 1994 to style web pages.

In 1996, the first version of CSS introduced i.e. CSS1

Then, after two years, second version came

In 1998, second version of CSS came i.e. CSS2

In 2011, third version of CSS came i.e. CSS3

This is the current version of CSS3.

Ways to give CSS

There are 3 ways to give CSS -

1. Inline CSS
2. Internal / Embedded CSS
3. External CSS

(g) 100

1. Inline CSS → The CSS which is written in same HTML file.

< h1 style="background-color: red; color: pink;" > Hello </ h1 >

→

2. Internal CSS :- We have to use style tag in head tag. Each property and value pair should be separated by semi-colon.

3. External CSS :- We have to create separate CSS file.