WHY SASS?

Why SASS?

Introduction to SASS	What is SASS?
SASS vs SCSS	Difference between SASS and SCSS.
Variables	How to use Variables in SASS?
@rules	(@use and @forward), (@mixin and @include) , and @extend.
Statements and Expressions	Where to write statements and expressions?
Style rules	Nesting, parent selector (&) and placeholder selector (%).

01.

Introduction to SASS

What is SASS?

What is SASS?

- Preprocessor scripting language
- Compiled
- 2 Syntax
  - SASS (Indented)
  - SCSS (Superset of css)

02.

Variables and Interpolation

How to use Variables and Interpolation?

1. Variables

SCSS	CSS
Imperative	Declarative
Compiled, can not be reused.	You can access it using js

```scss
44  //SASS Variables
45  $color-header:  ■red;
46
47  //CSS Variables
48  :root {
49    --color-heading:  ■red;
50  }
```

```html
<h1 class="titlecss">TITLE CSS</h1>
<h1 class="titlescss">TITLE SCSS</h1>
```

```scss
124  .titlecss {
125    color: var(--color-heading);
126    --color-heading: #00ff00;
127  }
128
129  .titlescss {
130    color: $color-header;
131    $color: #00ff00;
132  }
```

TITLE CSS

TITLE SCSS

03.

@rules

@mixin   and   @include
@extend
@use   and   @forward

@mixin and @include

```scss
@mixin removePaddingMargin() {
    padding: 0;
    margin: 0;
}
```

```scss
p {
    @include removePaddingMargin();
}
```

@mixin and @include

```scss
@mixin displayFlex($flex-direction-column, $justify-content){
    display: flex;
    @if $flex-direction-column{
        flex-direction: column;
    }
    justify-content: $justify-content;
}
```

@mixin and @include

```html
<div class="nesting">
  <div class="nesting space"></div>
  <div class="space"></div>
  <div class="nesting-space"></div>
</div>
```

@mixin and @include

```scss
.nesting {
  width: 100%;
  height: 700px;
  margin: 0 auto;
  /* display: flex;
  justify-content: space-around; */
  @include displayFlex(true, space-around);
```

You, now • Uncommitted changes

@mixin and @include

@extend

```scss
%displayFlex{
    display: flex;
    justify-content: center;
    gap: 10px;
}
```

```scss
.nesting {
  width: 100%;
  height: 700px;
  margin: 0 auto;
  /* display: flex;
  justify-content: space-around; */
  /* @include displayFlex(true, space-between) */
  @extend %displayFlex;
```
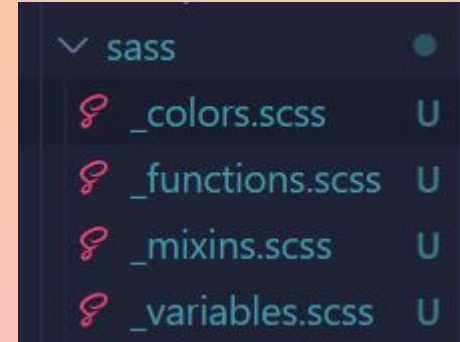
@extend

@use and @forward

```scss
src > sass > _index.scss
1  @forward 'sass/mixins';
2  @forward 'sass/functions';
3  @forward 'sass/variables';
4  @forward 'sass/colors';
5
```
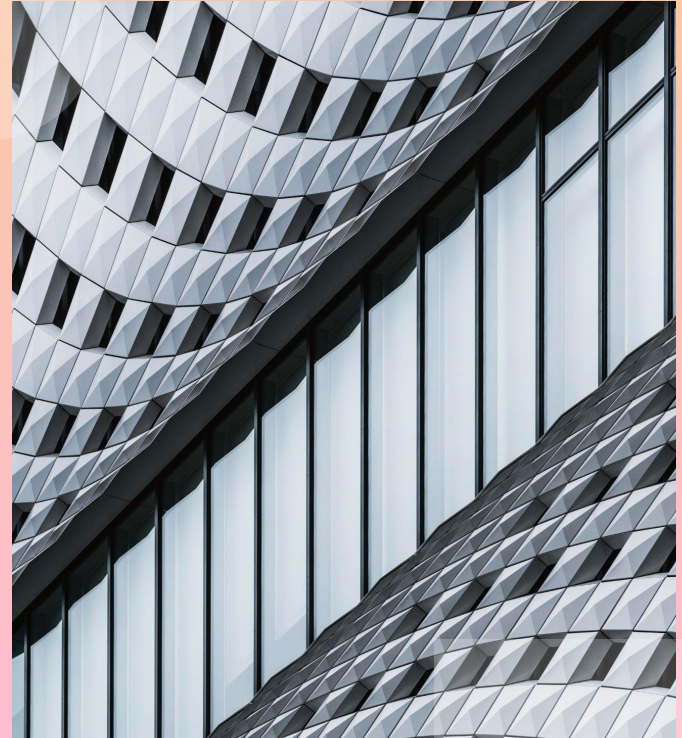
```
∨ sass
  _colors.scss      U
  _functions.scss   U
  _mixins.scss      U
  _variables.scss   U
```

```scss
43  <style lang="scss">
44
45  @use 'sass' as *;
```

04.

Statements and Expressions

Where to write Statements and Expressions?

1. Statements

Variable	Anywhere
Style rule	Anywhere except inside functions.
@use	At the top of the sheet
@extend	Inside style rule
Property declaration	

2. Expressions

- Are
  - Variables
  - Function calls
  - Special functions
    - Calc
    - Lighten
    - Darken
  - Literals and operators
- These are passed to mixins and functions

05.

Style Rule Nesting

Nesting, Parent Selector (&), and placeholder Selector (%)

1. CSS Properties

```
84    font: {
85        family: Arial, "Helvetica Neue", Helvetica, sans-serif;
86        size: 1.7rem;
87        weight: 800;
88    }
```
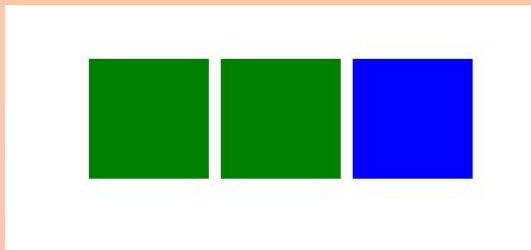
```
91    margin: {
92        right: 10px;
93        bottom: 50px;
94    }
```

2. Parent Selector (&)

```html
21    <div class="nesting">
22        <div class="nesting space"></div>
23        <div class="space"></div>
24        <div class="nesting-space"></div>
25    </div>
```

```scss
123    .nesting {
124        width: 100%;
125        height: 700px;
126        margin: 0 auto;
127        @extend %displayFlex;
128
129        & .square { ⋯              BG: RED
134        }
135        .square { ⋯                BG: Green
141        }
142        &-square { ⋯               BG: Blue
152        }
153    }
```

2. Parent Selector (&)


```scss
123   .nesting {
124     width: 100%;
125     height: 700px;
126     margin: 0 auto;
127     @extend %displayFlex;
128
129     //affects -> class="nesting square "
130  >  & .square { ⋯
135     }
136     //affects -> div-> class="nesting", child div-> class="square"
137  >  .square { ⋯
143     }
144     //affects class="nesting-square"
145  >  &-square { ⋯
155     }
156   }
```

2. Placeholder Selector (%)

```scss
%displayFlex{
    display: flex;
    justify-content: center;
    gap: 10px;
}
```

Thank YOU