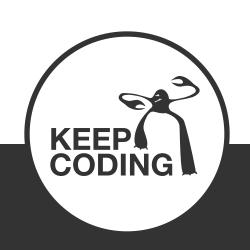


# Introducción



#### Introducción

SASS es un pre-procesador CSS

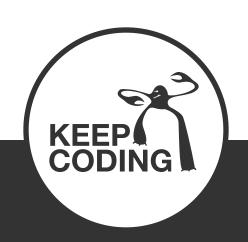
Añade características dinámicas a CSS como variables y funciones

#### Ventajas:

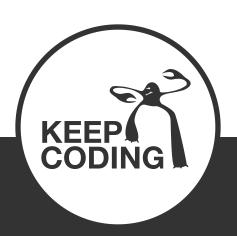
- Desarrollo de CSS más rápido
- Mejor mantenimiento del código

#### Inconvenientes

 Hay que procesar SASS cada vez que hacemos un cambio para obtener el CSS modificado

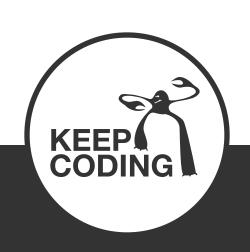


# Nuestro primer SASS



#### hello.scss

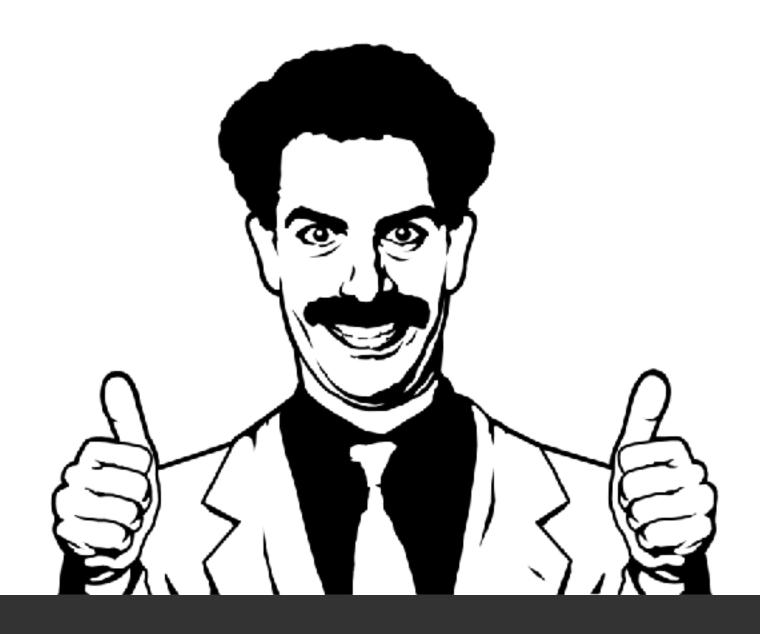
```
$main-text-color: blue;
body {
    color: $main-text-color;
}
```

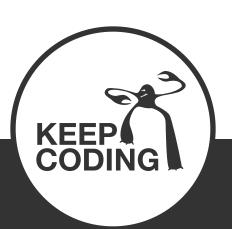


#### hello.scss

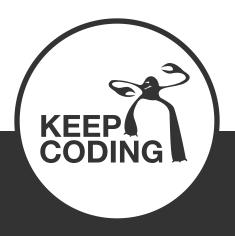
```
$ node-sass hello.scss
```

```
body {
  color: blue;
}
```





# Sintaxis ¿SASS o SCSS?



#### SASS vs SCSS

#### SASS Syntax

nav ul

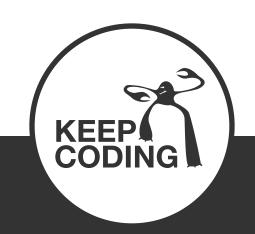
margin: 0

padding: 0

list-style: none

#### SCSS Syntax

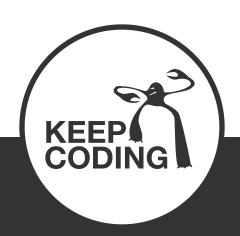
```
nav {
  ul {
  margin: 0;
  padding: 0;
  list-style: none;
  }
}
```



#### SASS vs SCSS

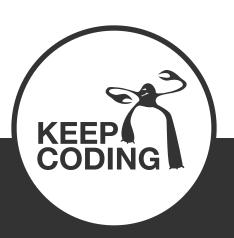
Por suerte o desgracia, SCSS es la más utilizada debido a:

- Su sintaxis es 100% compatible con CSS normal (lo que permite hacer copy&paste de código CSS sin problema.)
- Menor barrera de entrada (si sabes CSS, puedes usar directamente SCSS)



# Variables

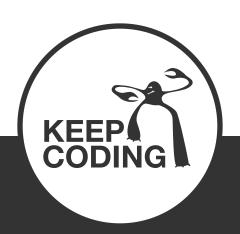
Podemos definir variables para almacenar valores o incluso para utilizar como nombres de propiedades CSS o rutas a ficheros.



#### Variables

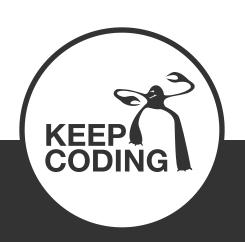
```
$font-stack: Helvetica, sans-serif;
$primary-color: #333;

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



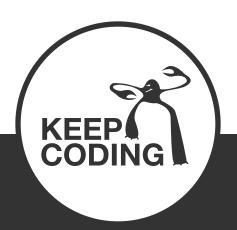
#### Variables

```
body {
  font: 100% Helvetica, sans-serif;
  color: #333;
}
```



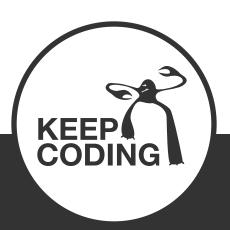
# Anidamiento

Podemos anidar las reglas unas dentro otras, lo que nos ahorrará mucho código repetitivo



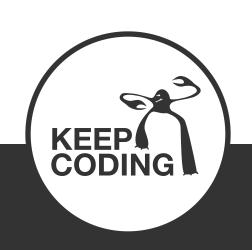
#### Anidamiento

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



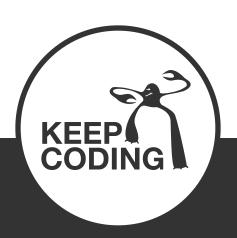
#### Resultado

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



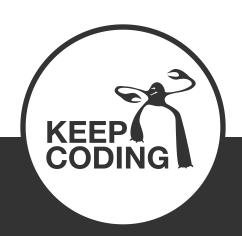
## Especialización de un elemento

```
a {
  font-weight: bold;
  text-decoration: none;
  &:hover { text-decoration: underline; }
  body.firefox & { font-weight: normal; }
}
```

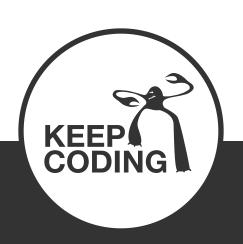


#### Resultado

```
a {
  font-weight: bold;
  text-decoration: none;
a:hover {
  text-decoration: underline;
body.firefox a {
  font-weight: normal;
```



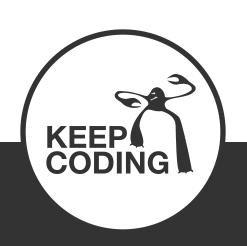
# Comentarios



#### Comentarios

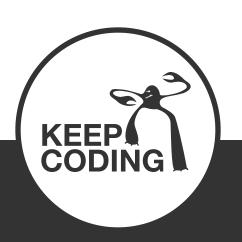
```
/* comentarios clásicos o multilínea */
$font-size-base: 12px;
```

// comentario de una sola línea \$\text{\$white: #ffffff;}



# Mixins

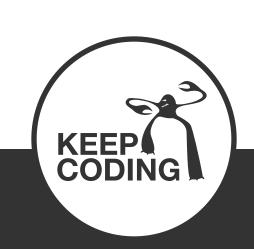
Los mixins nos permiten mezclar propiedades de clases y también definir funciones de generación de código CSS.



# Mixin sin parámetros

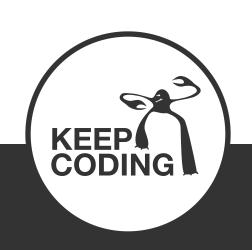
```
@mixin clearfix {
  display: inline-block;
  &:after {...}
  * html & { height: 1px }
}
.menu { @include clearfix; }
```

Debemos utilizar la directiva @include para utilizar un mixin.



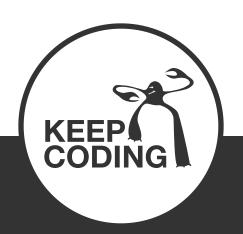
#### Resultado

```
.menu { display: inline-block; }
.menu:after {...}
* html .menu { height: 1px }
```



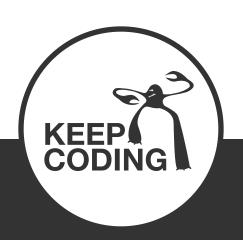
## Mixin con parámetro

```
@mixin border-radius($radius) {
  -webkit-border-radius: $radius;
  -moz-border-radius: $radius;
  -ms-border-radius: $radius;
  border-radius: $radius;
}
.box { @include border-radius(10px); }
```



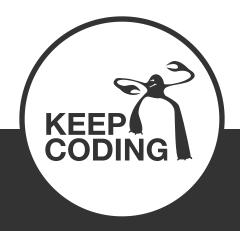
#### Resultado

```
.box {
  -webkit-border-radius: 10px;
  -moz-border-radius: 10px;
  -ms-border-radius: 10px;
  border-radius: 10px;
}
```



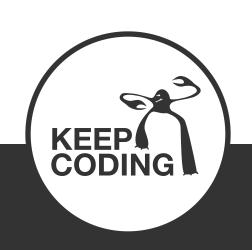
### Mixin como bloque

```
@mixin apply-to-ie-only {
 html.ie {
  @content;
@include apply-to-ie-only {
 #logo {
  background-image: url(/logo.gif);
```



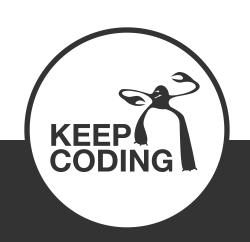
#### Resultado

```
html.ie #logo {
  background-image: url(/logo.gif);
}
```



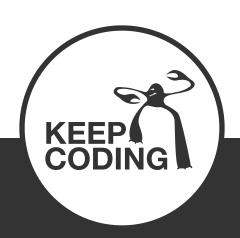
# Util para responsive

```
$desktop-width: 1024px;
$tablet-width: 768px;
@mixin tablet {
 @media (min-width: $tablet-width) and (max-width: $desktop-width
- 1px) {
  @content;
```



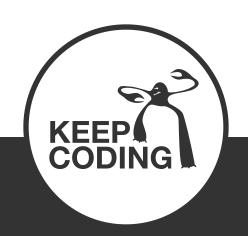
# Util para responsive

```
p {
  font-size: 16px;
  @include tablet {
   font-size: 18px;
  }
}
```



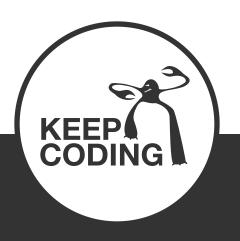
#### Resultado

```
p {
  font-size: 16px;
}
@media (min-width: 768px) and (max-width: 1023px) {
    p {
      font-size: 18px;
    }
}
```



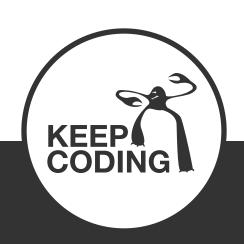
# Operadores

Al poder definir variables podemos realizar operaciones básicas con las mismas



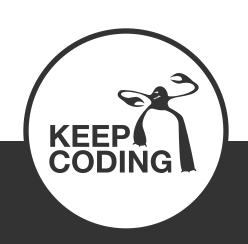
## Operadores

```
article[role="main"] {
  float: left;
  width: 600px / 960px * 100%;
}
```



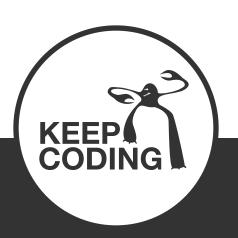
# Operadores

```
article[role="main"] {
  float: left;
  width: 62.5%;
}
```



# Funciones built-in

SASS incorpora una serie de funciones built-in para realizar diferentes operaciones

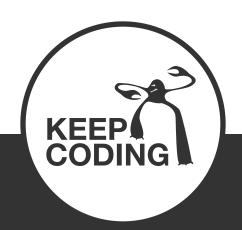


## opacify & transparentize

```
$translucent-red: rgba(255, 0, 0, 0.5);

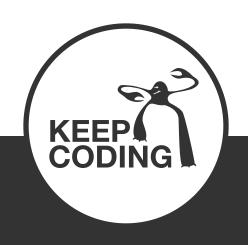
p {
  color: opacify($translucent-red, 0.3);
  background: transparentize($translucent-red, 0.25);
}
```

Añaden o quitan transparencia a un color



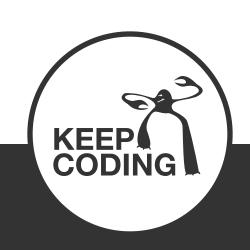
## opacify & transparentize

```
p {
  color: rgba(255, 0, 0, 0.8);
  background-color: rgba(255, 0, 0, 0.25);
}
```



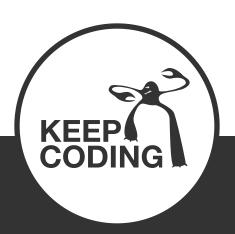
#### Funciones built-in

http://sass-lang.com/documentation/Sass/Script/Functions.html



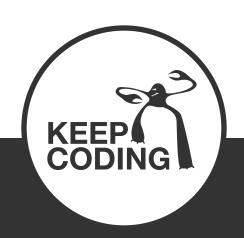


Funciona igual que en CSS...pero pueden anidarse!

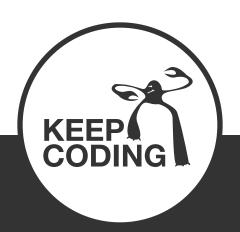


# Especializando el comportamiento de una clase

```
.sidebar {
  width: 300px;
  @media screen and (orientation: landscape) {
    width: 500px;
  }
}
```

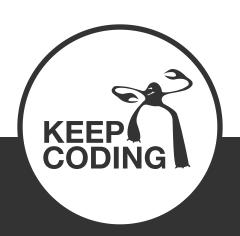


```
.sidebar {
  width: 300px;
}
@media screen and (orientation: landscape) {
    .sidebar {
     width: 500px;
    }
}
```

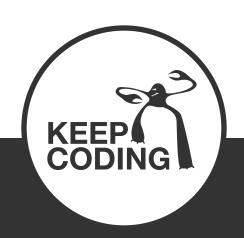


#### Anidándose unas con otras

```
@media screen {
    .sidebar {
      @media (orientation: landscape) {
         width: 500px;
      }
    }
}
```

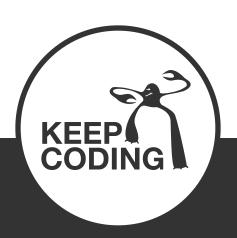


```
@media screen and (orientation: landscape) {
   .sidebar {
     width: 500px;
   }
}
```



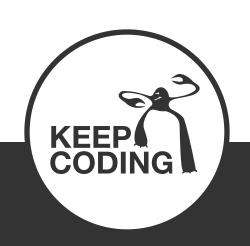


Permite heredar las reglas de un estilo

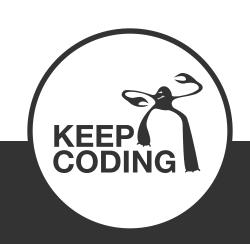


#### Herencia

```
.message {
 border: 1px solid #ccc;
 padding: 10px;
 color: #333;
.success {
 @extend .message;
 border-color: green;
```

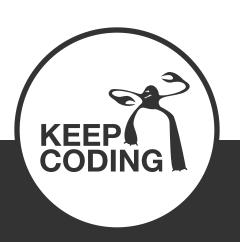


```
.message, .success {
 border: 1px solid #ccccc;
 padding: 10px;
 color: #333;
.success {
 border-color: green;
```

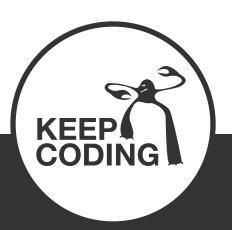




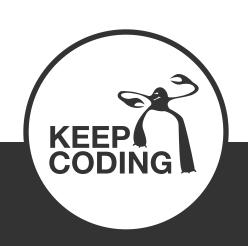
Permite escribir reglas condicionales





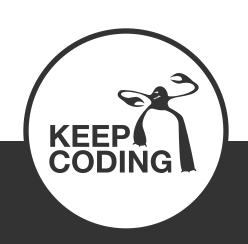


```
p {
 border: 1px solid;
}
```



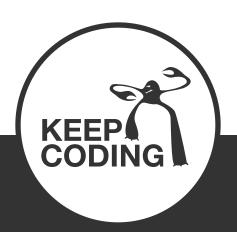


Permite hacer un bucle para escribir reglas

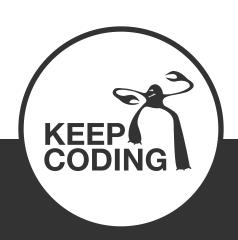




```
@for $i from 1 through 3 {
   .item-#{$i} { width: 2em * $i; }
}
```

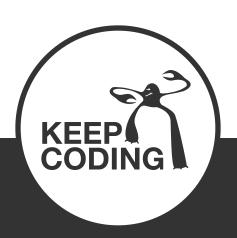


```
.item-1 {
 width: 2em;
.item-2 {
 width: 4em;
.item-3 {
 width: 6em;
```



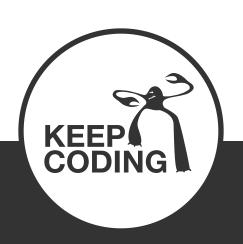


Permite recorrer una lista de valores

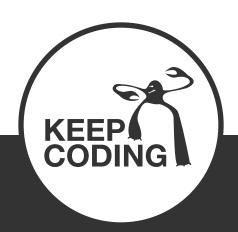


## @each

```
@each $animal in puma, sea-slug, egret {
    .#{$animal}-icon {
    background: url('/images/#{$animal}.png');
    }
}
```

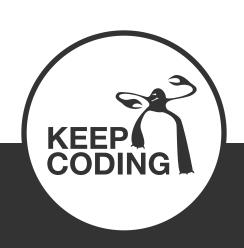


```
.puma-icon {
 background: url('/images/puma.png');
.sea-slug-icon {
 background: url('/images/sea-slug.png');
.egret-icon {
 background: url('/images/egret.png');
```





Permite realizar un bucle mientras se cumple una condición



## @while

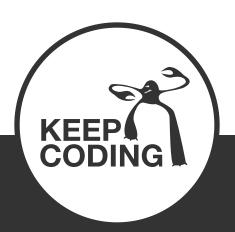
```
$i: 6;

@while $i > 0 {

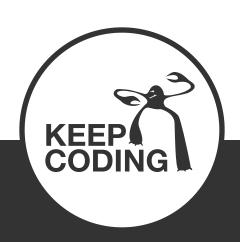
.item-#{$i} { width: 2em * $i; }

$i: $i - 2;

}
```

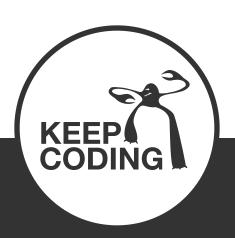


```
.item-6 {
 width: 12em;
.item-4 {
 width: 8em;
.item-2 {
 width: 4em;
```





Permite definir nuestras propias funciones

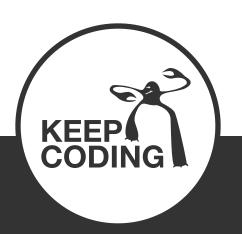


#### @function

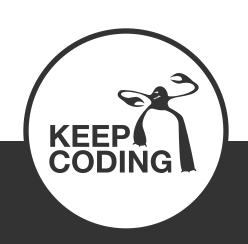
```
$grid-width: 40px;
$gutter-width: 10px;

@function grid-width($n) {
    @return $n * $grid-width + ($n - 1) * $gutter-width;
}

#sidebar { width: grid-width(5); }
```

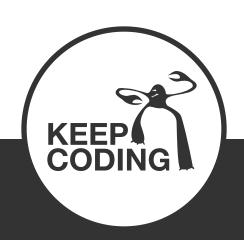


```
#sidebar {
  width: 240px;
}
```



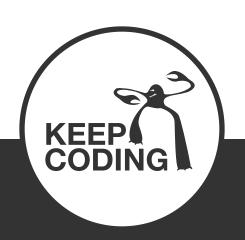
# @import

La directiva @import se comporta de diferentes maneras en función de la extensión del archivo que importemos.



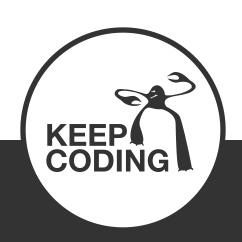
#### Se mantiene intacta cuando...

- Si la extensión del archivo es .css
- Si el archivo empieza por "http"
- Si el archivo es una url()
- Si la instrucción tiene media queries



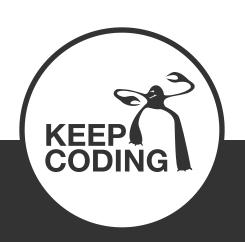
# @import

```
@import "foo.css";
@import "foo" screen;
@import "http://foo.com/bar";
@import url(foo);
```



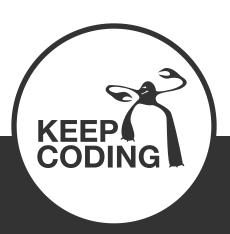
# Resultado del @import

```
@import "foo.css";
@import "foo" screen;
@import "http://foo.com/bar";
@import url(foo);
```



#### Partials

Archivos SASS que queremos cargar pero no compilar (no queremos crear su respectivo archivo CSS)



#### Partials

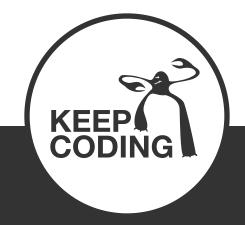
```
_reset.scss
```

```
html,
body,
ul,
ol {
    margin: 0;
    padding: 0;
}
```

#### base.scss

```
@import 'reset';
```

```
body {
  font: 100% Helvetica;
  background-color: white;
}
```



#### Partials

El nombre de archivo un *partial* deben comenzar por \_ seguido del nombre del partial (y su extensión).

Para usarlo, debemos utilizar la instrucción @import seguido del nombre del partial.

Nombre	Archivo	Importación
reset	_reset.scss	@import "reset"

