CSS preprocessor-Sass

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5. Importing SASS
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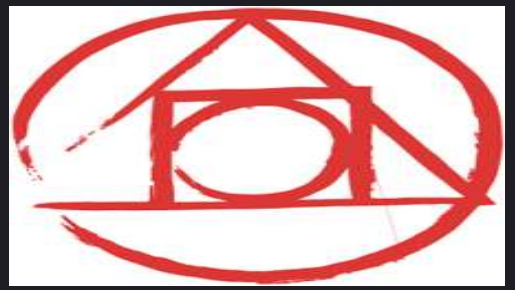
00

What are CSS Preprocessors ?

S A S S

What are CSS Preprocessors ?



- Scripting language for writing CSS.
- Write CSS more efficiently.

A few of most popular CSS preprocessors:

- Sass
- LESS
- Stylus
- PostCSS

01

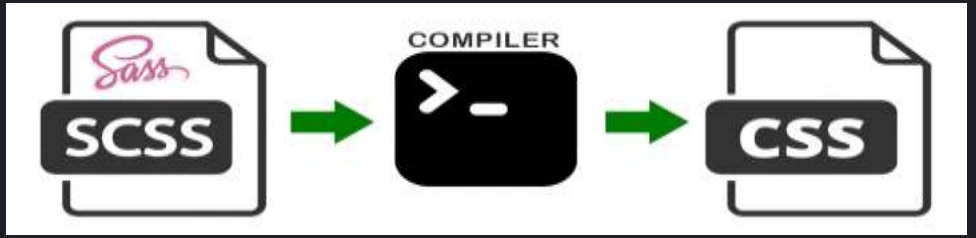
What is sass?

Syntactically Awesome Style sheets

S A S S

What is
SASS

- Super Awesome Stylesheets OR
Syntactically Awesome Stylesheets



•SASS a style sheet extension language because it extends the standard CSS characteristics by introducing the benefits of a basic programming language. So SASS will compile your code and generate the CSS output a browser can understand.

S A S S

What is
SASS

•SASS comes with two different syntaxes: SASS itself and SCSS, the most used one. SCSS syntax is CSS compatible, so you just have to rename your .css file to .scss .

•scss extension is exactly the same. sass extension uses next line instead of {} and tab instead of ;.

SCSS Sass

```scss
$font-stack: Helvetica, sans-serif;
$primary-color: #333;

body {
  font: 100% $font-stack;
  color: $primary-color;
}
```

SCSS Sass

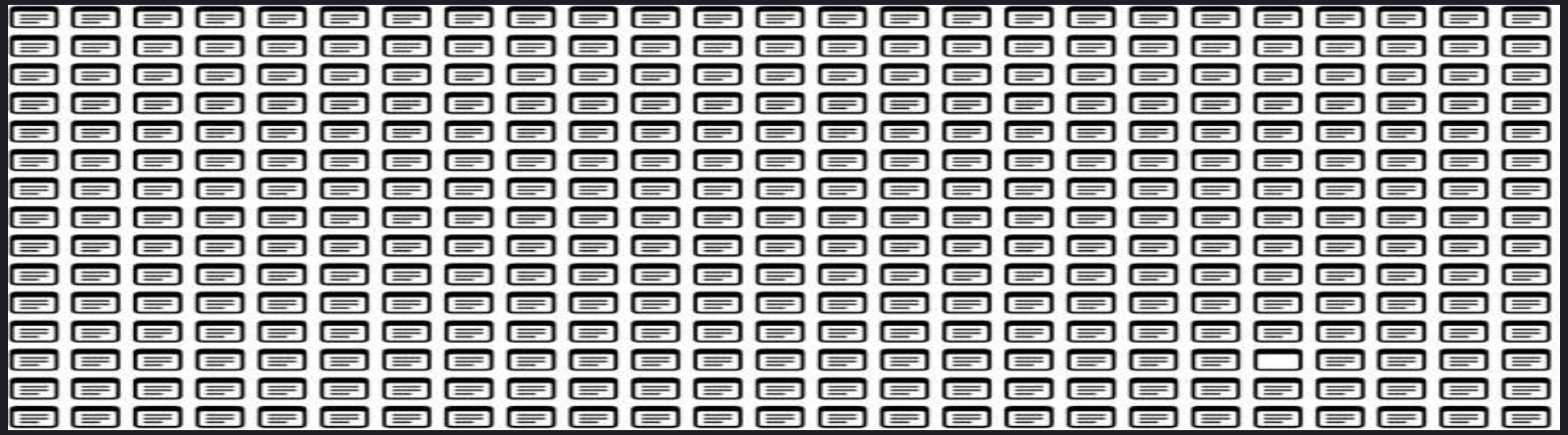
```sass
$font-stack: Helvetica, sans-serif
$primary-color: #333

body
  font: 100% $font-stack
  color: $primary-color
```

S A S S

Why?? What's wrong with CSS ??

Nothing , CSS is awesome

Without it , all websites would look the same

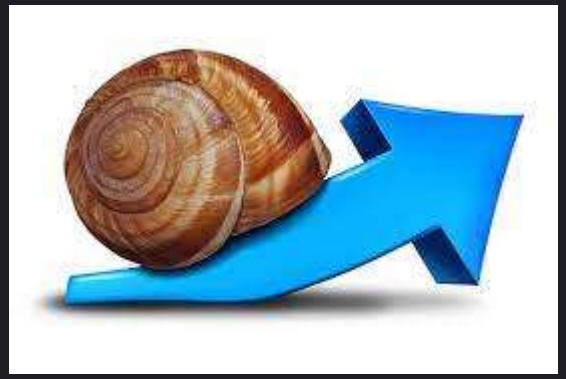


S A S S

Why?? What's wrong with CSS ??

BUT .....

1- Developing CSS is slow



2- CSS is repetitive

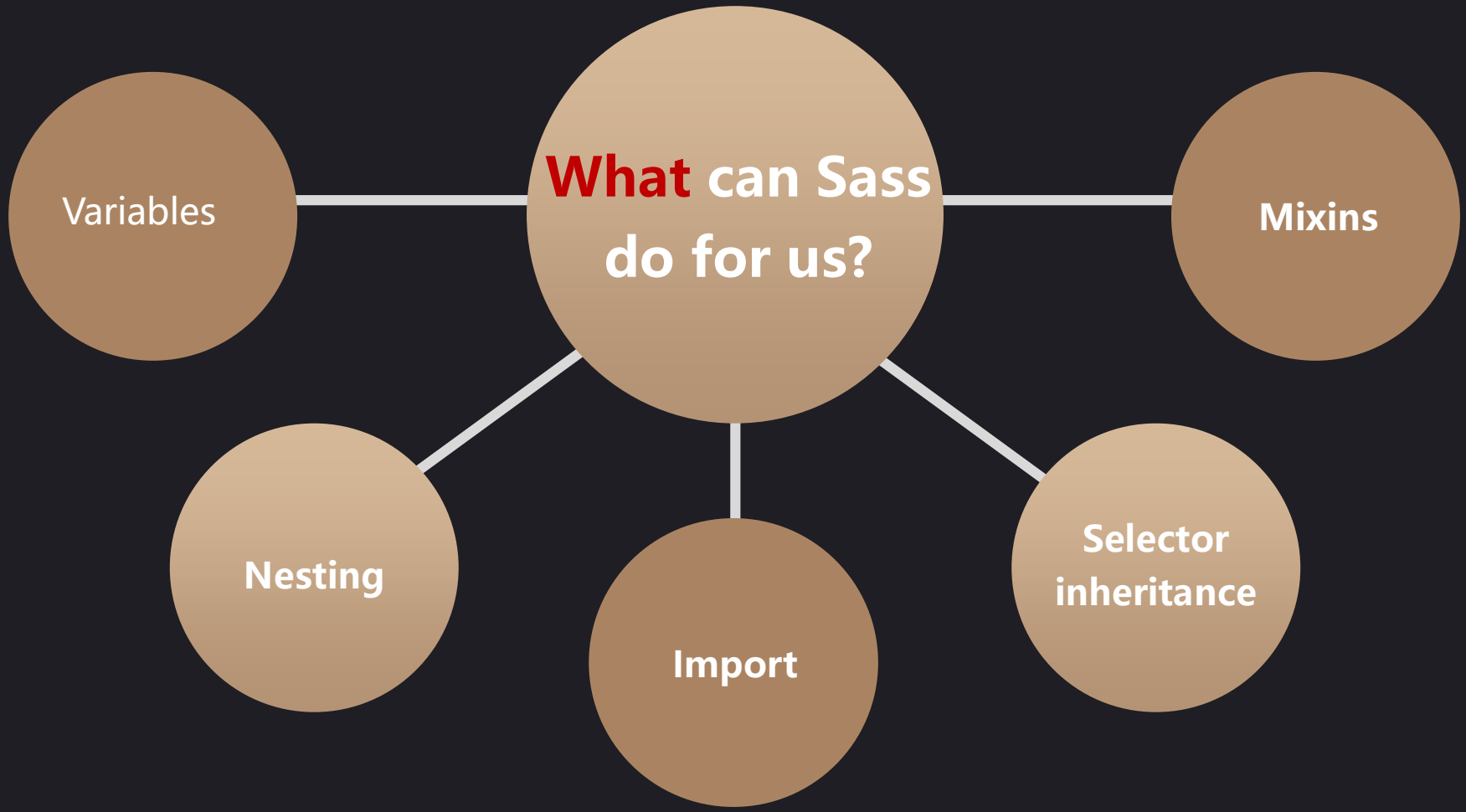
So CSS needs external tools for optimization

3- CSS isn't really reusable

02

Sass features

Sass features



03

SASS Variables

SASS Variables

Using the $ (dollar) symbol

Can be used to store
colors , fonts , size , etc ...

.SCSS

```scss
$link-color: #ffffff;
$v-link-color: #646363;

a {
  color: $link-color;

  &:visited {
    color: $v-link-color;
}
```

.CSS

```css
body a {
  color: white; }
  body a:visited {
    color: #646363; }
```

04

SASS Nesting

S A S S N e s t i n g

1. All selectors inside a selector are translated to nested selectors .

SCSS Sass

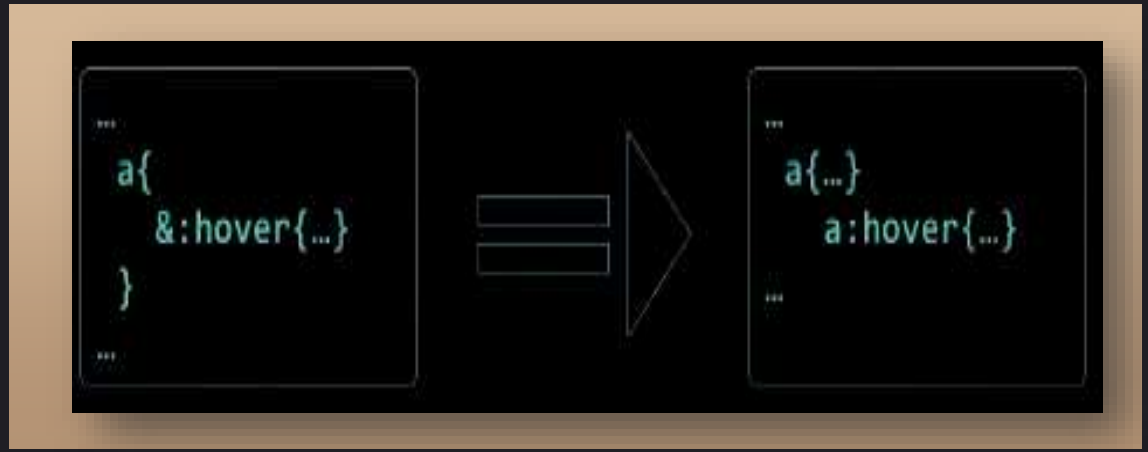
```scss
nav {
  ul {
    margin: 0;
    padding: 0;
    list-style: none;
  }

  li { display: inline-block; }

  a {
    display: block;
    padding: 6px 12px;
    text-decoration: none;
  }
}
```

CSS

```css
nav ul {
  margin: 0;
  padding: 0;
  list-style: none;
}
nav li {
  display: inline-block;
}
nav a {
  display: block;
  padding: 6px 12px;
  text-decoration: none;
}
```

S A S S N e s t i n g

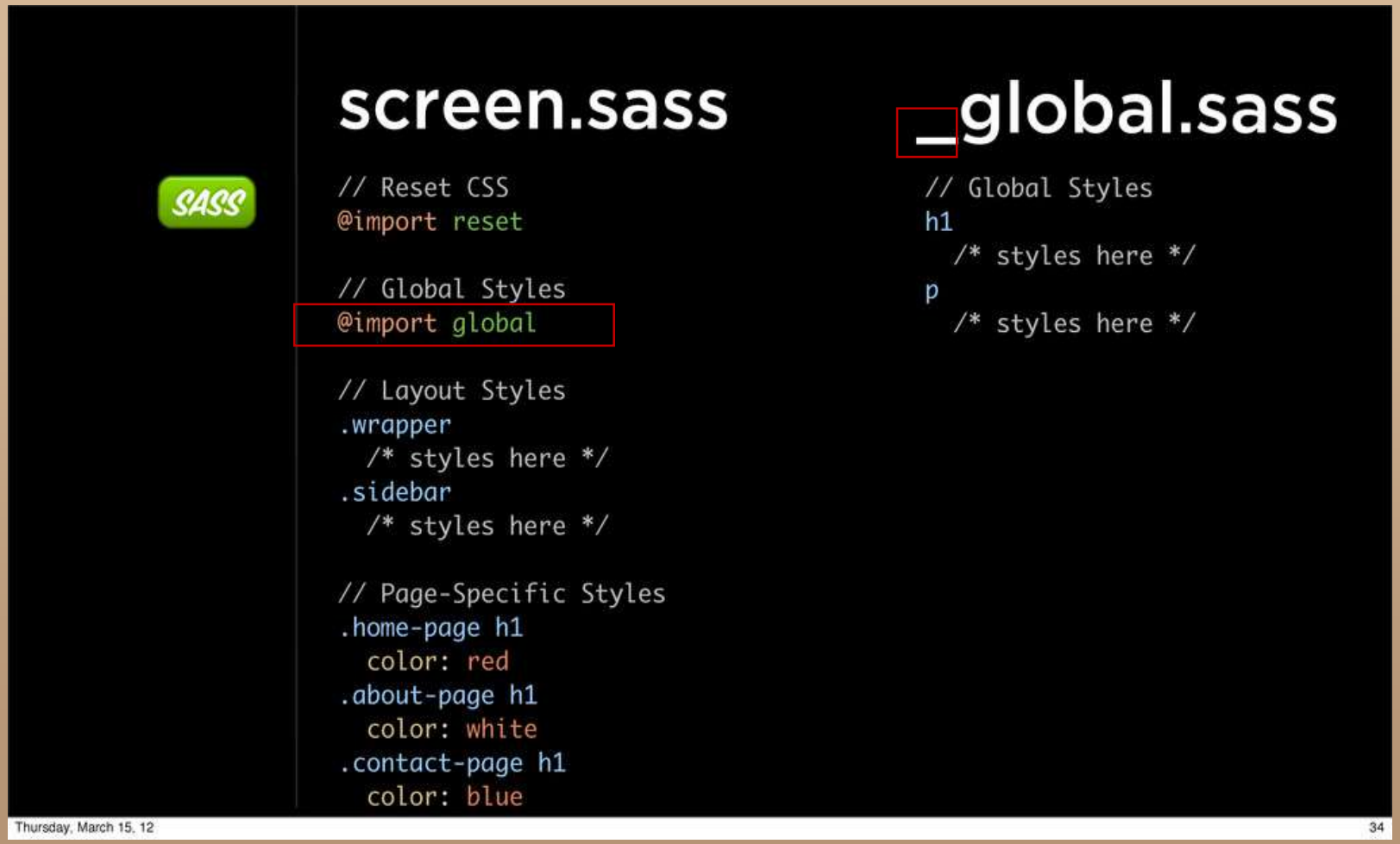
2 Selectors can also reference themselves inside their selector using the symbol → “&” .



05

Importing SASS

Importing Sass



CSS import VS SASS import

CSS	SASS
CSS import makes multiple HTTP request.	Sass import makes only one HTTP request.
Poor performance	Good performance
CSS import happens at runtime.	Sass import happens at compile time.

06

Selector inheritance

Selector inheritance

The @extend directive lets you share a set of CSS properties from one selector to another.

.scss

```scss
.button-basic  {
  border: none;
  padding: 15px 30px;
  text-align: center;
  font-size: 16px;
  cursor: pointer;
}

.button-report  {
  @extend .button-basic;
  background-color: red;
}

.button-submit  {
  @extend .button-basic;
  background-color: green;
  color: white;
}
```

.css

```css
.button-basic, .button-report, .button-submit {
  border: none;
  padding: 15px 30px;
  text-align: center;
  font-size: 16px;
  cursor: pointer;
}

.button-report  {
  background-color: red;
}

.button-submit  {
  background-color: green;
  color: white;
}
```

07

SASS - Mixins

Sass - Mixins

•A mixin lets you make groups of CSS declarations that you want to reuse throughout your site. It helps keep your Sass very DRY. You can even pass in values to make your mixin more flexible. Here's an example for theme:-

SCSS Sass

```scss
@mixin theme($theme: DarkGray) {
  background: $theme;
  box-shadow: 0 0 1px rgba($theme, .25);
  color: #fff;
}

.info {
  @include theme;
}
.alert {
  @include theme($theme: DarkRed);
}
.success {
  @include theme($theme: DarkGreen);
}
```

CSS

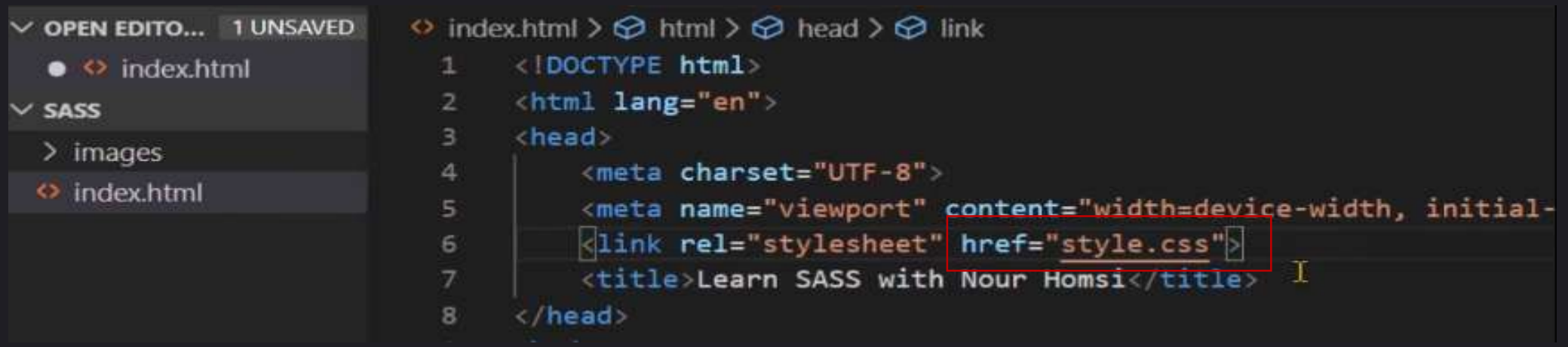
```css
.info {
  background: DarkGray;
  box-shadow: 0 0 1px rgba(169, 169, 169, 0.25);
  color: #fff;
}

.alert {
  background: DarkRed;
  box-shadow: 0 0 1px rgba(139, 0, 0, 0.25);
  color: #fff;
}

.success {
  background: DarkGreen;
  box-shadow: 0 0 1px rgba(0, 100, 0, 0.25);
  color: #fff;
}
```

08

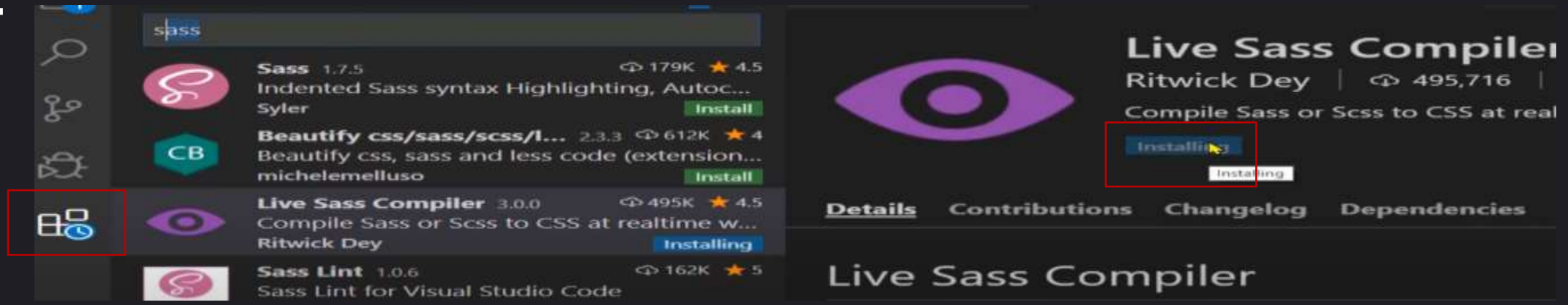
Working with Sass – in VSC

S A S S

1


OPEN EDITO... 1 UNSAVED
index.html
SASS
images
index.html
index.html > html > head > link
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta name="viewport" content="width=device-width, initial-
6 <link rel="stylesheet" href="style.css">
7 <title>Learn SASS with Nour Homsi</title>
8 </head>

2

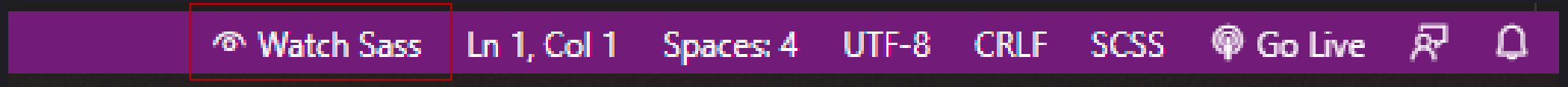

sass
Sass 1.7.5 179K 4.5
Indented Sass syntax Highlighting, Autoc...
Syler
Install
Beautify css/sass/scss/l... 2.3.3 612K 4
Beautify css, sass and less code (extension...
michelemelluso
Install
Live Sass Compiler 3.0.0 495K 4.5
Compile Sass or Scss to CSS at realtime w...
Ritwick Dey
Installing
Sass Lint 1.0.6 162K 5
Sass Lint for Visual Studio Code
Live Sass Compiler
Ritwick Dey 495,716
Compile Sass or Scss to CSS at real
Installing
Installing
Details Contributions Changelog Dependencies
Live Sass Compiler

S A S S

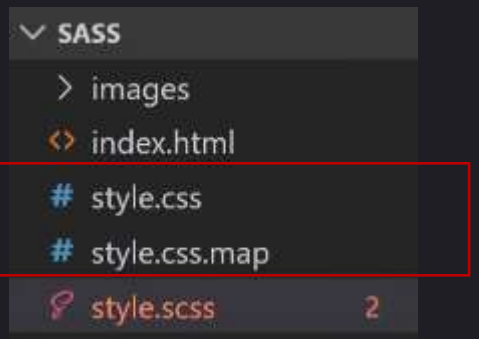
3

EXPLORER
OPEN EDITORS
style.scss
SASS
images
index.html
style.scss
style.scss
style.scss
1

4

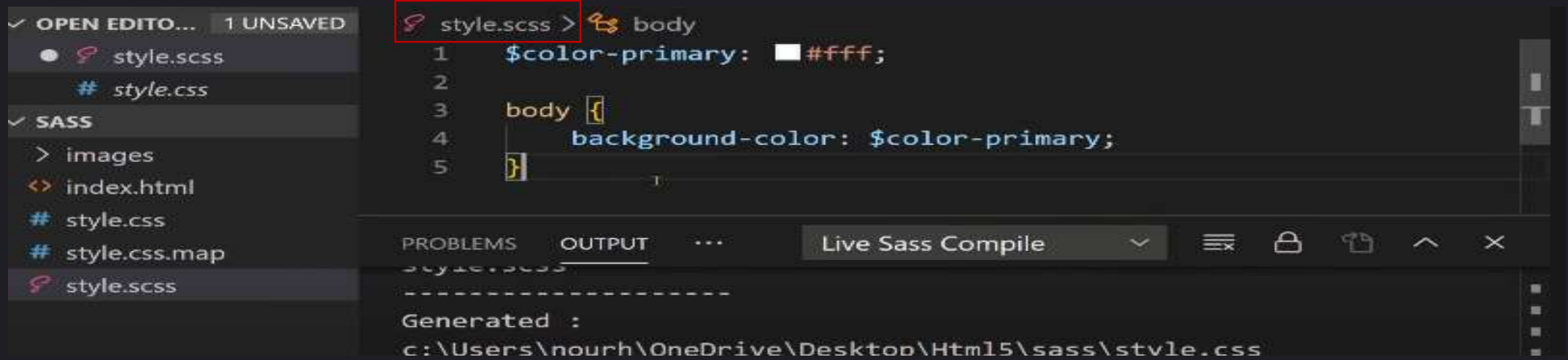

Watch Sass
Ln 1, Col 1
Spaces: 4
UTF-8
CRLF
SCSS
Go Live

5

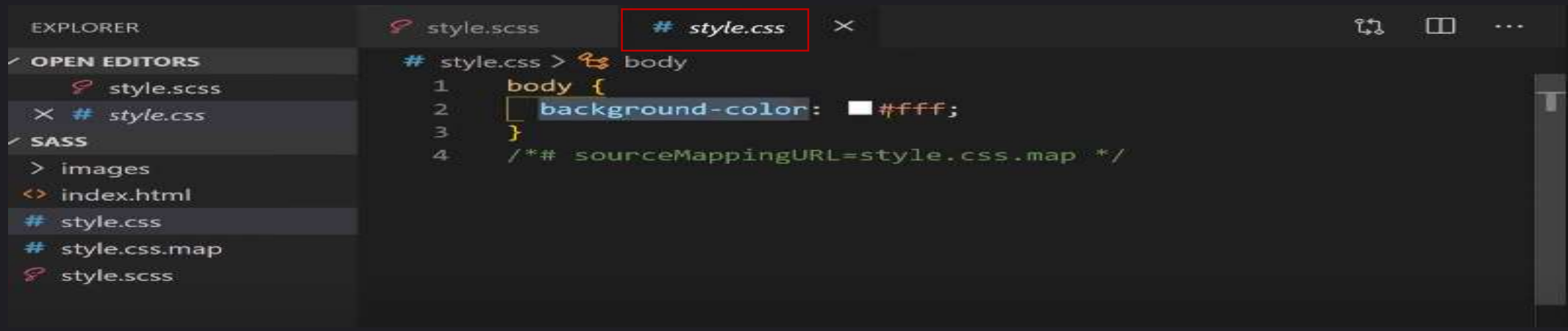

SASS
images
index.html
style.css
style.css.map
style.scss
2

S A S S

6


OPEN EDITO... 1 UNSAVED
style.scss
style.css
SASS
images
index.html
style.css
style.css.map
style.scss
style.scss > body
1 $color-primary: #fff;
2
3 body {
4 background-color: $color-primary;
5 }
PROBLEMS
OUTPUT
Live Sass Compile
Generated :
c:\Users\nourh\OneDrive\Desktop\Html5\sass\style.css

7


EXPLORER
OPEN EDITORS
style.scss
style.css
SASS
images
index.html
style.css
style.css.map
style.scss
style.scss
style.css
style.css > body
1 body {
2 background-color: #fff;
3 }
4 /*# sourceMappingURL=style.css.map */

S A S S

Resources

https://sass-lang.com/guide
https://developer.mozilla.org/en-US/docs/Glossary/CSS_preprocessor
https://codersera.com/blog/difference-between-css-and-scss/
https://www.slideserve.com/chandler-lambert/sass
https://www.geeksforgeeks.org/include-vs-extend-in-sass/
https://www.youtube.com/watch?v=zmotaI8b5Qc&list=PLPTNqXpQ2tbgJPXA07MUI3A2oxnOfB6z4&index=1

https://www.youtube.com/watch?v=3zE1s_WCgVM&list=PLPTNqXpQ2tbgJPXA07MUI3A2oxnOfB6z4&index=9
https://sass-lang.com/documentation/at-rules/import
https://stackoverflow.com/questions/40976874/what-is-the-difference-between-css-import-and-sass-scss-import
https://sass-lang.com/documentation/at-rules/mixin

THANKS