

Post-Modern CSS

IN-DEPTH ON GRID LAYOUT, FLEXBOX & OTHER NEW PROPERTIES



Wait. Post-Modern?

LIKE... ANDY WARHOL?



Wait. Post-Modern?

LIKE... ANDY WARHOL? SORTA.

“Simplifying to the extreme, I define postmodern as an incredulity toward **metanarratives**.”

– Jean-François Lyotard

“Postmodernism was a reaction to modernism. Where modernism was about **objectivity**, postmodernism was about **subjectivity**. Where modernism sought a **singular truth**, postmodernism sought the **multiplicity of truths**.”

– Miguel Syjuco

Why Post-Modern?

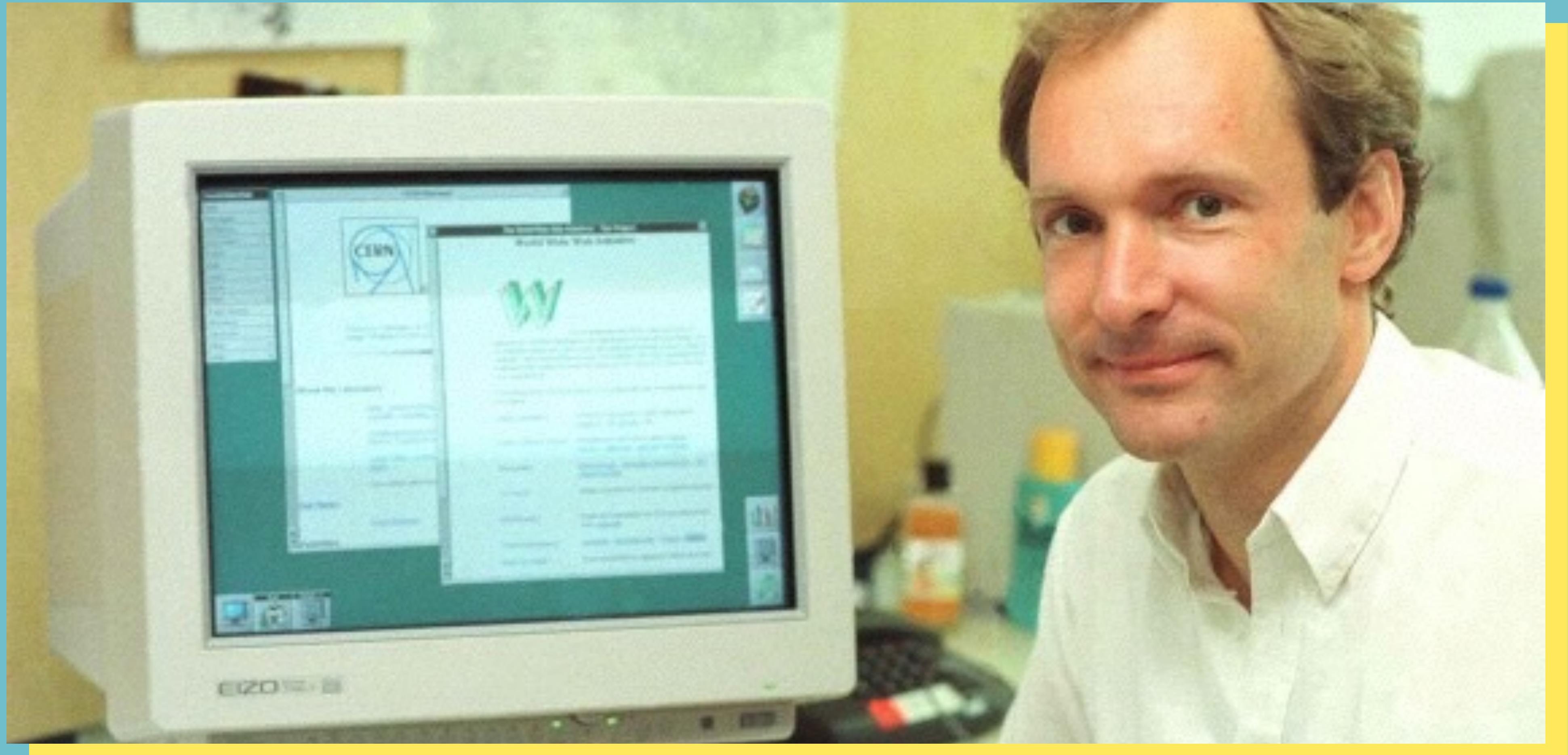
A VERY BRIEF HISTORY OF THE ERAS OF THE WEB AND CSS

CHESS
POKER
FIGHTER COMBAT
GUERRILLA ENGAGEMENT
DESERT WARFARE
AIR-TO-GROUND ACTIONS
THEATERWIDE TACTICAL WARFARE
THEATERWIDE BIOTOXIC AND CHEMICAL WARFARE
GLOBAL THERMONUCLEAR WAR



Pre-History

POINT-TO-POINT CONNECTIONS; BULLETIN BOARDS; RESEARCHERS



The Classical Era

HTTP; HTML; THE BROWSER; SIR TIM BERNERS-LEE

 Shame and War Revisited - Netscape

File Edit View Go Communicator Help





Shame and War Revisited

Adding Semantic Markup to HTML

Philip Greenspun
Laboratory for Computer Science and Artificial Intelligence Laboratory
Massachusetts Institute of Technology

Abstract

"HTML represents the worst of two worlds. We could have taken a formatting language and added

The Middle Ages

OR THE RISE AND FALL OF CSS



The Modern Era

HTML5; CSS3; ADVANCED JS; FRAMEWORKS



Postmodernity

ADVANCED LAYOUT; RE-EMERGENCE OF UNIQUE DESIGN

“Postmodernism was a reaction to modernism. Where modernism was about **objectivity**, postmodernism was about **subjectivity**. Where modernism sought a **singular truth**, postmodernism sought the **multiplicity of truths**.”

– Miguel Syjuco

Our Objectivism

HEY LOOK, IT'S EVERY BOOTSTRAP WEBSITE EVER

Take a look around at the same bootstrap page you've seen ten million times before!
Featuring all the same things as those pages!

THIS BUTTON MAKES THE PAGE SCROLL

“Simplifying to the extreme, I define postmodern as an incredulity toward **metanarratives**.”

– Jean-François Lyotard

Our Metanarrative

“CSS Sucks”

-EVERY DEVELOPER EVER



The Rise and Fall of CSS

THE BATTLE OVER STYLE SHEETS AND IMPLEMENTATION

CSS Starts Strong

1994: CSS1 Spec starts

1996: CSS1 Spec complete (IE3 kinda adopts)

2000: IE5 reaches 99% CSS1 adoption

The screenshot shows the homepage of Angelfire, a web hosting service. At the top, there's a navigation bar with links to Lycos.com, Tripod.com, WhoWhere.com, MailCity.com, Hotwired.com, and HotBot.com, followed by an "All Sites..." link. The main header features the "ANGELFIRE" logo in a stylized font. Below the header, there's a section titled "FREE PAGES" with text about getting fast pages and thousands of URLs. To the right, there's a list of services: Site Map and Info, Free Angelfire Email, Search/Browse Angelfire, and Message Boards. A tagline "You make the pages... We make it easy." is centered below the services. At the bottom, there are "Register" and "Login" buttons. On the left side, there's a red button labeled "sell books," and on the right, a note about the site being the official for Super Bowl XXXIII.

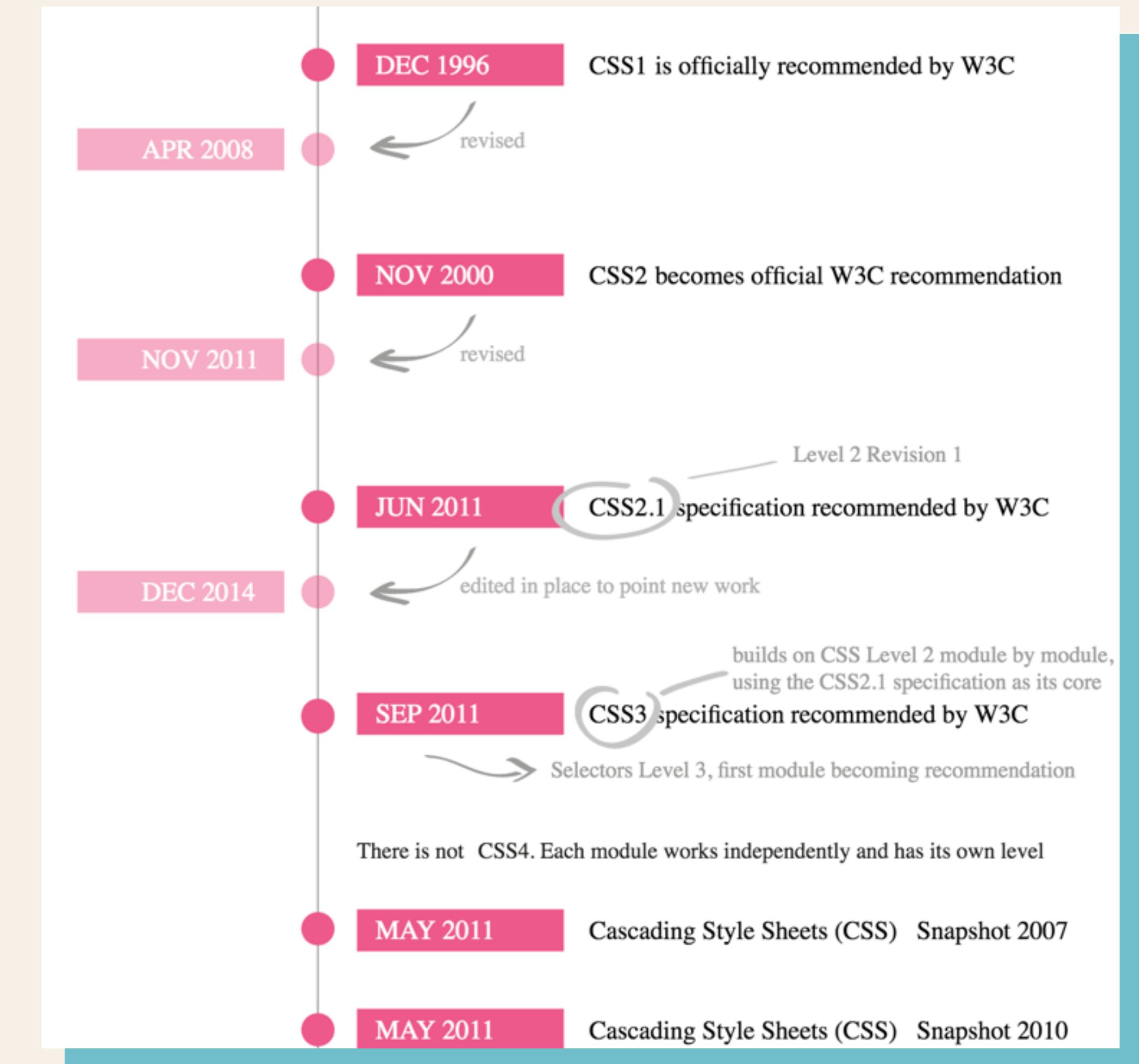
The middle part, not so much

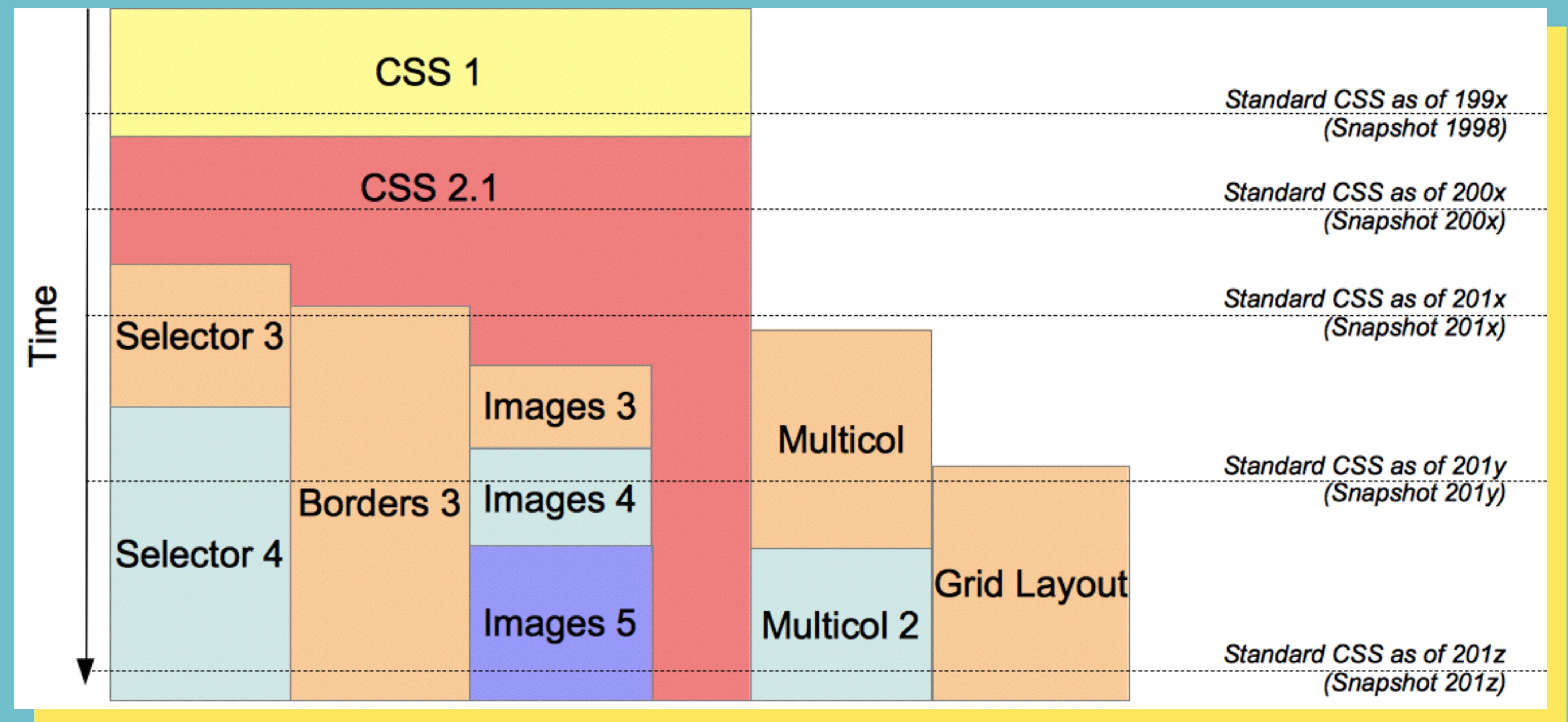
1998: CSS2 Spec first WD

2000: CSS2 Becomes Recommendation

2000-07: CSS2/2.1 turmoil and back and forth

2011: CSS2.1 Finally finished and published





Why CSS3 is better

THE SECRET SAUCE IS MODULES

SOURCE: [MDN](#)

Further Reading

- [The CSS Saga](#)
- [The Evolution of CSS](#)

The New Hotness

TODAY'S GOAL: ADOPT ONE OF THESE PROPERTIES

Code Examples: postmoderncss.com

CSS Gradients

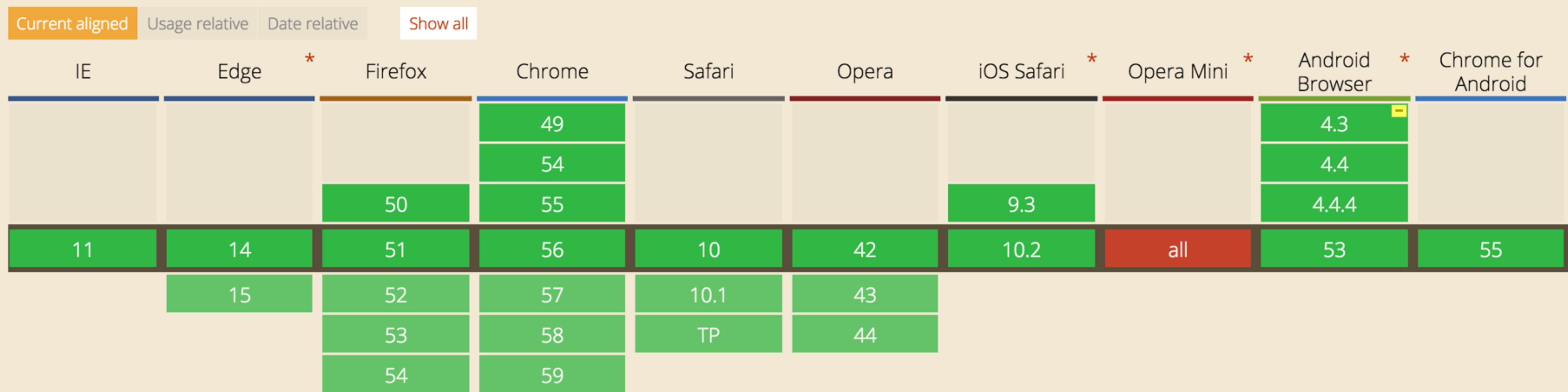
WHY USE IMAGES WHEN CSS CAN DO AMAZING THINGS?

Support (Go FOR It!)

CSS Gradients - CR

Method of defining a linear or radial color gradient as a CSS image.

Global	93.88% + 0.13% = 94.01%
unprefixed:	83.73%
U.S.A.	97.66% + 0.09% = 97.75%
unprefixed:	96.81%



CSS Gradients for fun and profit

```
body {  
    background-image: linear-  
gradient(#F46035, #7E311C);  
}
```

CSS Gradients for fun and profit

```
body {  
    background-image: linear-  
gradient(45deg, #F46035, #7E311C);  
}
```

CSS Gradients for fun and profit

```
body {  
    background-image: linear-  
gradient(to bottom, #F46035,  
#7E311C 50%, #F46035 70%);  
}
```

CSS Gradients for fun and profit

```
body {  
    background-image: radial-  
gradient(#F46035, #7E311C);  
}
```

CSS Gradients for fun and profit

```
body {  
    background-image: radial-  
gradient(circle at 10% 0, #F46035,  
#7E311C 50%);  
}
```

CSS Gradients for fun and profit

```
body {  
    background-image: repeating-  
        linear-gradient(to top right,  
        #F46035, #F46035 20px, #7E311C  
        20px, #7E311C 40px);  
}
```



CSS Gradients for fun and profit

```
body {  
    background-image: repeating-  
        linear-gradient(to top right,  
        #F46035, #F46035 20px, #7E311C  
        20px, #7E311C 40px);  
}
```

```
repeating-linear-gradient(  
    to top right, #F46035, #F46035 20px, #7E311C  
    20px, #7E311C 40px  
);
```

```
repeating-linear-gradient(  
    [direction], [first color] #F46035,  
    [first color again to fight fade] #F46035 20px,  
    [second color] #7E311C 20px,  
    [second color again to fight fade] #7E311C 40px  
) ;
```

CSS Shapes

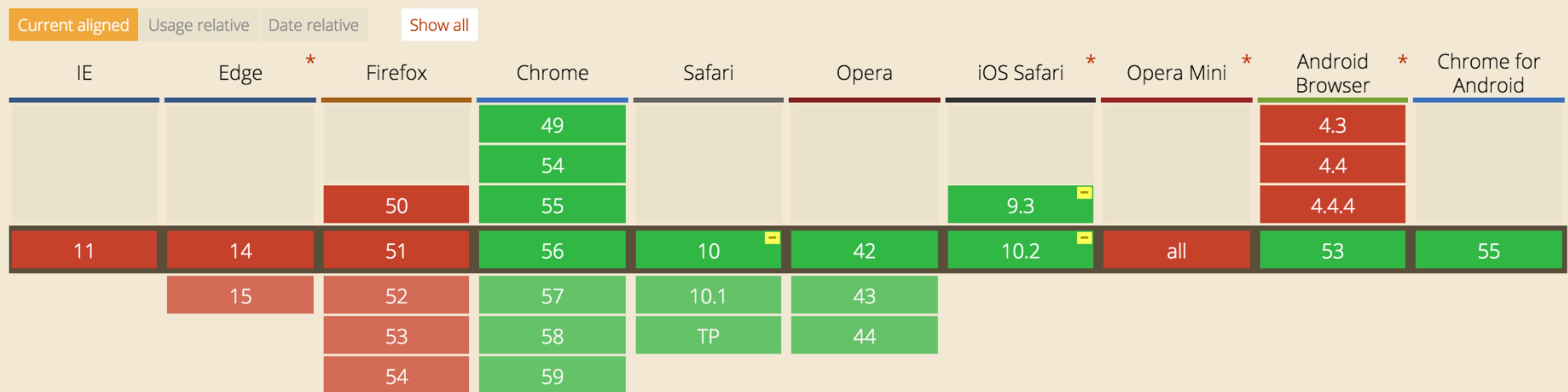
MAKING FLOATING IMAGES INTERESTING AGAIN

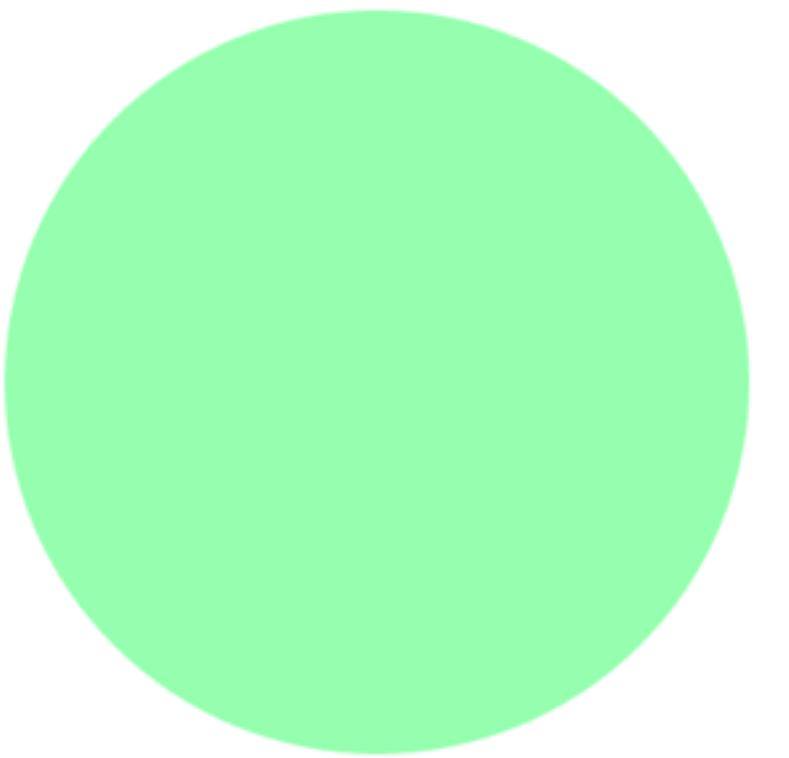
Support (USE BUT DON'T DEPEND ON)

CSS Shapes Level 1 - CR

Allows geometric shapes to be set in CSS to define an area for text to flow around.

Global 68.14%
unprefixed: 56.27%
U.S.A. 76.17%
unprefixed: 48.24%





(CIRCLE) How do you like CSS now?

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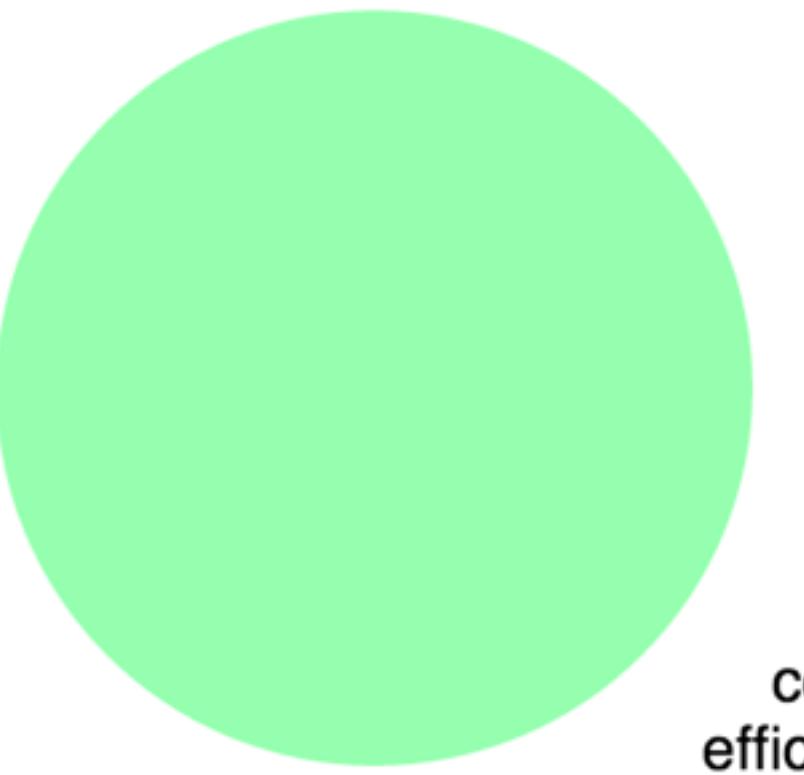
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```
<main class="container angled">
  <div class="circle"></div>

  <h1></h1>
  <p>...</p>
  <p>...</p>
  <p>...</p>
</main>
```

`shape-outside(circle, polygon, url, content-box)`

SHAPE-INSIDE COMING IN LEVEL 2



(CIRCLE) How do you like CSS now?

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```
.circle {  
    float: left;  
    shape-outside: circle();  
    margin: 0 3em .5em 0;  
}
```

(POLYGON) How do you like CSS now?

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```
<main class="container angled">
  <div class="polygon"></div>
  <h1></h1>
  <p>...</p>
  <p>...</p>
  <p>...</p>
</main>
```

(POLYGON) How do you like CSS now?



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vitae finibus. Nunc in libero non augue egestas molestie id ut
sapien.

```
.polygon {  
    float: left;  
    width: 200px;  
    height: 400px;  
    shape-outside: polygon(22% 0,  
    23% 18%, 79% 25%, 90% 36%, 66%  
    56%, 75% 80%, 28% 101%, 45% 60%,  
    45% 40%);  
}
```



(IMAGE) How do you like CSS?

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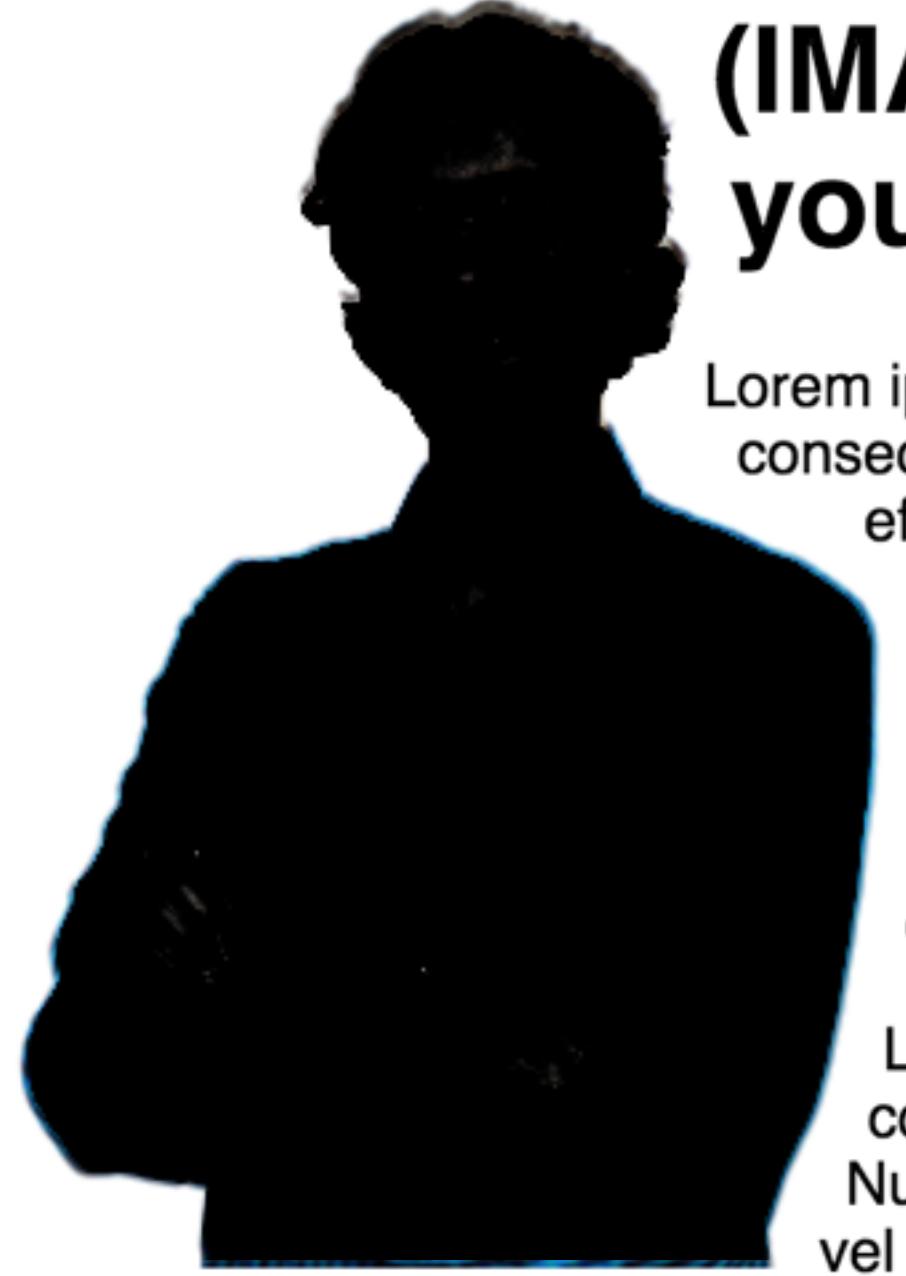
Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

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```
<main class="container angled">
  
  <h1></h1>
  <p>...</p>
  <p>...</p>
  <p>...</p>
</main>
```



(IMAGE) How do you like CSS?

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```
img {  
    float: left;  
    shape-outside: url(mask.png);  
    shape-margin: 10px;  
}
```

(MULTIPLE) How do you like CSS now?

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```
<main class="container angled">
  <aside class="left"></aside>
  <aside class="right"></aside>
  <h1></h1>
  <p>...</p>
  <p>...</p>
  <p>...</p>
</main>
```

(MULTIPLE) How do you like CSS now?

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc efficitur sollicitudin felis vel gravida. Suspendisse aliquet tellus dictum, faucibus eros vel, mattis orci. Vivamus luctus sed dolor vitae finibus. Nunc in libero non augue egestas molestie id ut sapien.

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```
.left {  
    float:left;  
    width: 20%;  
    height: 730px;  
    shape-outside: polygon(50% 0%,  
    100% 50%, 50% 100%, 0% 50%)  
}
```

```
.right {  
    float: right;  
    width: 20%;  
    height: 730px;  
    shape-outside: polygon(50% 0%,  
    100% 50%, 50% 100%, 0% 50%)  
}
```

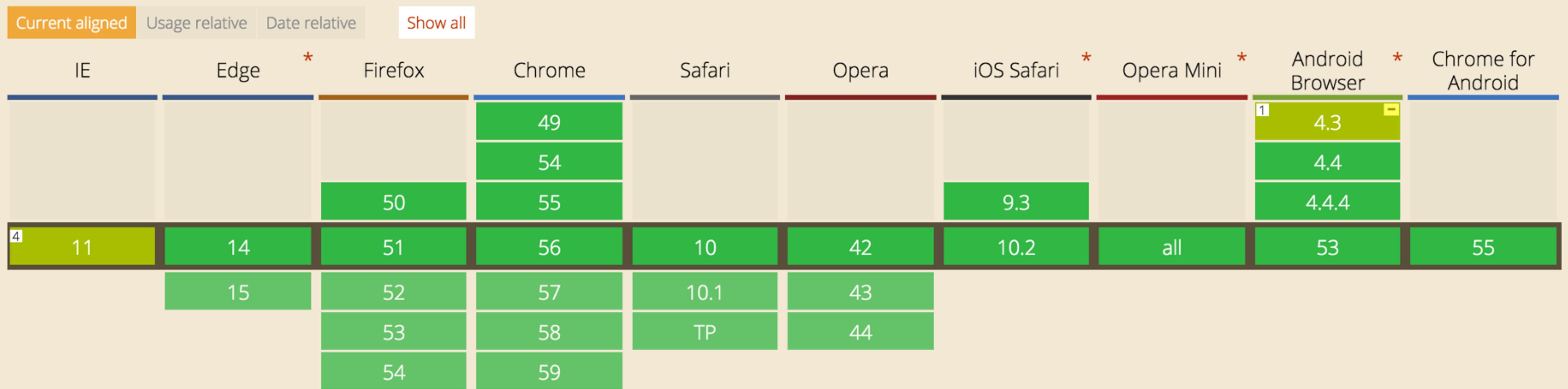
Flexbox

TRULY RESPONSIVE UNI-DIRECTIONAL LAYOUT

Support (use unless <IE10 is important)

Flexible Box Layout Module - CR

Method of positioning elements in horizontal or vertical stacks. Support includes the support for the all properties prefixed with **flex** as well as **display: flex**, **display: inline-flex**, **align-content**, **align-items**, **align-self**, **justify-content** and **order**.



1

2

3

4

5

6

DEFAULT: BLOCK-LEVEL

```
<div class="container">
    <div class="box box1">1</div>
    <div class="box box2">2</div>
    <div class="box box3">3</div>
    <div class="box box4">4</div>
    <div class="box box5">5</div>
    <div class="box box6">6</div>
</div>
```

1

2

3

4

5

6

DEFAULT: SIMPLE STYLING

```
.container {  
    width: 510px;  
    margin: 0 auto;  
    background: lightblue;  
}  
  
.box {  
    background-color: tomato;  
    margin: 20px 0;  
    padding: 20px;  
    color: white;  
}
```

```
1 2 3 4 5 6
```

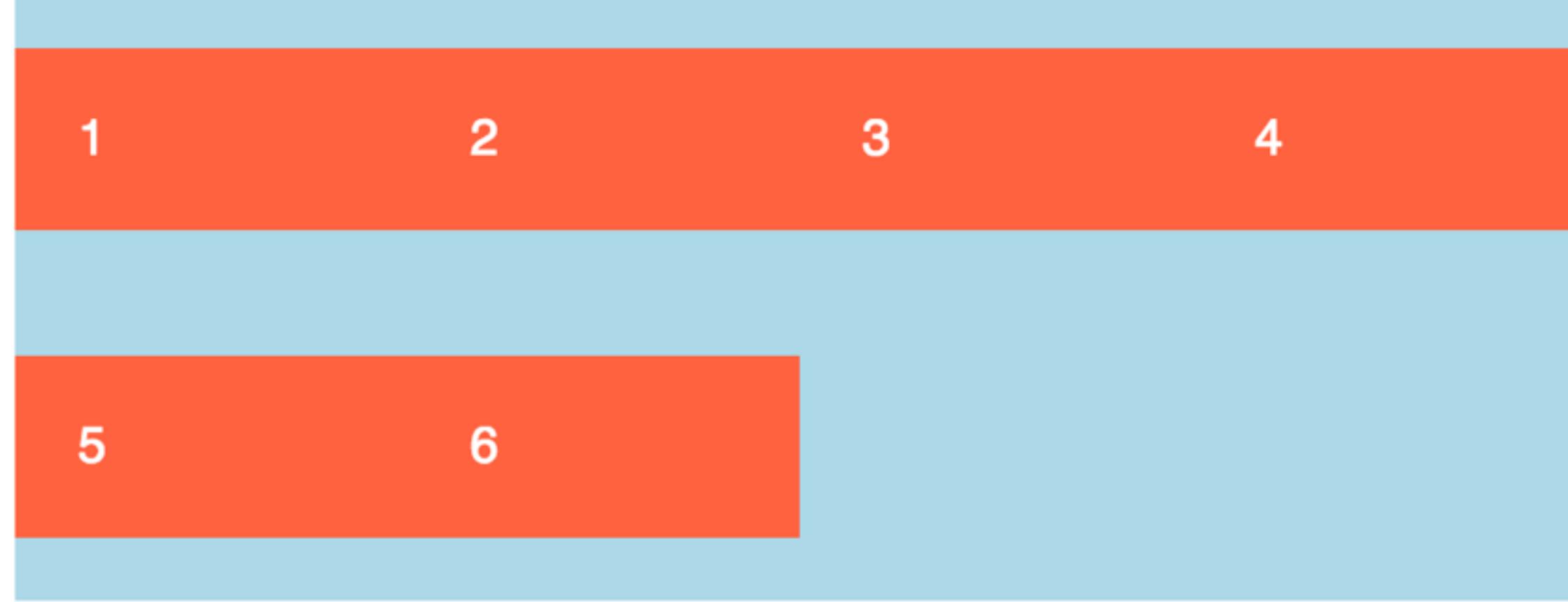
```
.container {  
    width: 510px;  
    margin: 0 auto;  
    background: lightblue;  
}  
.box {  
    float: left;  
    background-color: tomato;  
    margin: 20px 0;  
    padding: 20px;  
    color: white;  
}
```

1 2 3 4 5 6

```
.container:after {  
    content: "";  
    display: block;  
    clear: both;  
}
```

Box Size Math

(container size) 510px / 6 (number of boxes)
= 85px (box width)



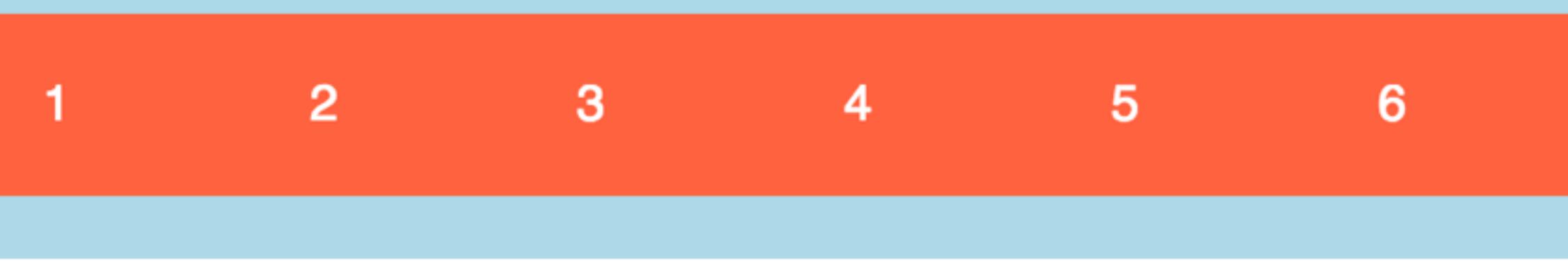
```
1 2 3 4
```

```
5 6
```

```
.box {  
    float: left;  
    background-color: tomato;  
    margin: 20px 0;  
    padding: 20px;  
    color: white;  
    width: 85px;  
}
```

Box Size Math (gosh darnit)

((container size) 510px / 6 (number of boxes)) - 40px (padding)
= 45px (box width)



1 2 3 4 5 6

```
.box {  
    float: left;  
    background-color: tomato;  
    margin: 20px 0;  
    padding: 20px;  
    color: white;  
    width: 45px;  
    or  
    width: 85px;  
    box-sizing: border-box;  
}
```

This is why we use frameworks

This is why Flex was created

1

2

3

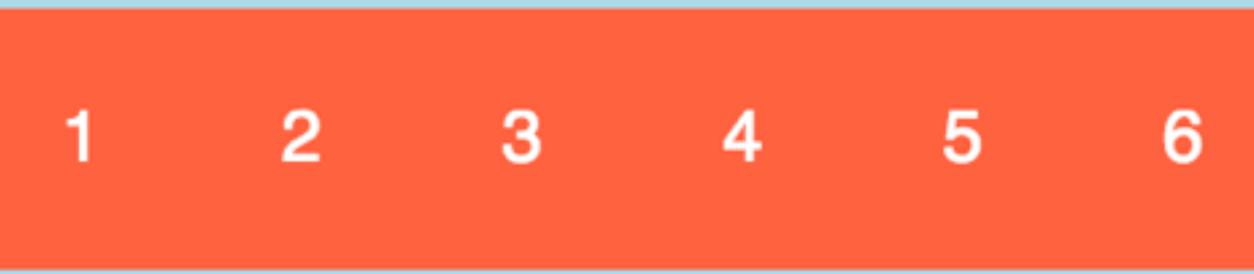
4

5

6

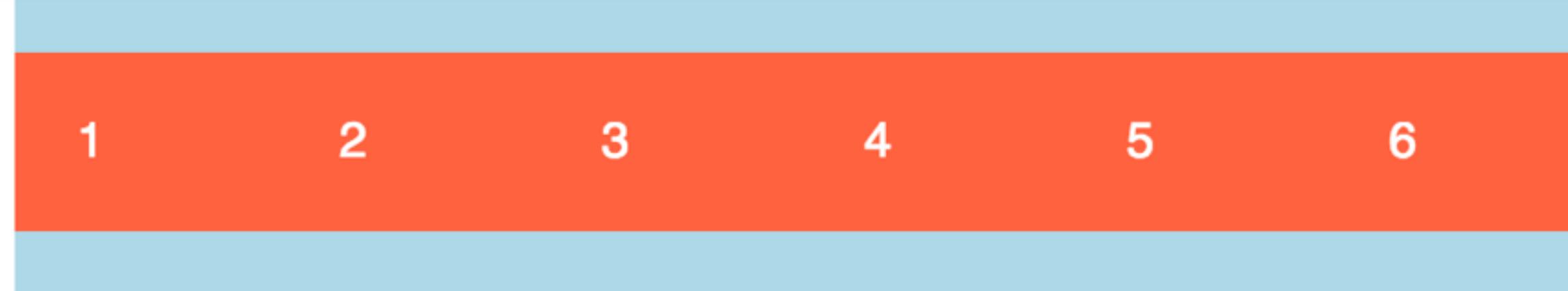
BACK THE TO START

```
<div class="container">
    <div class="box box1">1</div>
    <div class="box box2">2</div>
    <div class="box box3">3</div>
    <div class="box box4">4</div>
    <div class="box box5">5</div>
    <div class="box box6">6</div>
</div>
```



1 2 3 4 5 6

```
.container {  
    display: flex;  
}
```



1 2 3 4 5 6

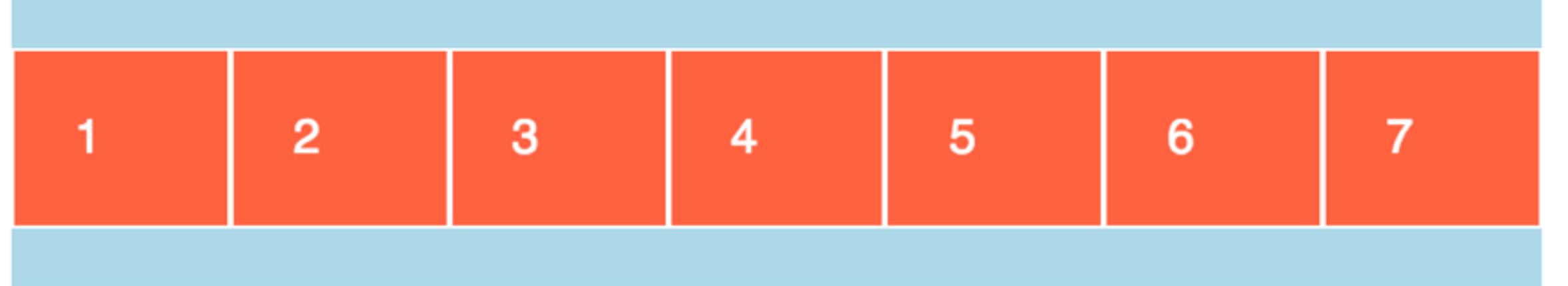
```
.container {  
    display: flex;  
}  
.box {  
    flex: 1;  
}
```

Box Size Math (done)

...



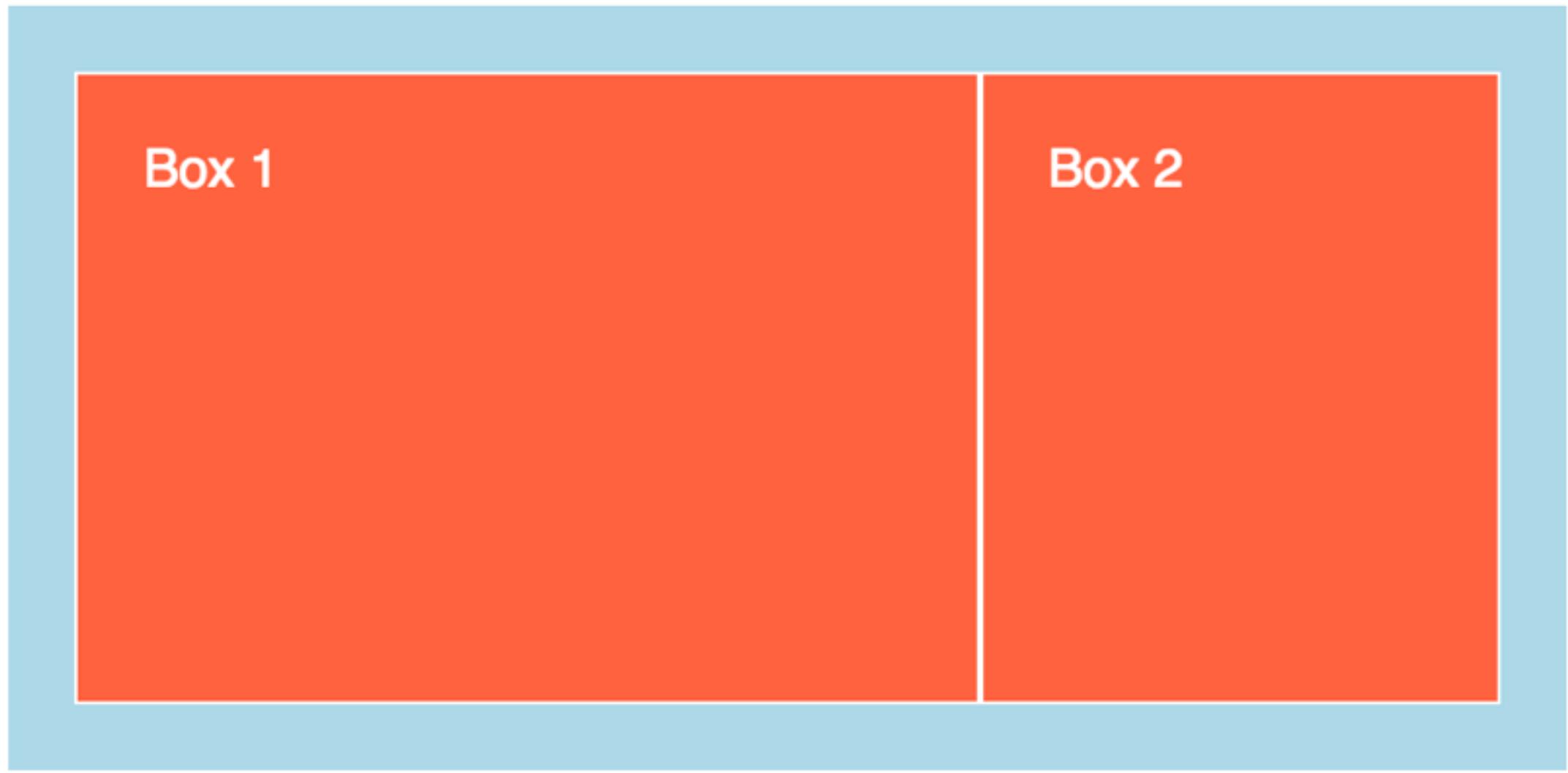
```
<div class="container">
    <div class="box box1">1</div>
    <div class="box box2">2</div>
    <div class="box box3">3</div>
    <!-- <div class="box box4">4</div>
        <div class="box box5">5</div>
        <div class="box box6">6</div>
-->
</div>
```



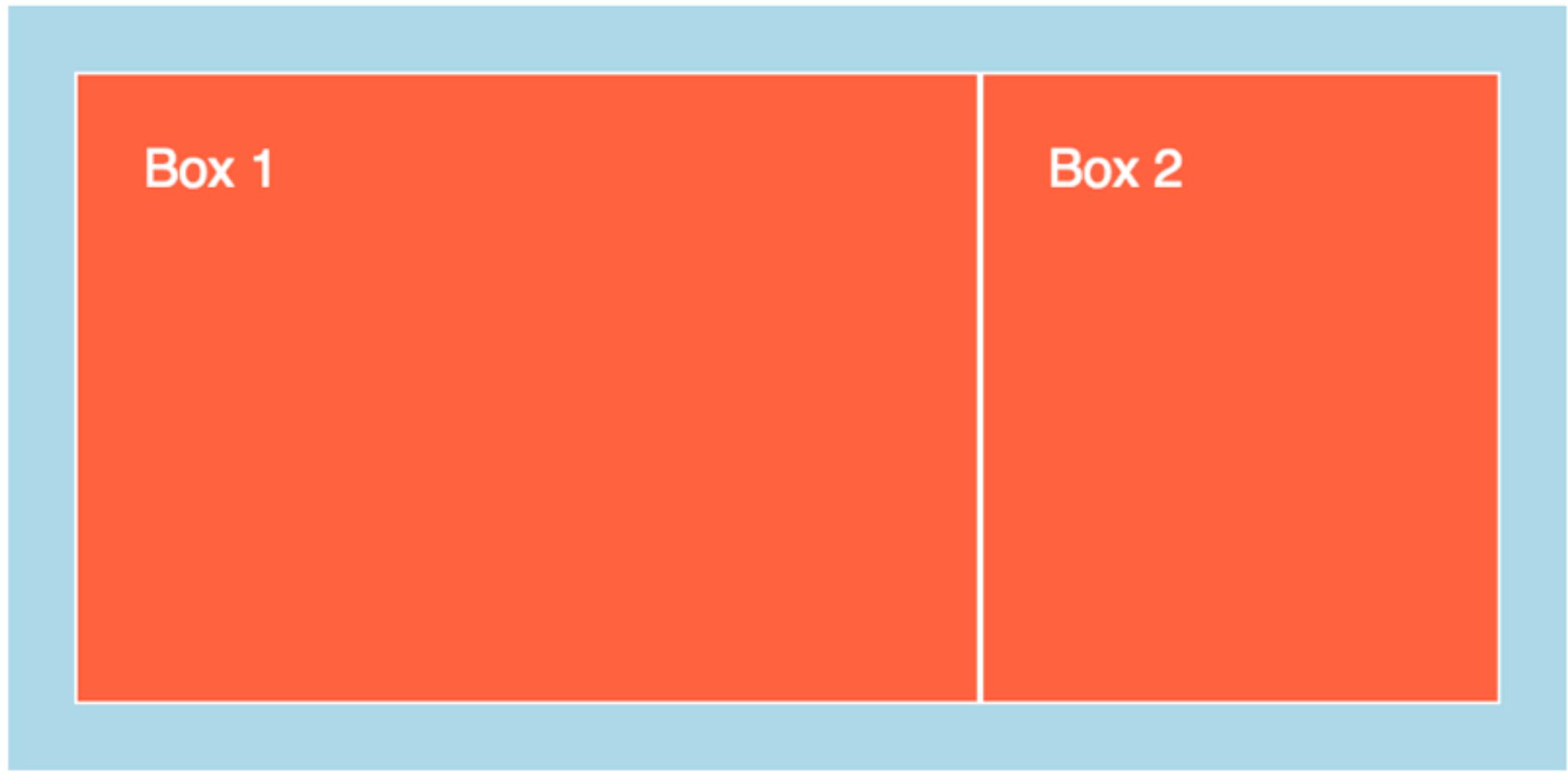
```
<div class="container">
    <div class="box box1">1</div>
    <div class="box box2">2</div>
    <div class="box box3">3</div>
    <div class="box box4">4</div>
    <div class="box box5">5</div>
    <div class="box box6">6</div>
    <div class="box box7">7</div>
</div>
```

Flex Layouts

Flex-grow

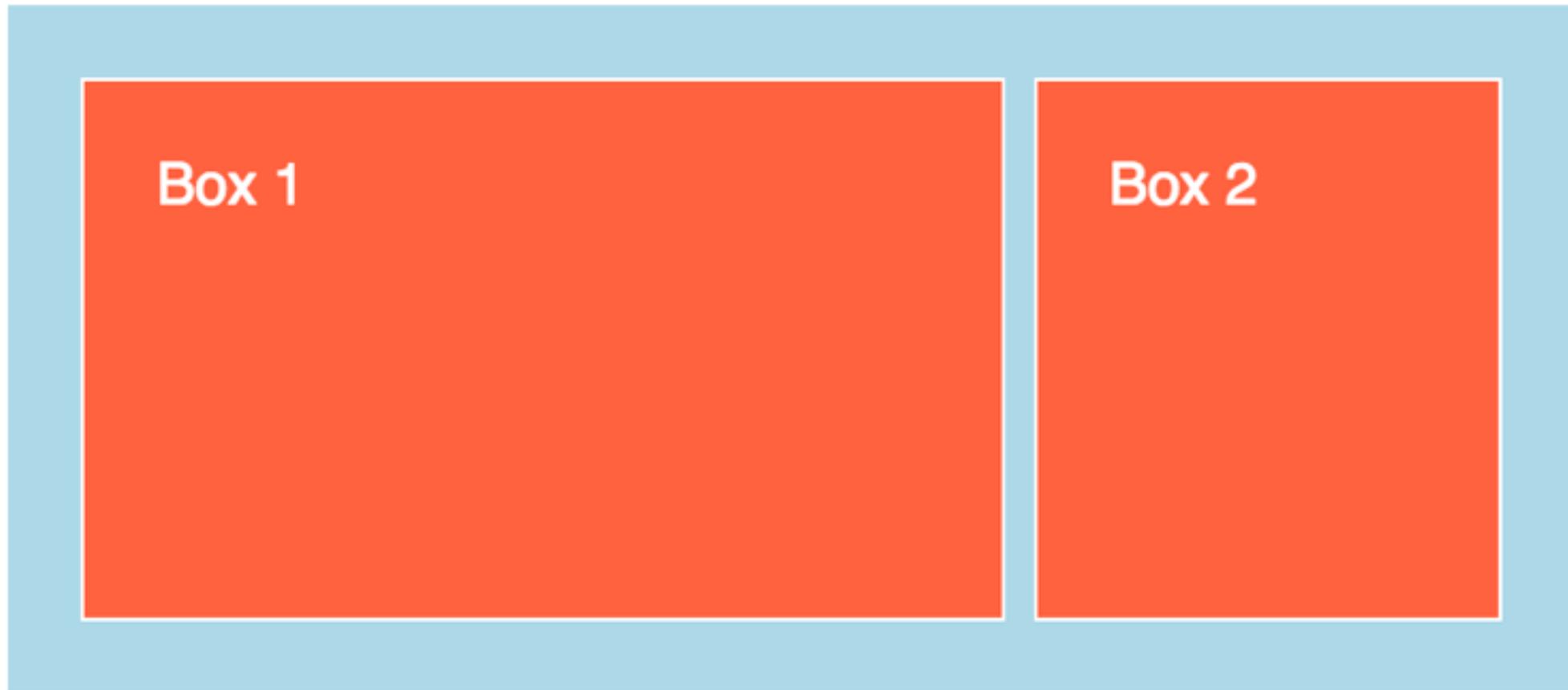


```
<div class="container">  
  <div class="box two-third">  
    Box 1  
  </div>  
  
  <div class="box one-third">  
    Box 2  
  </div>  
</div>
```



```
.container {  
  display: flex;  
}  
.two-third {  
  flex: 2;  
}  
.one-third {  
  flex: 1;  
}
```

Width + Justify-Content

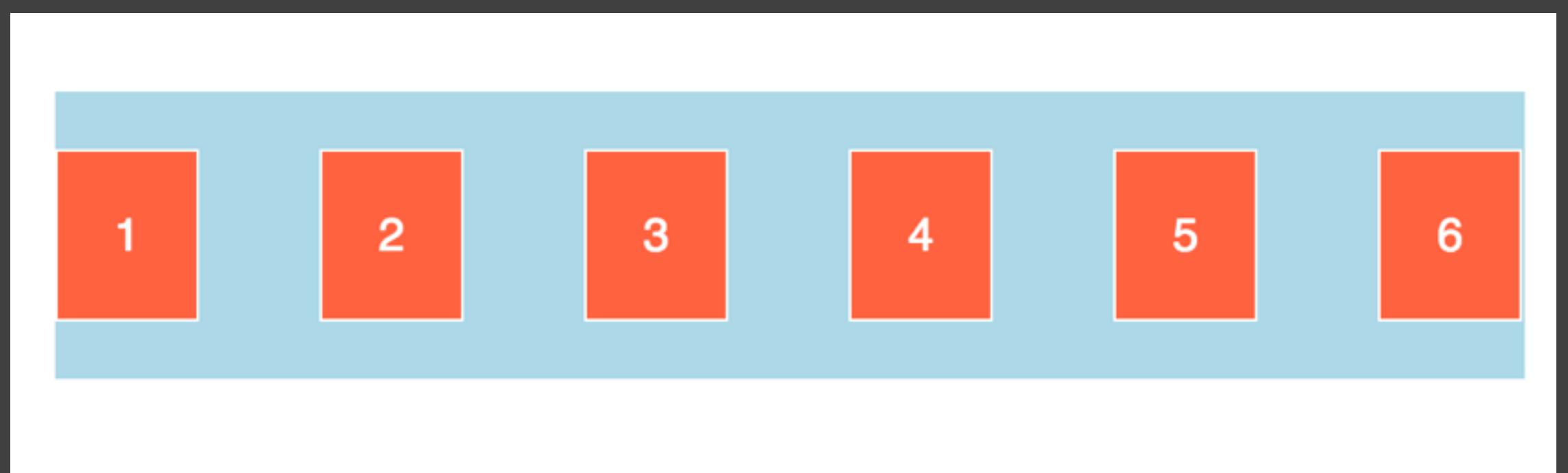
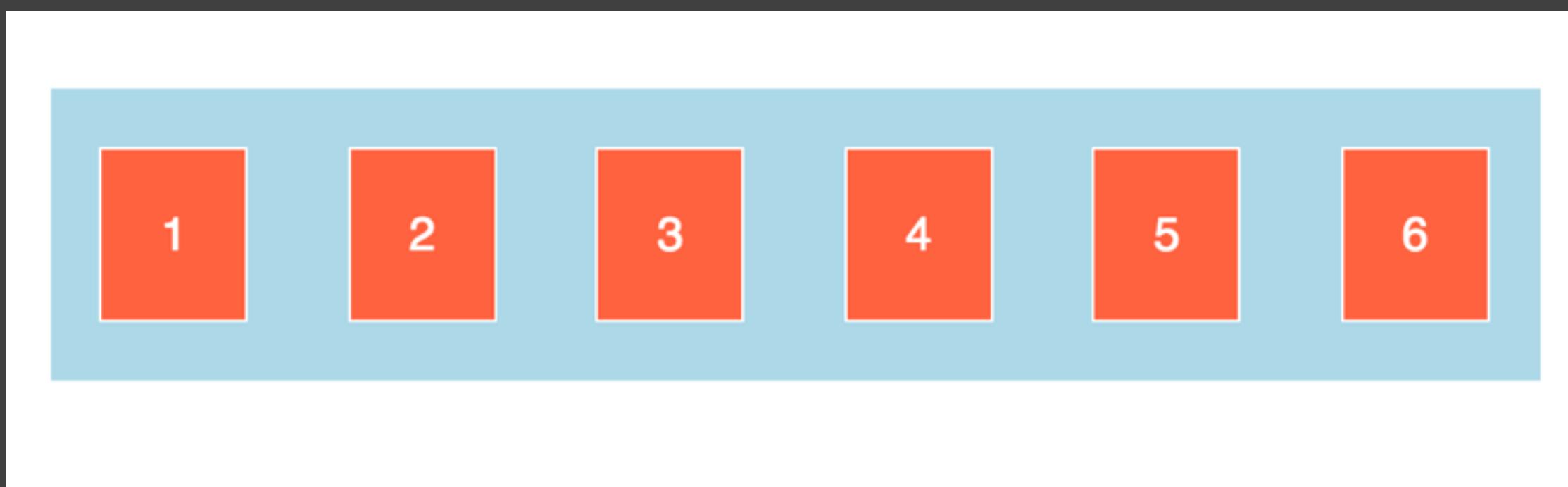
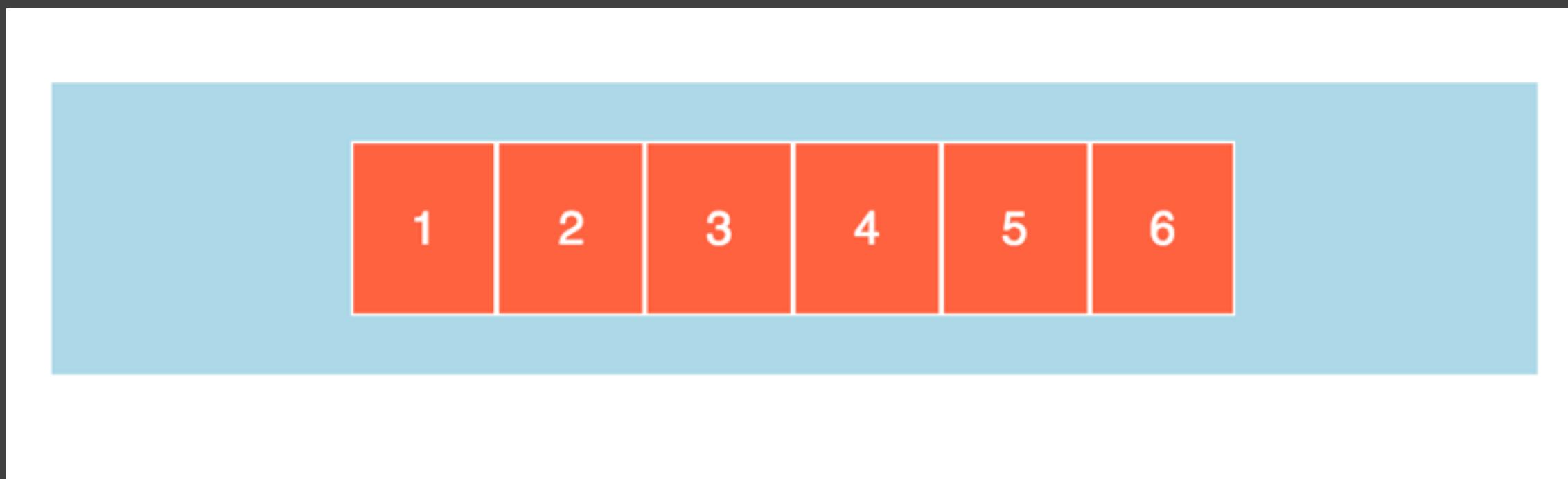
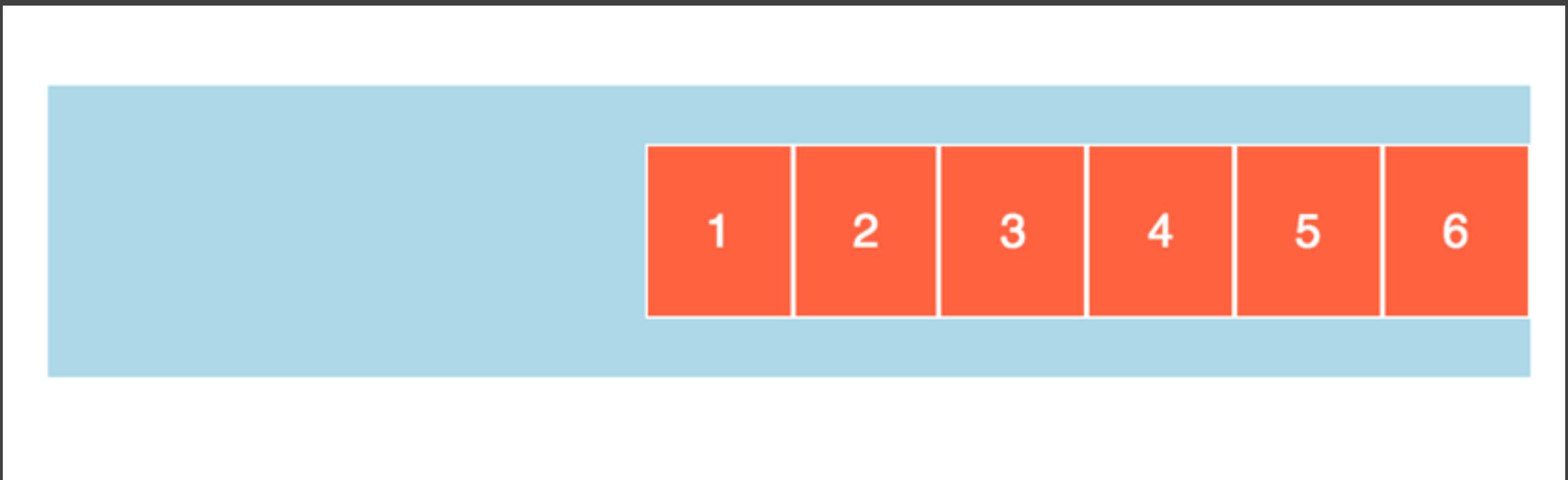
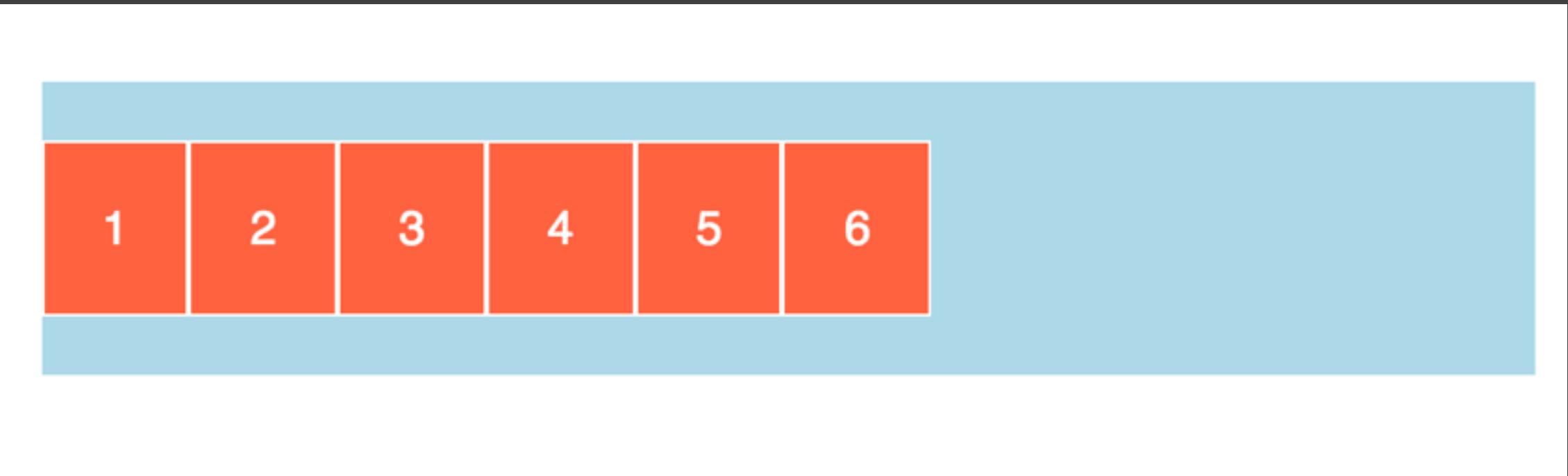


```
.container {  
    width: 80%;  
    padding: 20px;  
    display: flex;  
    justify-content: space-between;  
}  
.two-third {  
    width: 65%;  
}  
.one-third {  
    width: 33%;  
}
```

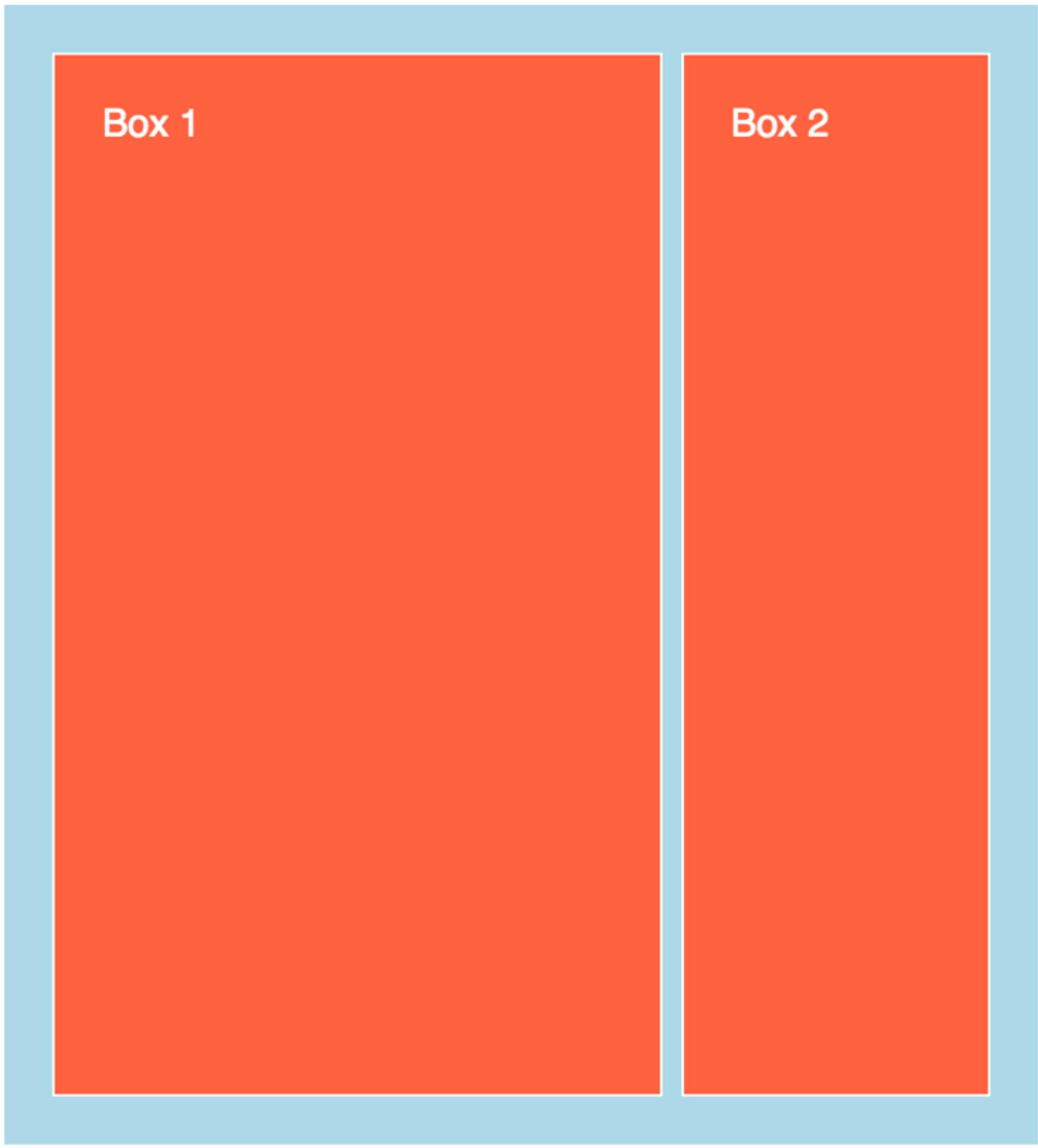
Box 1

Box 2

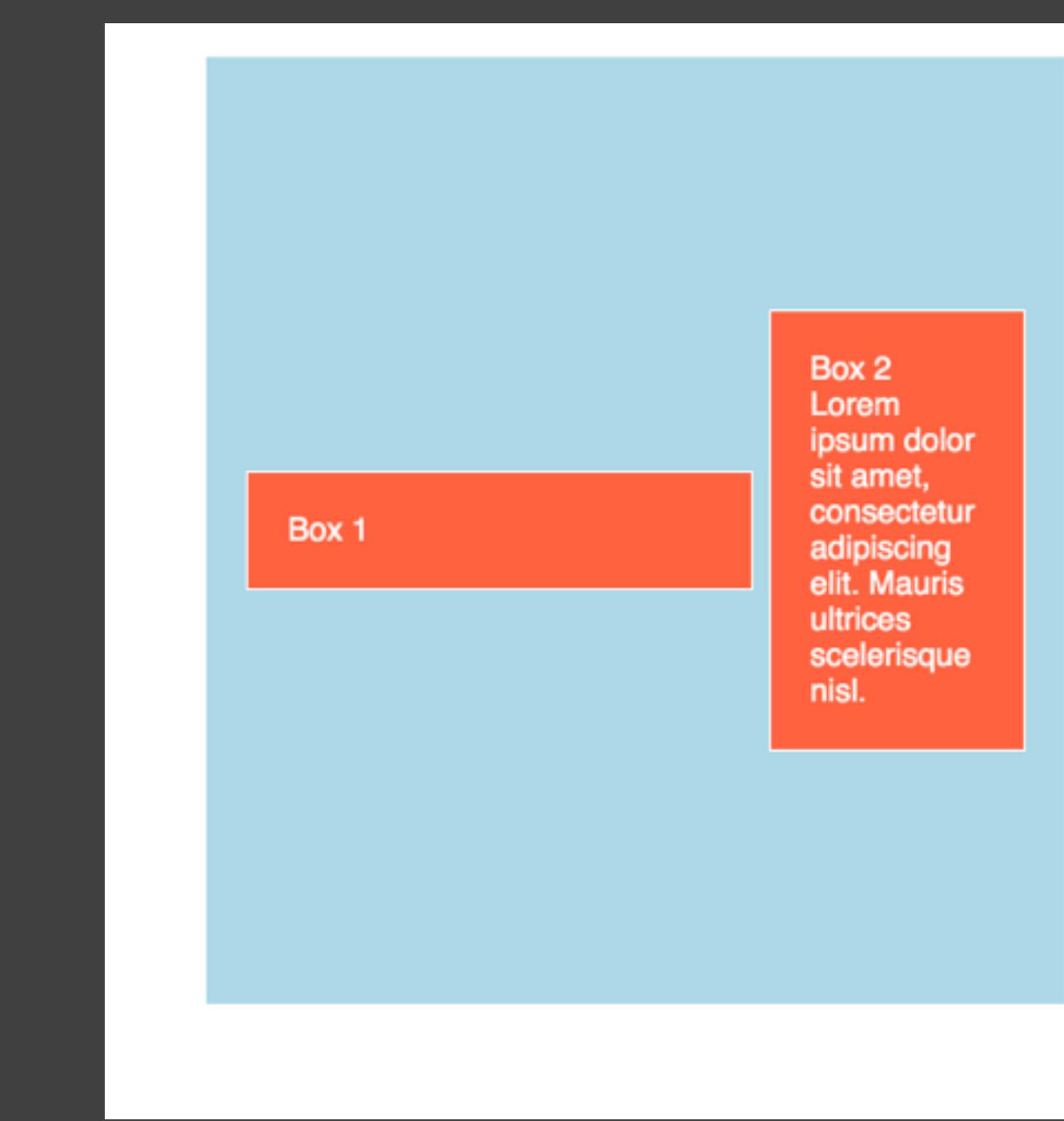
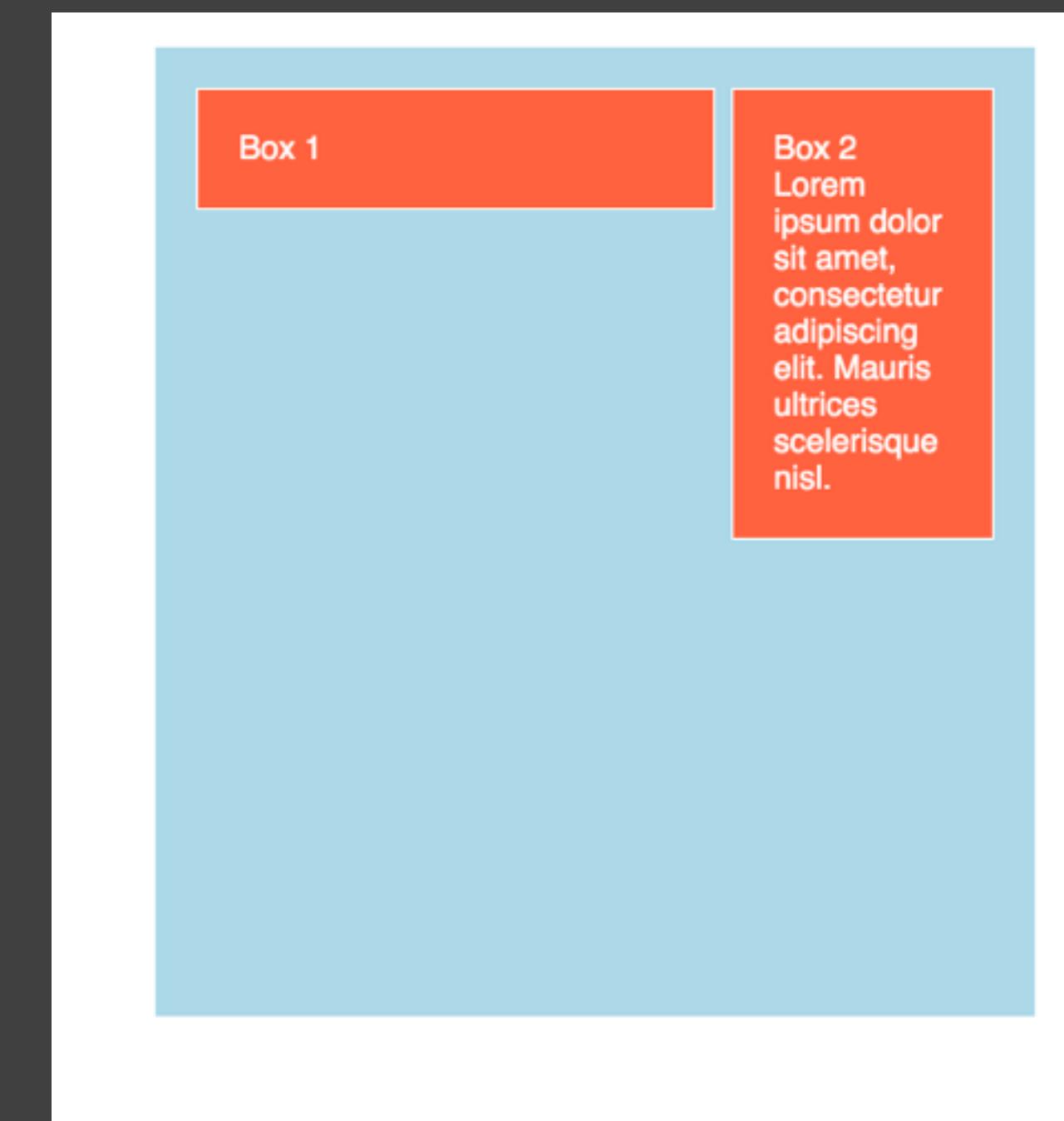
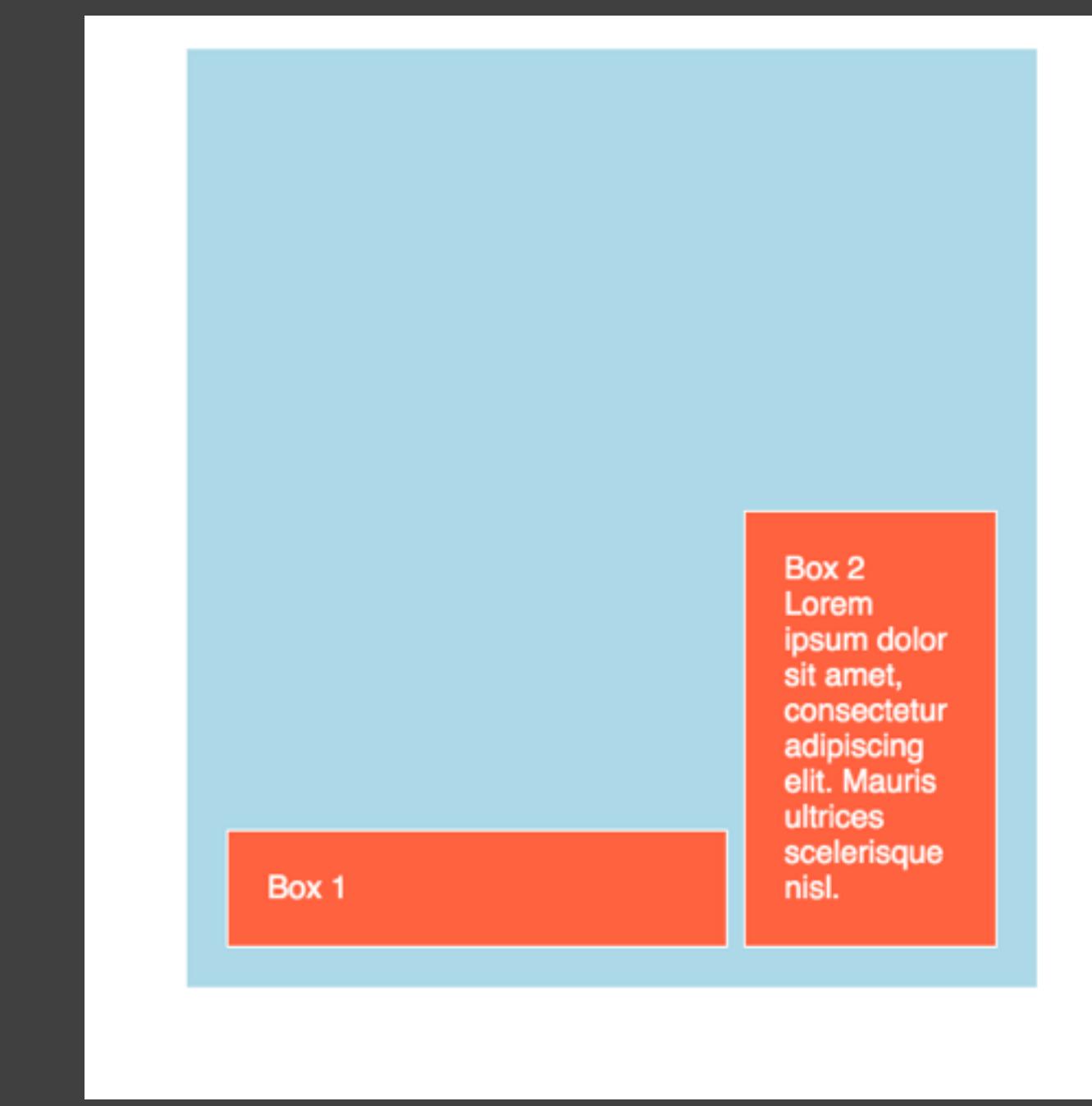
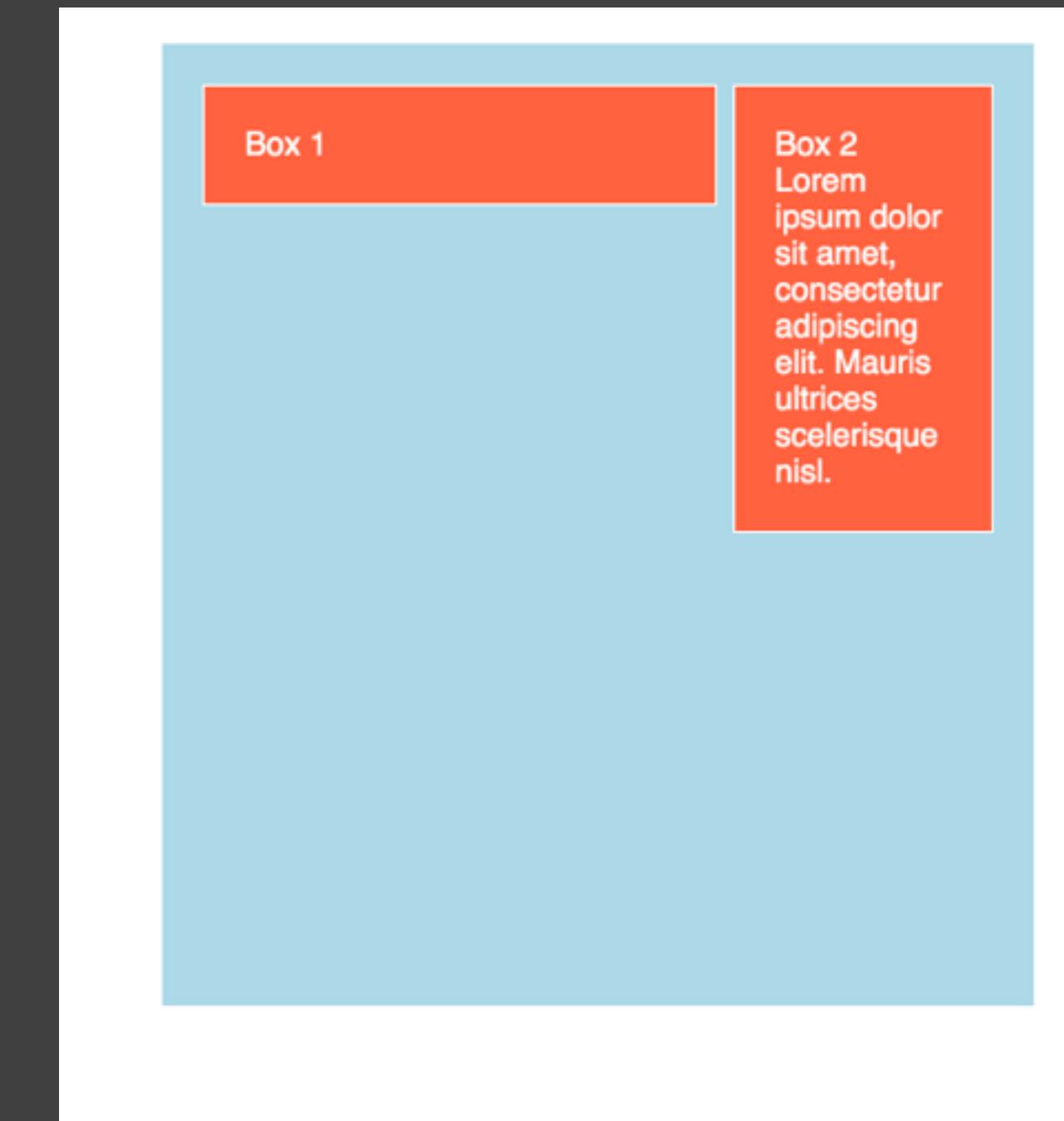
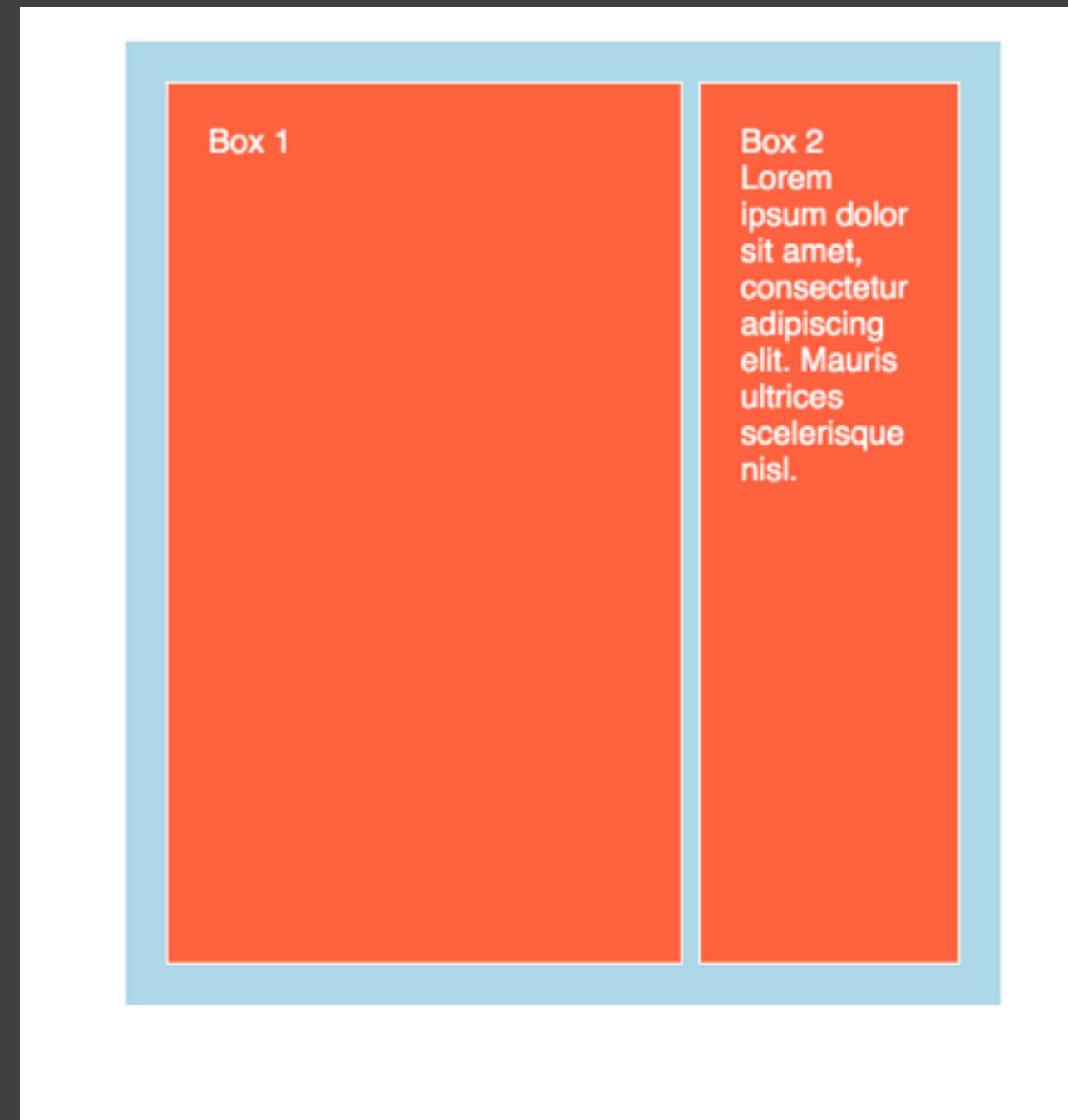
```
.container {  
  justify-content: space-between; // Extra whitespace between elements  
  justify-content: space-around; // Extra whitespace split to either  
                                side of elements  
  justify-content: space-evenly; // Extra whitespace split evenly  
                                around elements and row/column  
  justify-content: center;     // Content center with no whitespace  
  justify-content: flex-start; // Extra whitespace at the end  
                            (default)  
  justify-content: flex-end; // Extra whitespace at the start  
}
```



Height + Align-Items

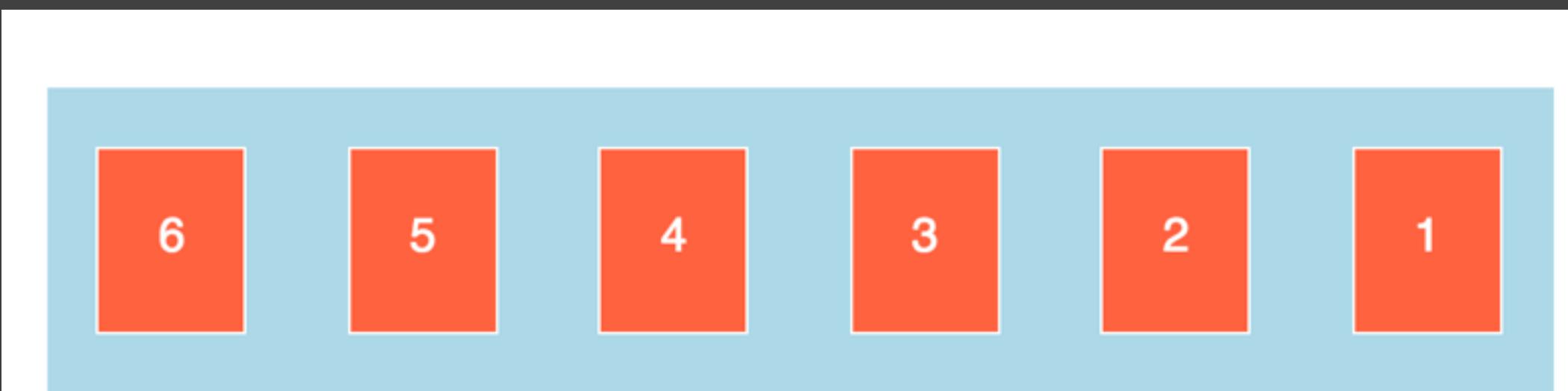
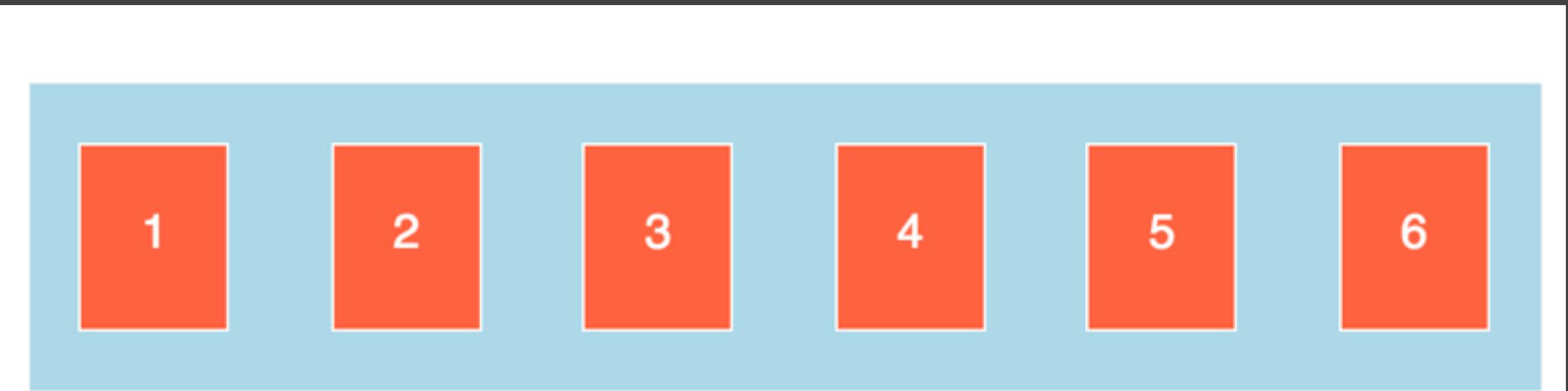


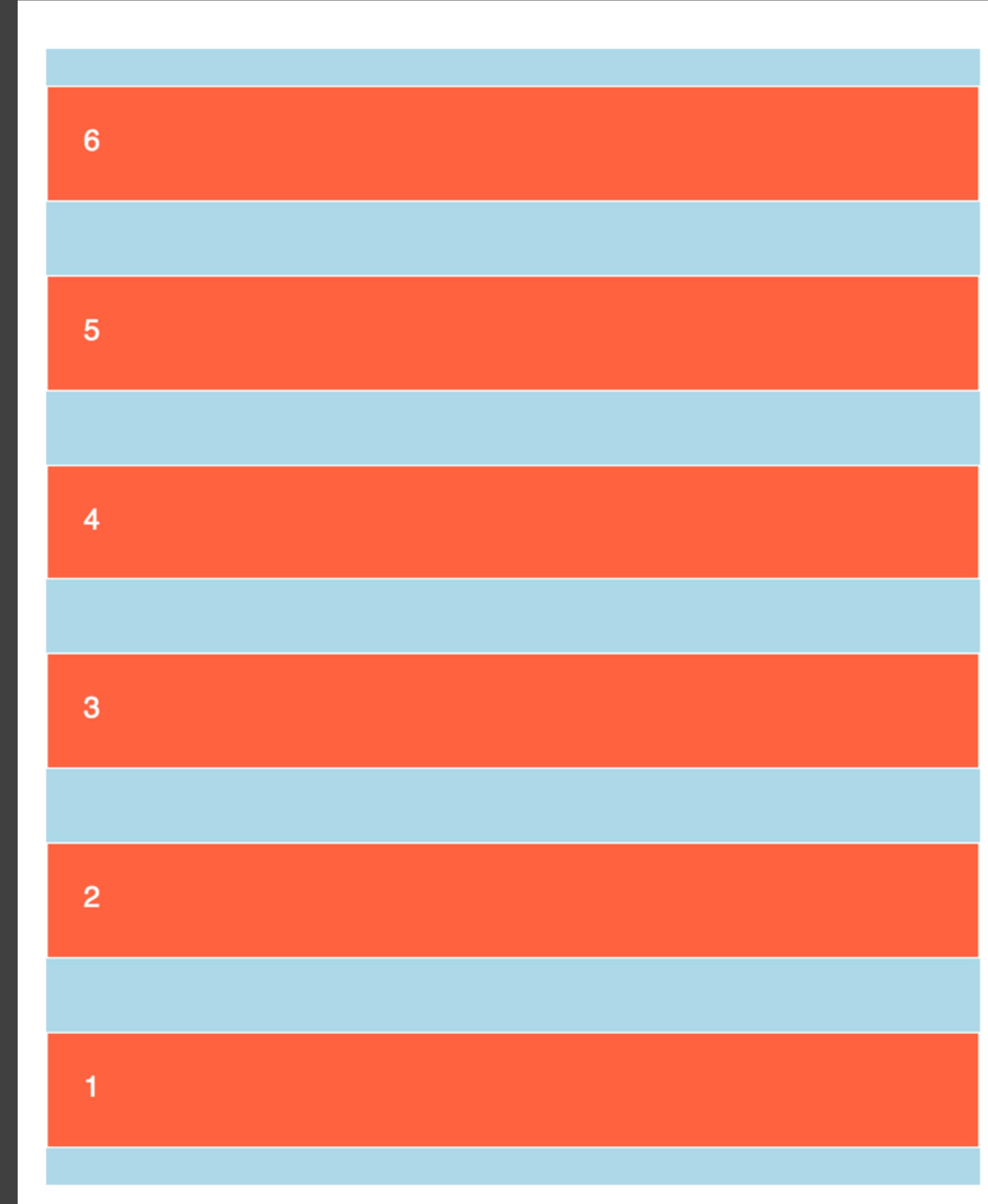
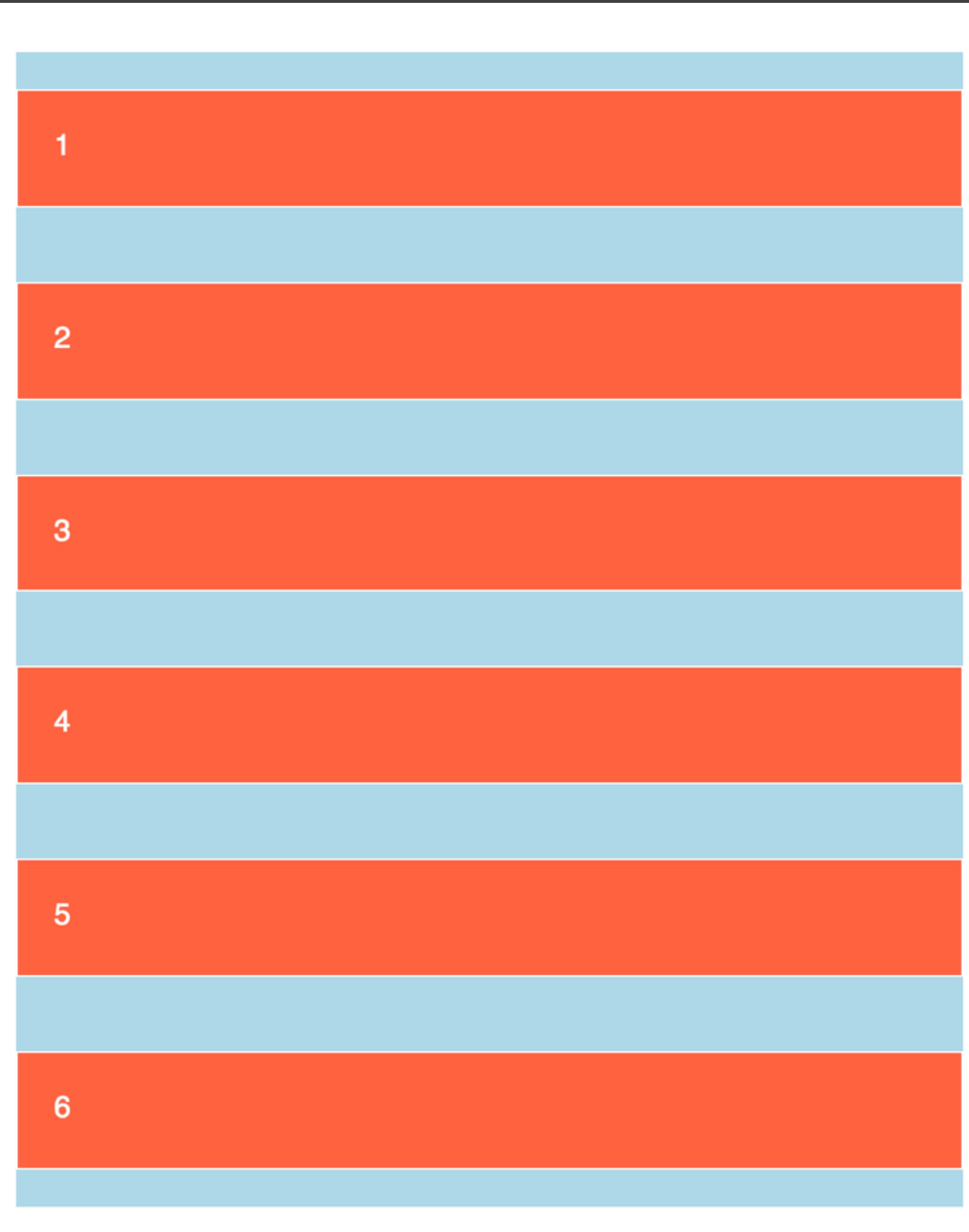
```
.container {  
    width: 80%;  
    height: 60vh;  
    padding: 20px;  
    display: flex;  
}  
.two-third {  
    width: 65%;  
}  
.one-third {  
    width: 33%;  
}
```

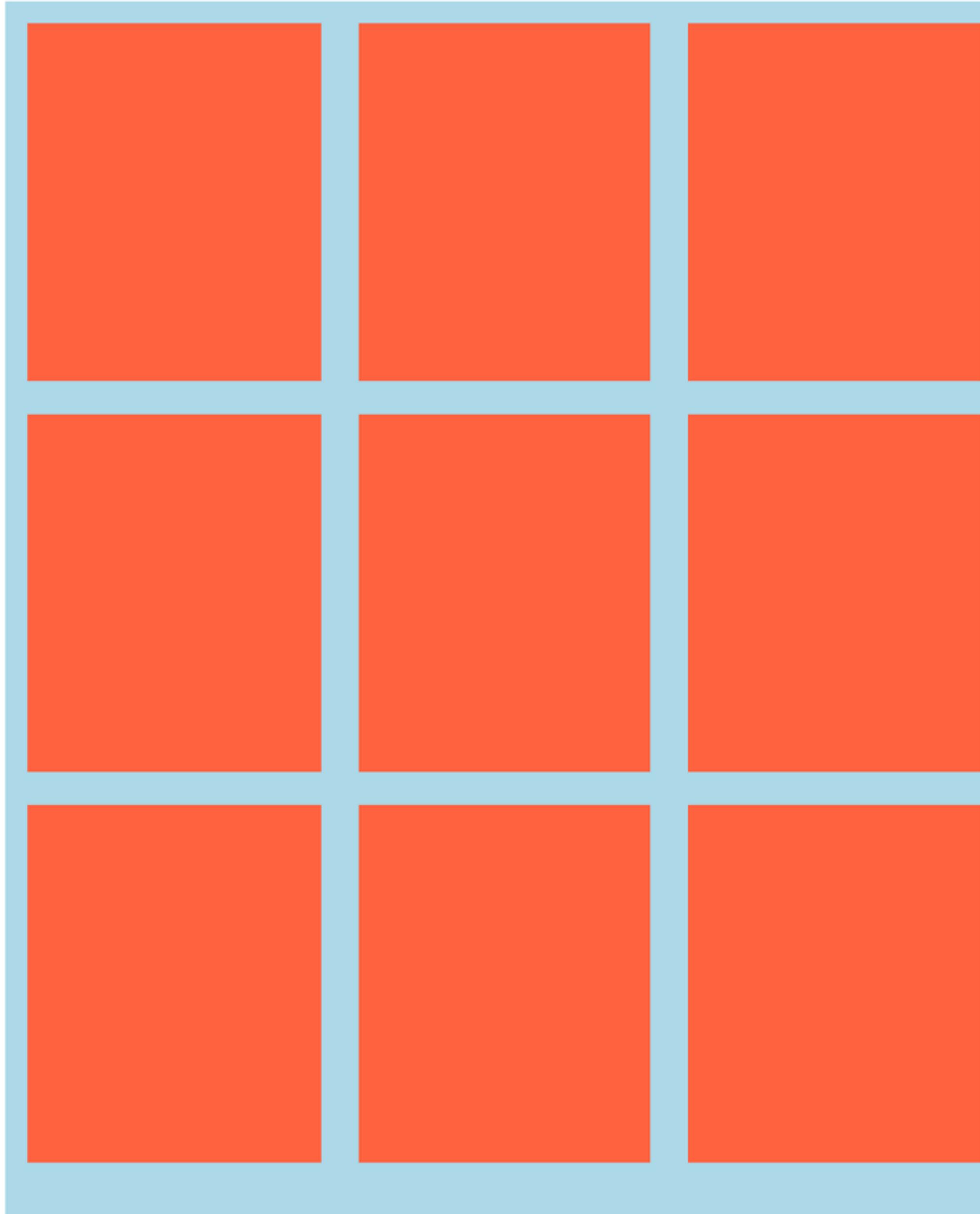
Directional Flexing

```
.container {  
  flex-direction: row;          // Default ... it's a row  
  flex-direction: row-reverse;   // Reverses the order of the row  
  flex-direction: column;        // It's a column with a simple  
                               change in CSS  
  flex-direction: column-reverse; // Reverses the direction of  
                               the column;  
  
  // Column also changes the direction justify and align deal with.  
}
```





Simple Utility - Fluid Grid



```
.container {  
    display: flex;  
    justify-content: space-between;  
    padding: 10px;  
    flex-wrap: wrap;  
}  
.box {  
    height: 30vw;  
  
    width: calc(33% - 10px);  
    margin-bottom: 15px;  
}
```

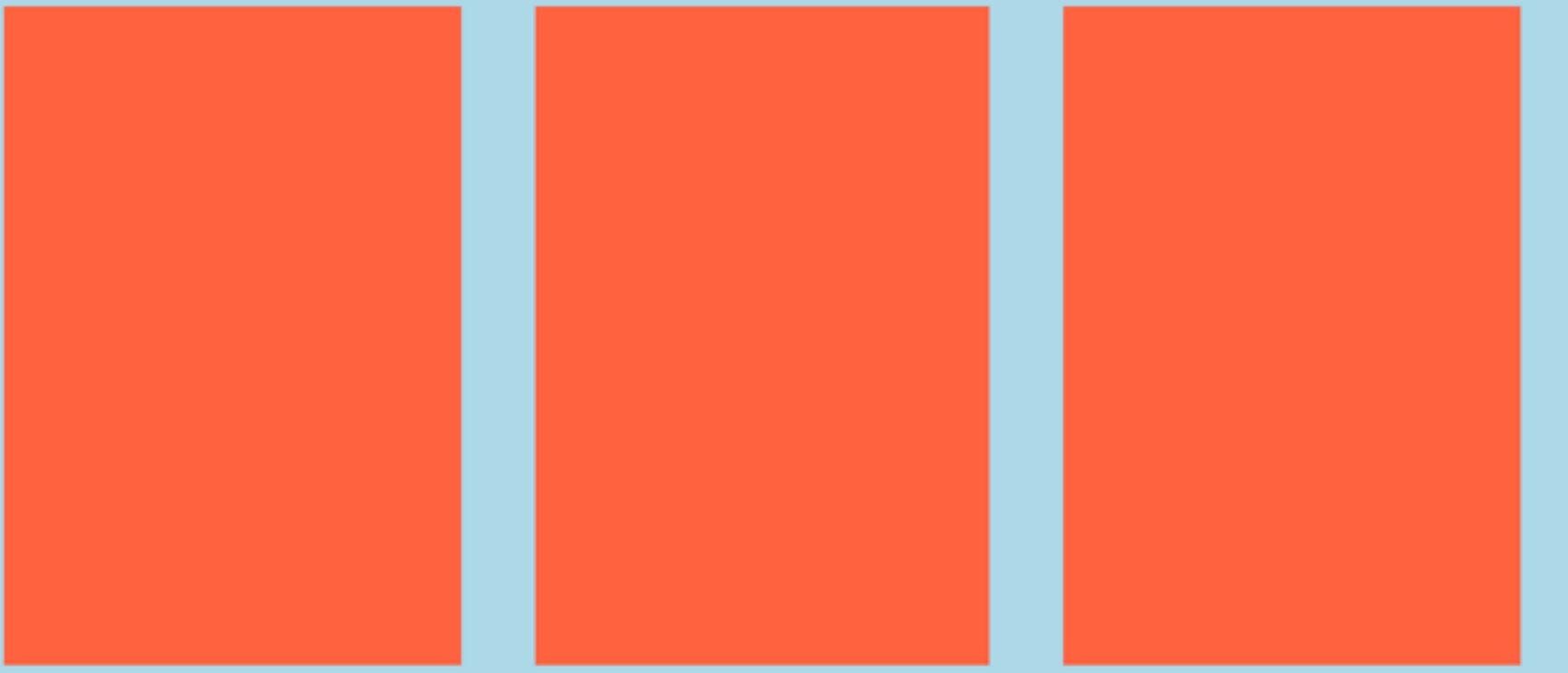
Learn More

- [Flexbox by Animated GIF](#)
- [Flexbox Froggy](#)
- [CSS Tricks Complete Guide to Flexbox](#)

New Units

SIZING HAS NEVER BEEN MORE FUN!

Size Relative to the viewport



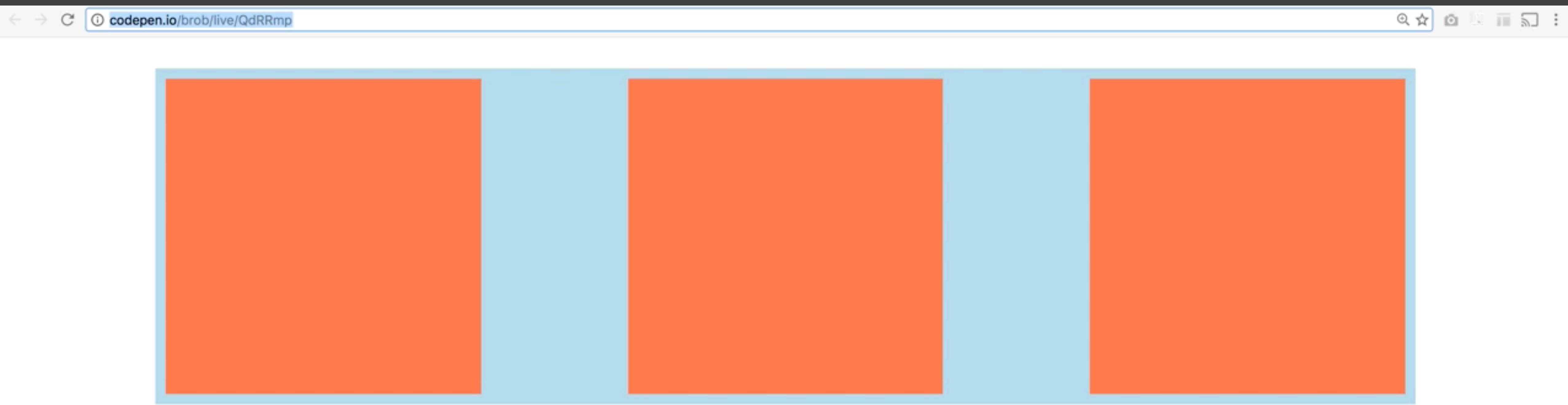
```
.container {  
    display: flex;  
    justify-content: space-between;  
    width: 80%;  
}  
.box {  
    width: 25vw;  
    height: 25vh;  
}
```

Viewport Math

((current viewport size) 600px / 100 (percentage)) x 25vw
= 150px (box width)

How can I use this for fun and profit?

Responsive Squares!



```
.box {  
width: 20vw;  
height: 20vw;  
}
```

Responsive Typography!

Truly Responsive typography with VWs

Just use a vw instead of a px value

Sometimes having a base font size is important, so we can mix vws with calc()

This gives us a relatively slow growth curve of our typography and makes sure it never gets too small to read. All without a breakpoint.

```
h1 {  
    font-size: default;  
}
```

```
h2 {  
    font-size: 5vw;  
}
```

```
h3 {  
    font-size: calc(16px + 1vw);  
}
```

```
p {  
    font-size: calc(12px + .75vw);  
    line-height: 1.4em;  
}
```

calc(unit [+,-, ÷, x] unit)

```
h3 {  
    font-size: calc(16px + 1vw);  
}  
.box {  
    width: calc(33% - 20px);  
    margin: 0 10px;  
}
```

Let's put a few things together

Hello There, World

Lorem ipsum dolor sit amet, consectetur adipiscing elit

Background Blend Mode

CAN THE BROWSER REPLACE PHOTOSHOP?

Support (FALL FORWARD WITH EYE TOWARD READABILITY)

CSS background-blend-mode  - CR

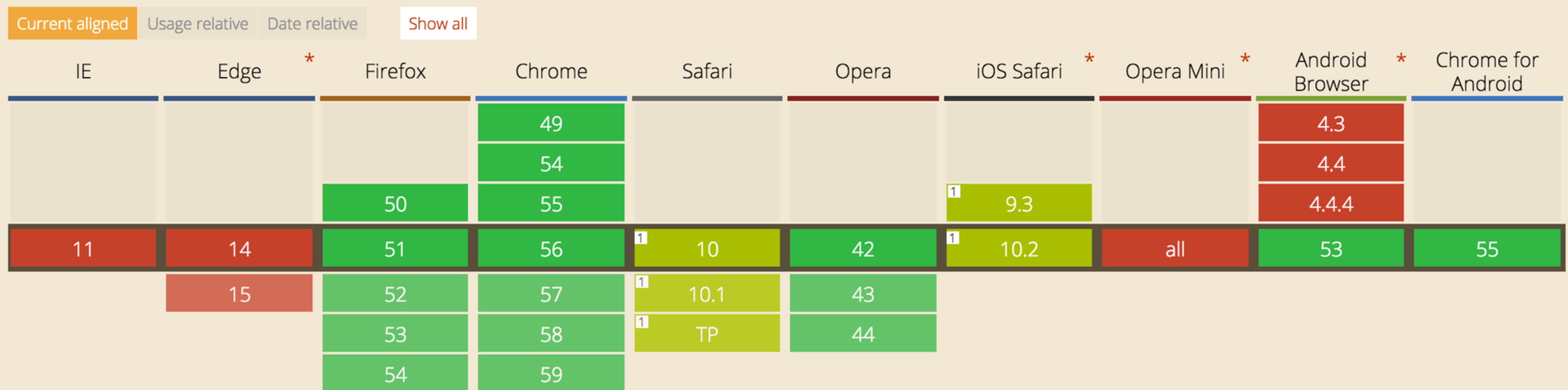
Global

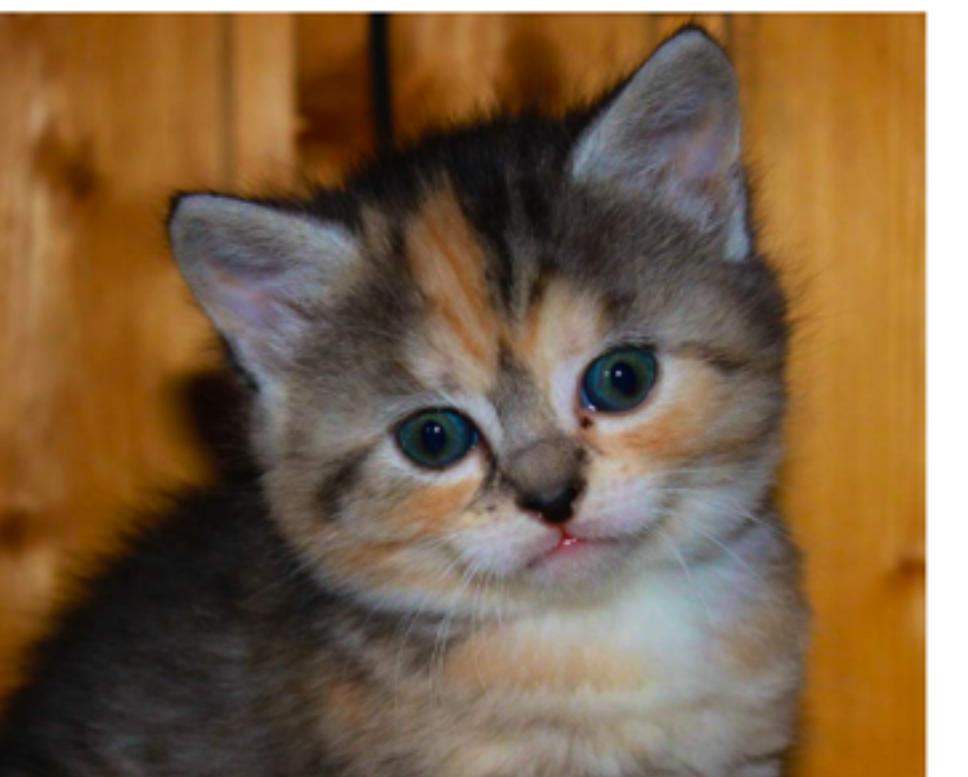
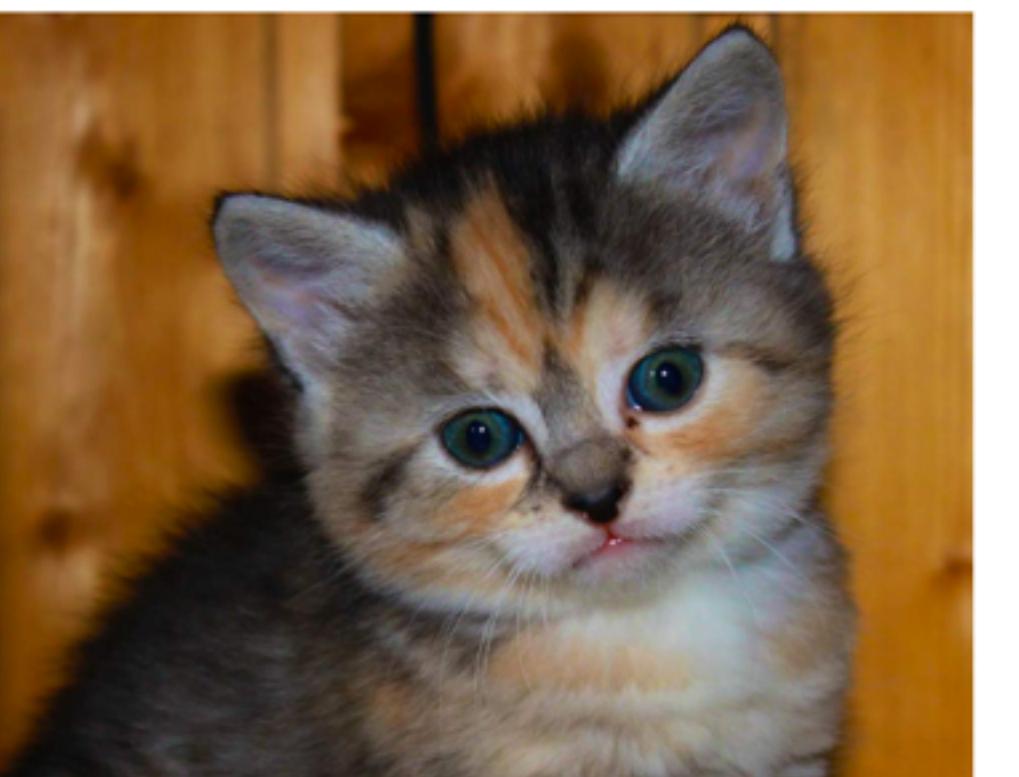
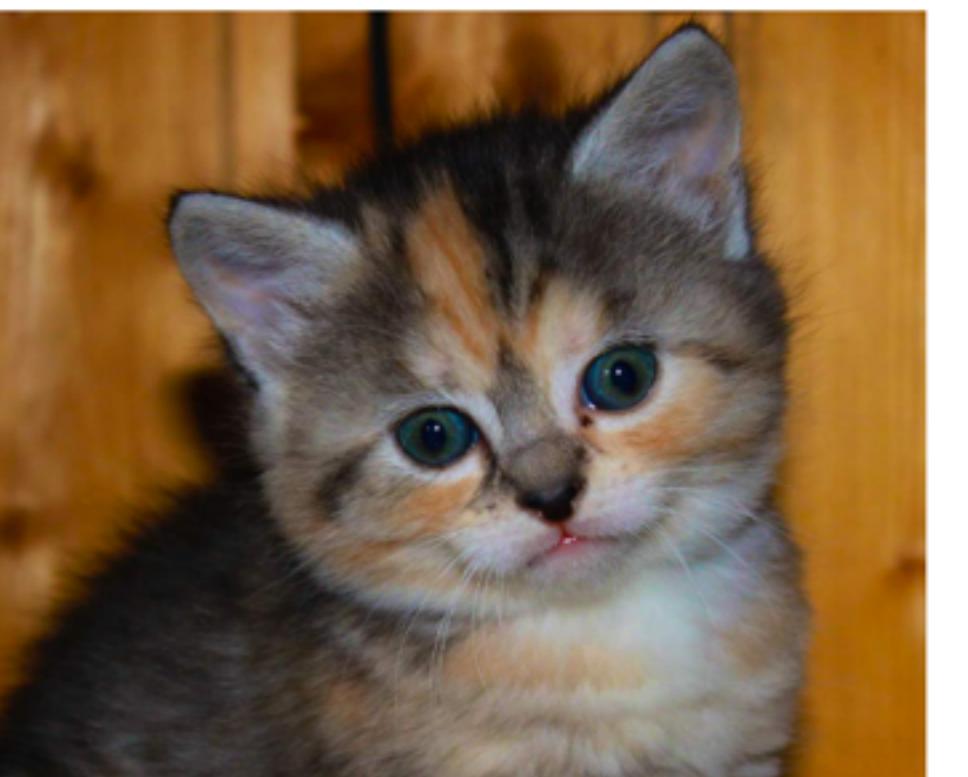
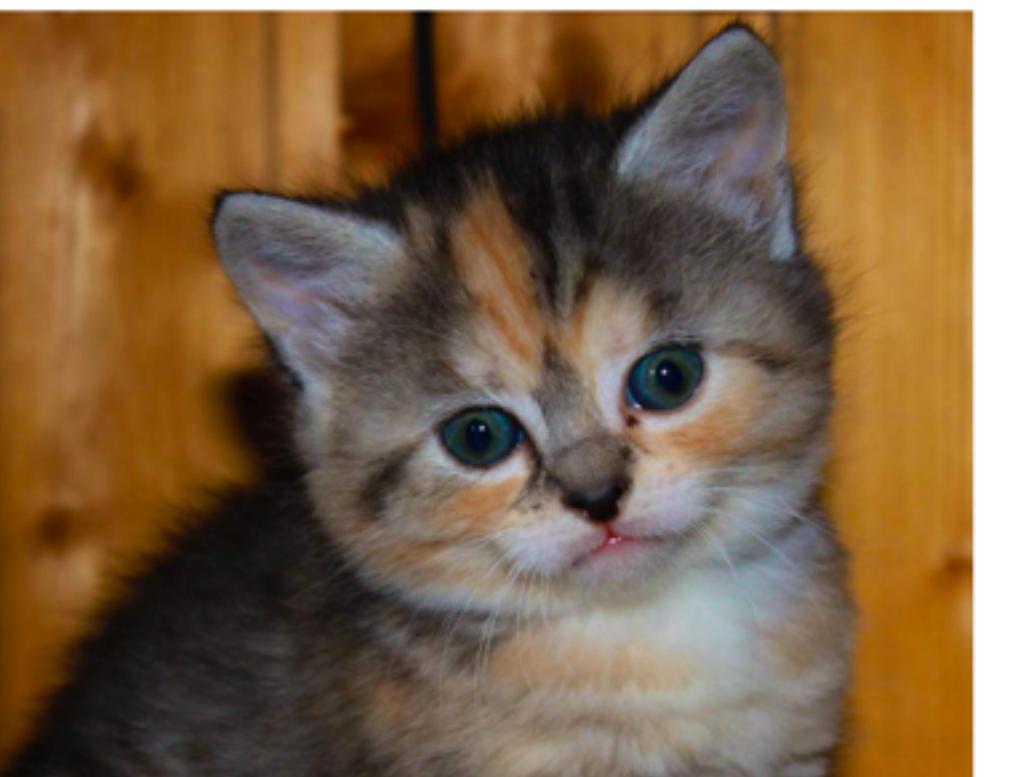
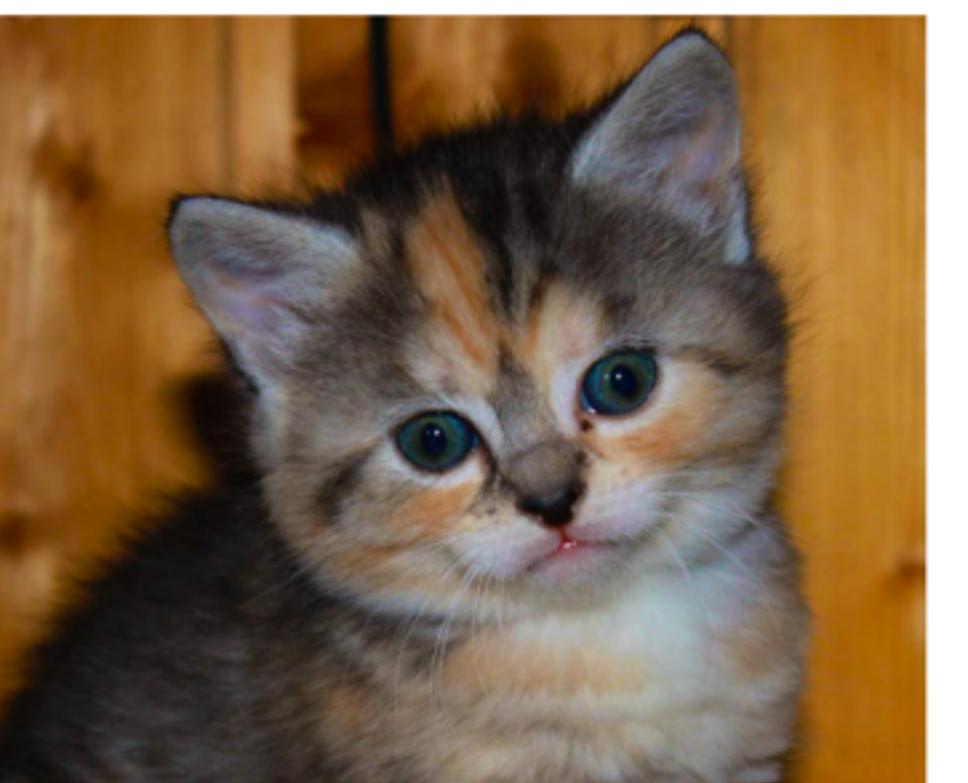
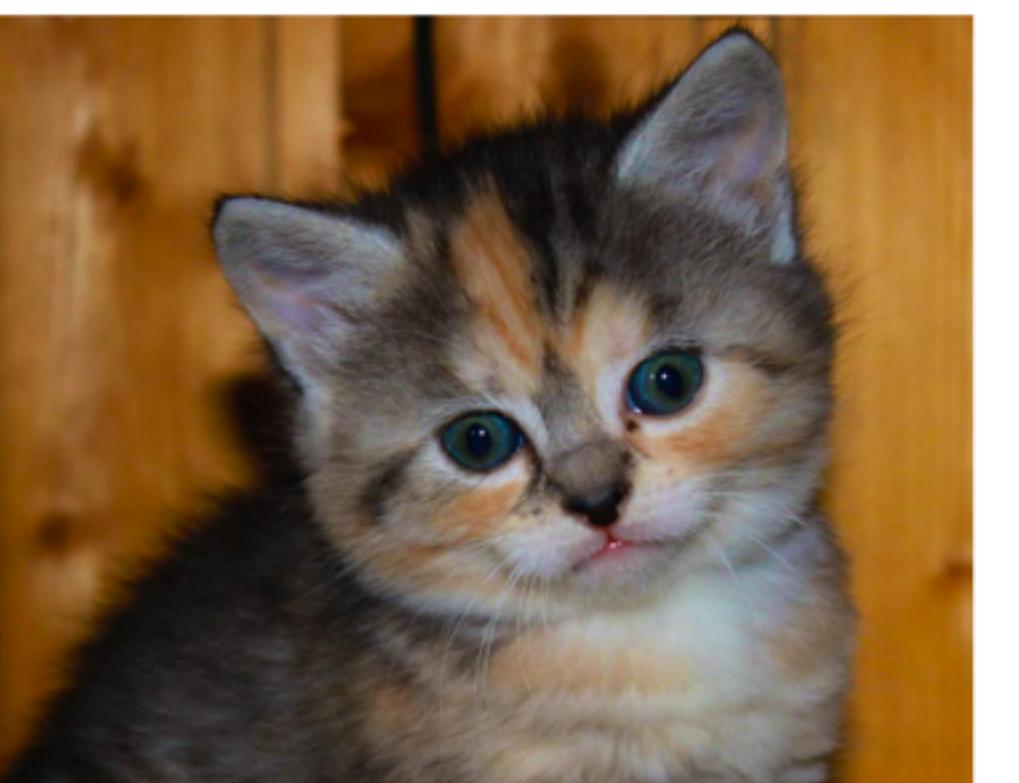
62.86% + 11.94% = 74.8%

U.S.A.

54.99% + 27.98% = 82.97%

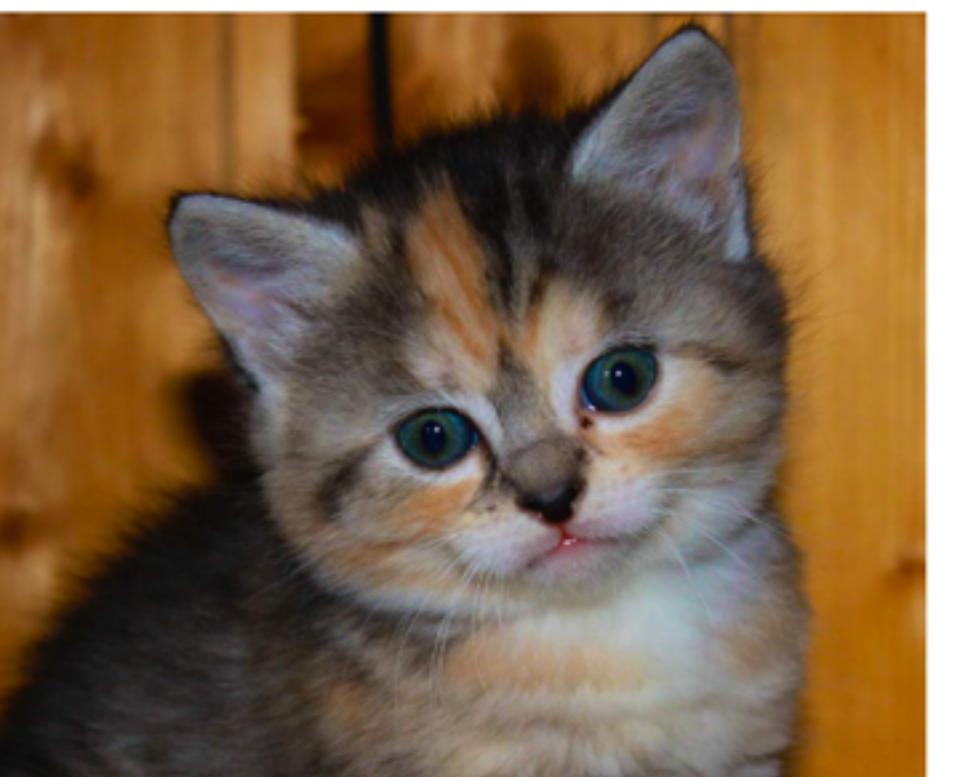
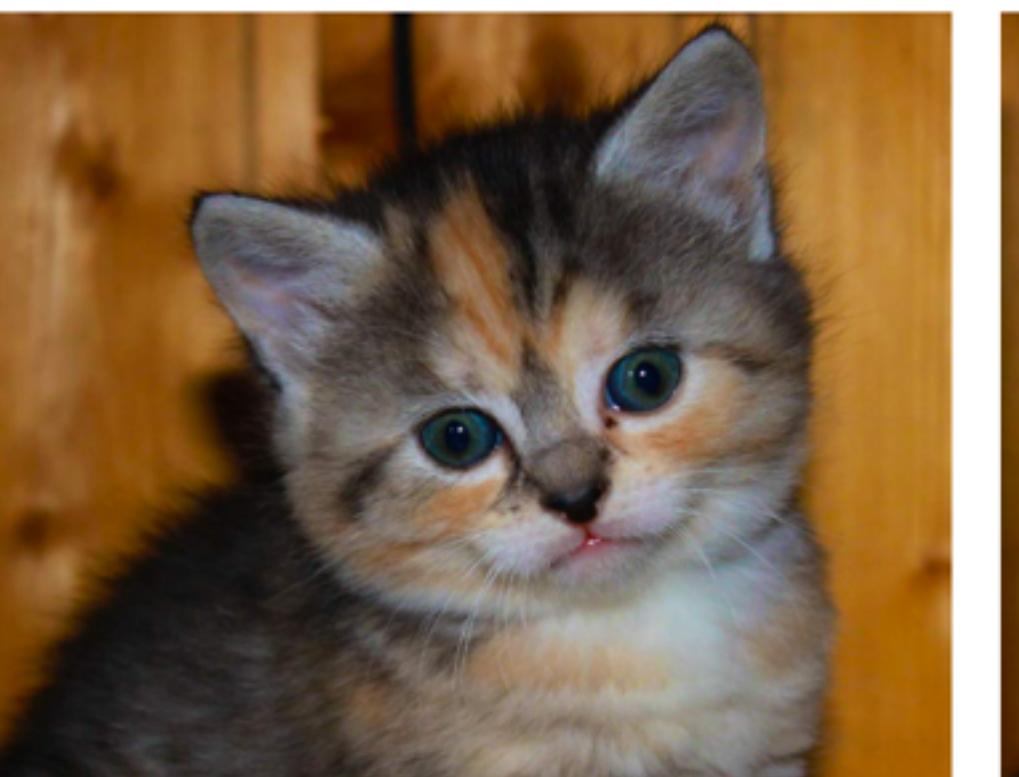
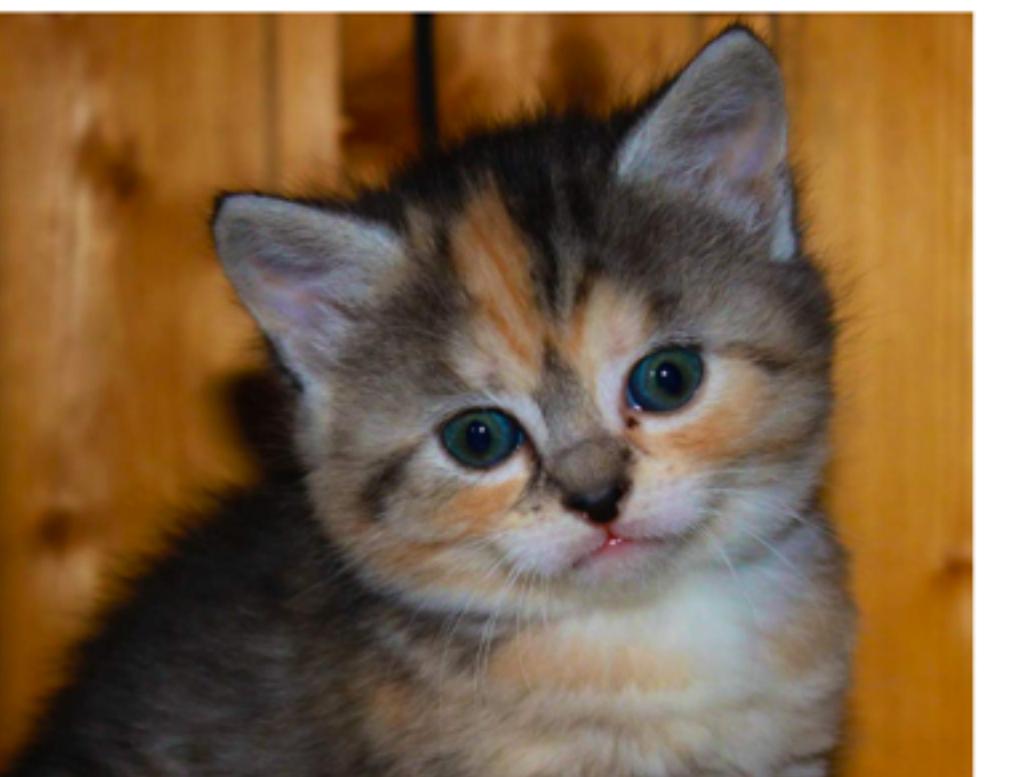
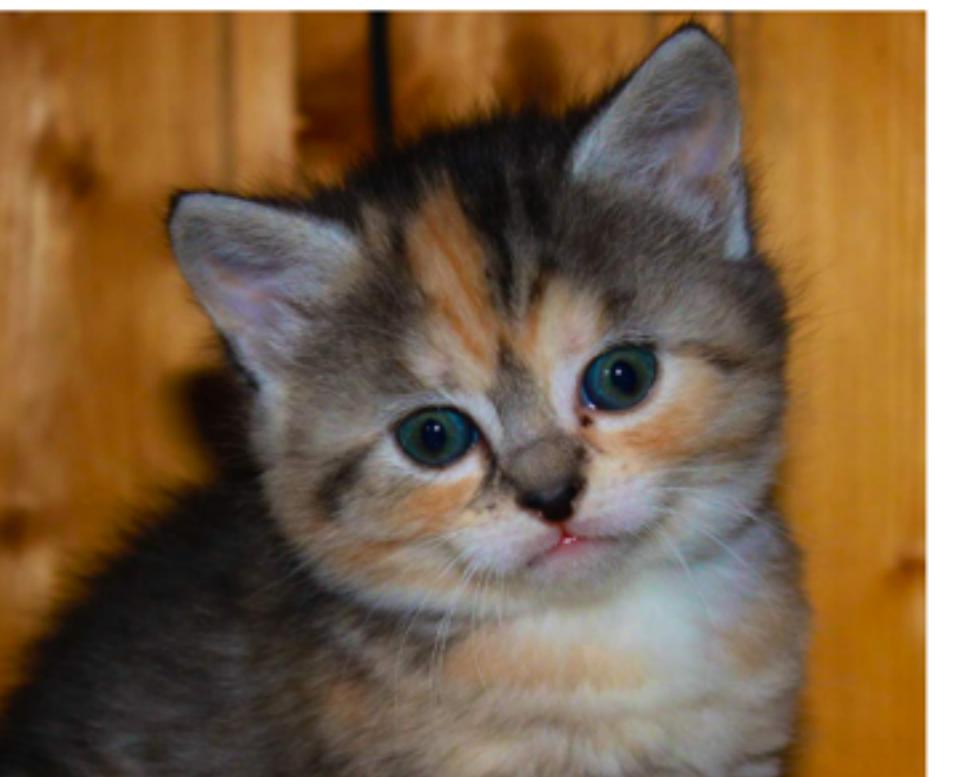
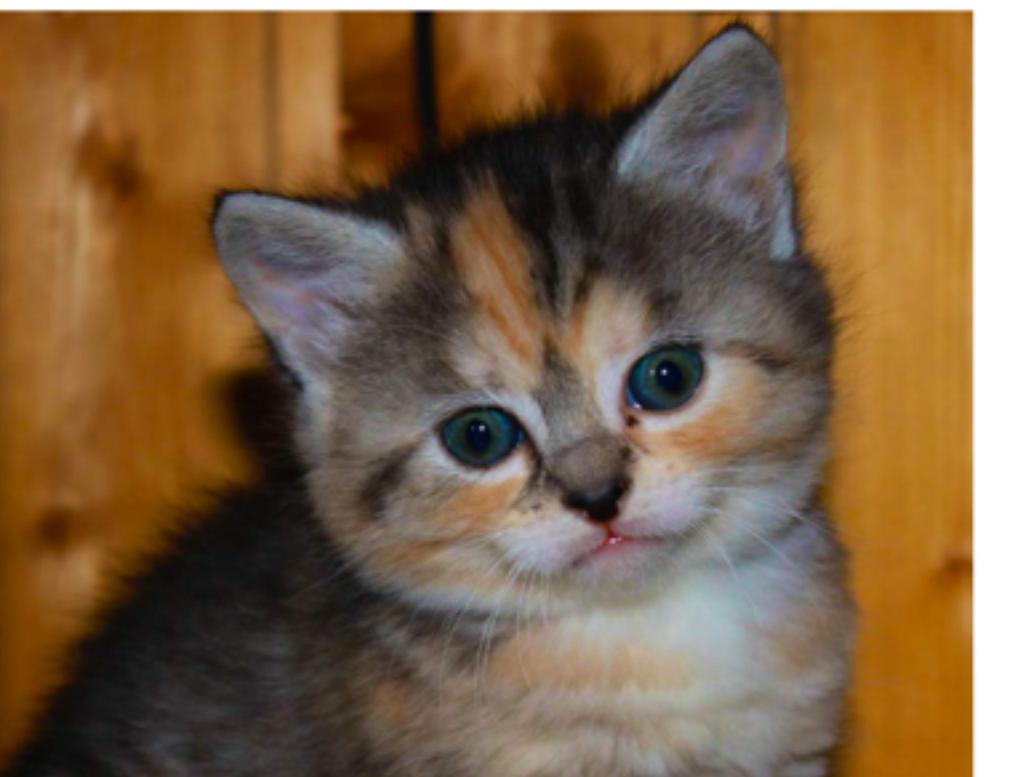
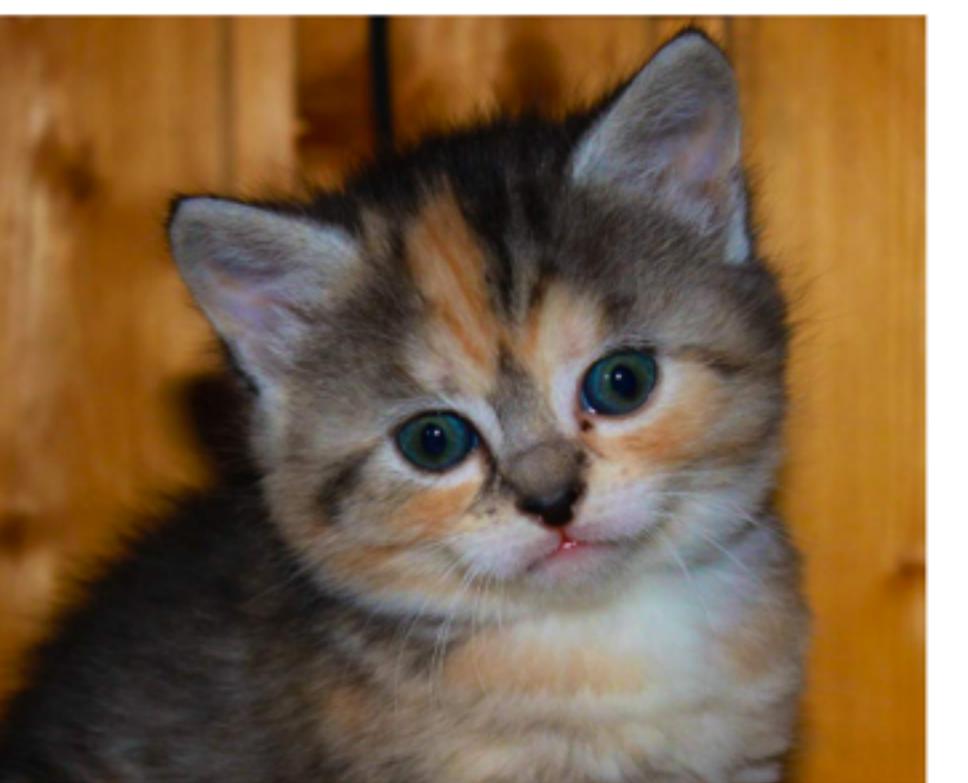
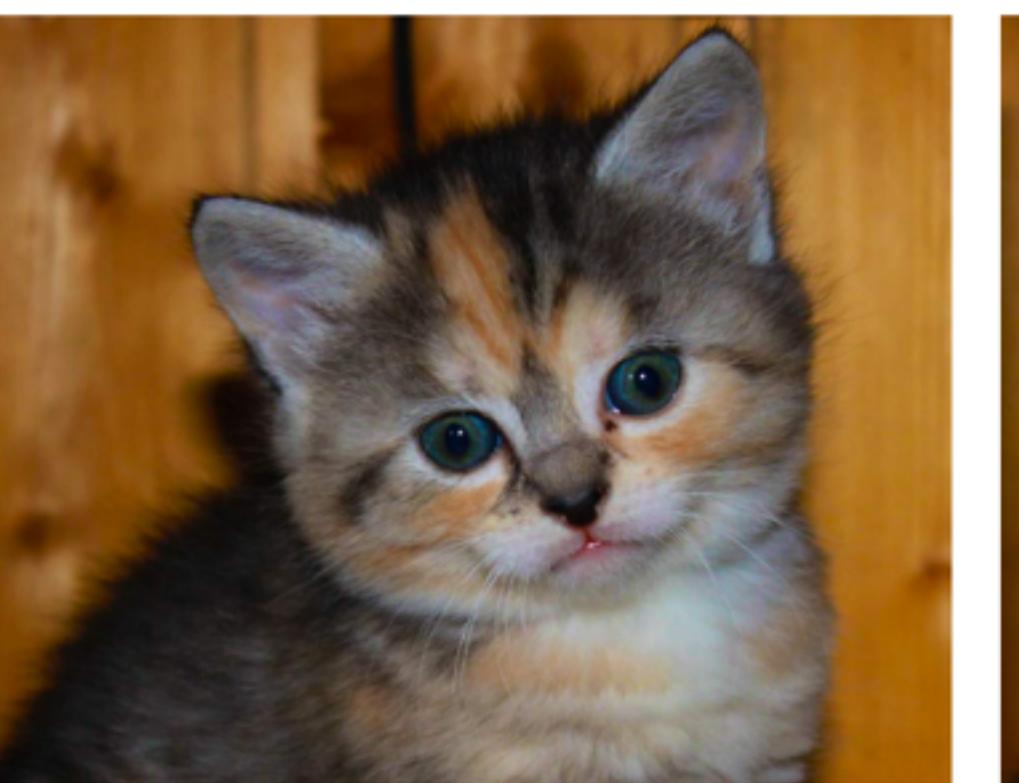
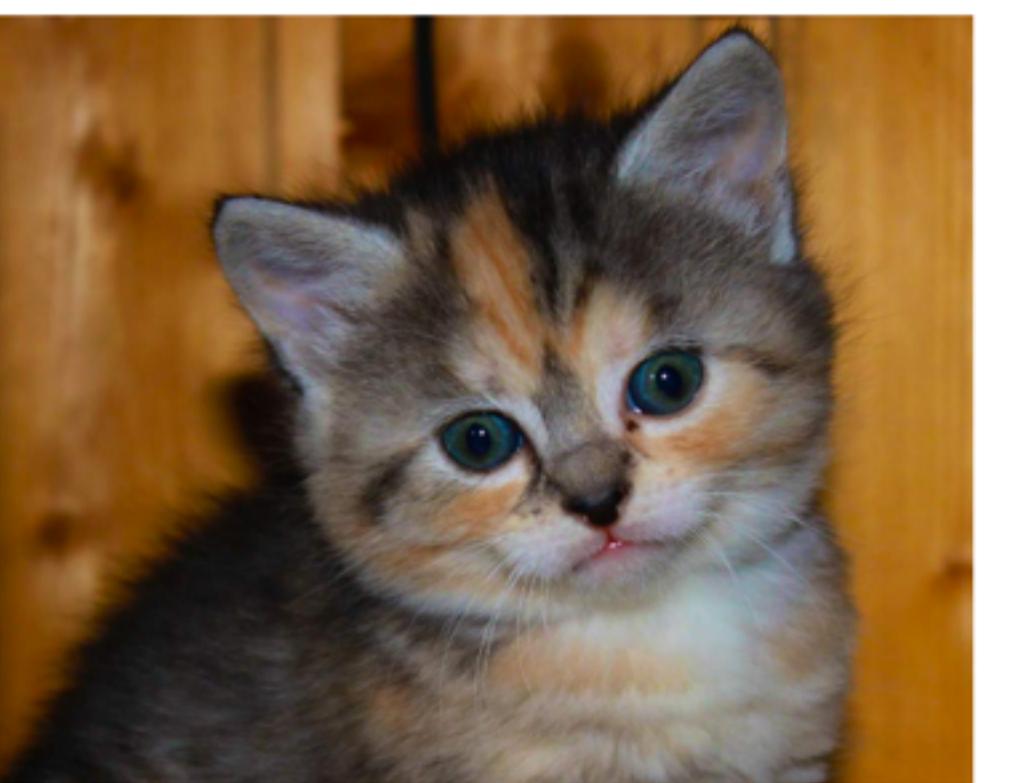
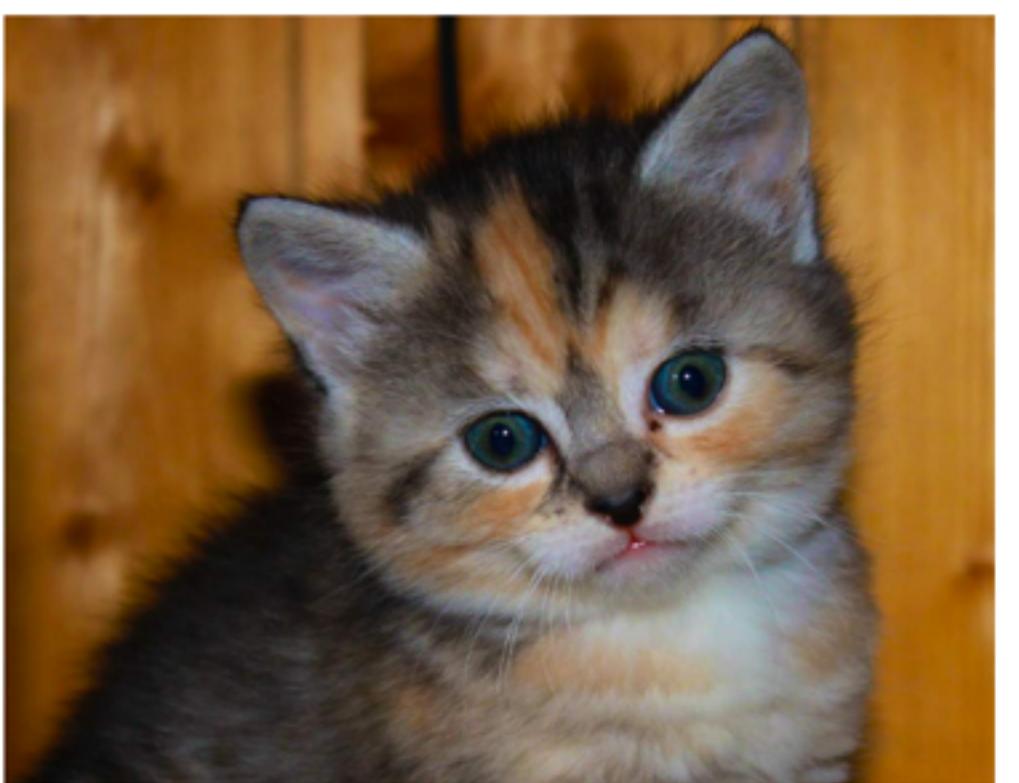
Allows blending between CSS background images, gradients, and colors.





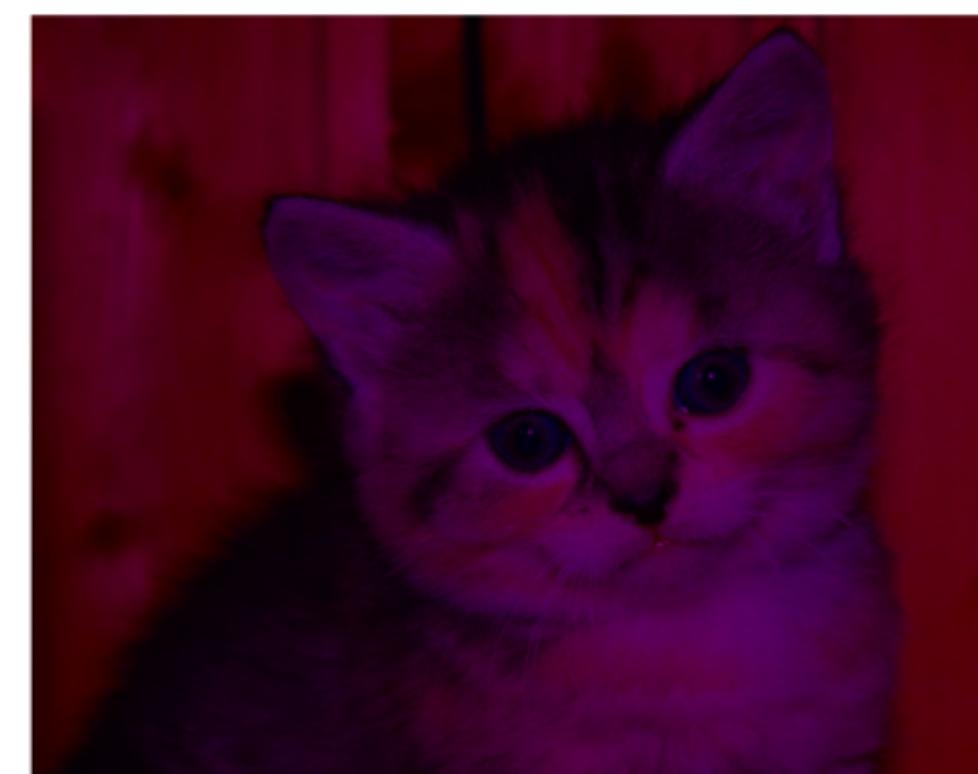
```
.box {  
    height: 15vw;  
    margin-bottom: 50px;  
    width: calc(25% - 10px);  
  
    background-size: cover;  
    background-image: url(https://placekitten.com/1000/800);  
    background-color: purple;  
    background-blend-mode: [value];  
}
```

normal | multiply | screen | overlay | darken | lighten | color-dodge | color-burn |
hard-light | soft-light | difference | exclusion | hue | saturation | color | luminosity

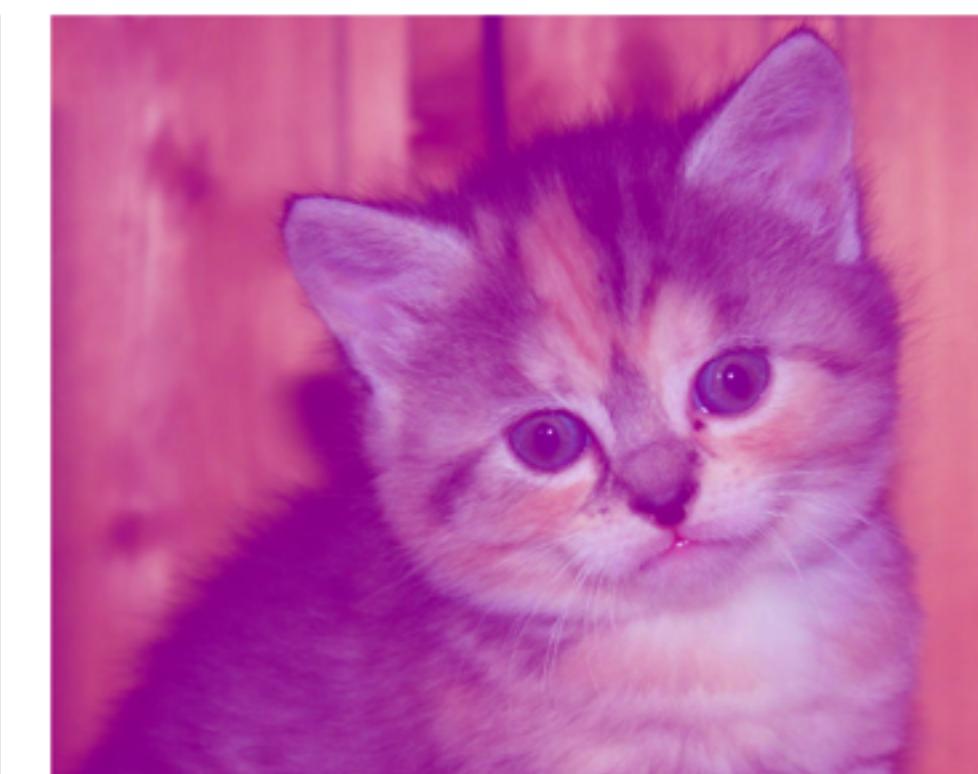




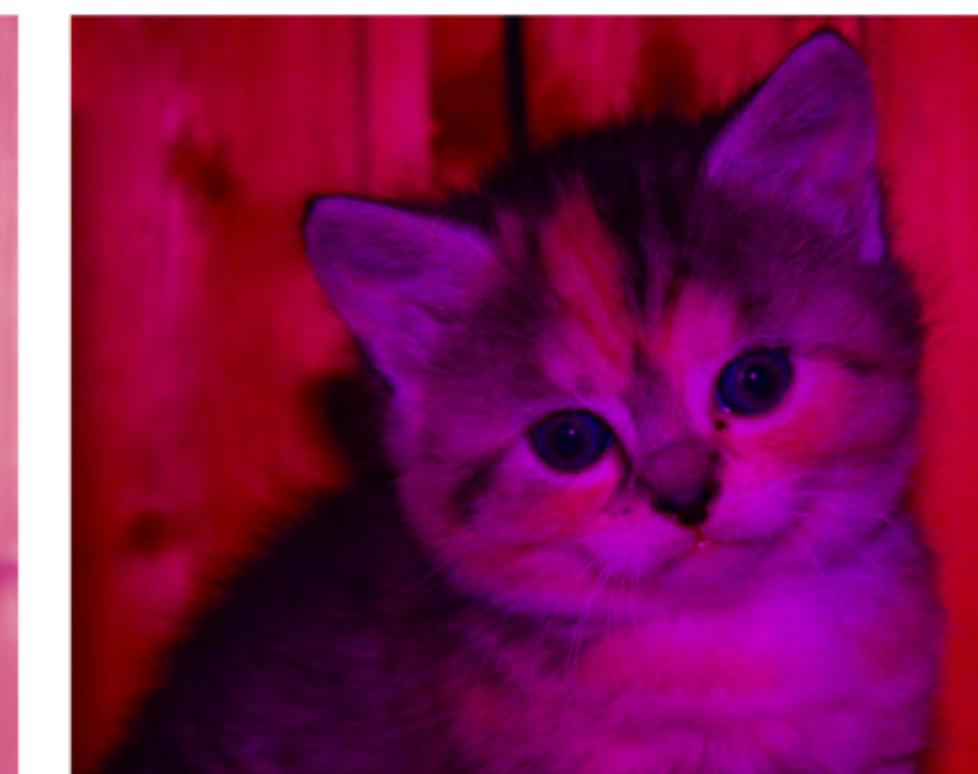
Normal



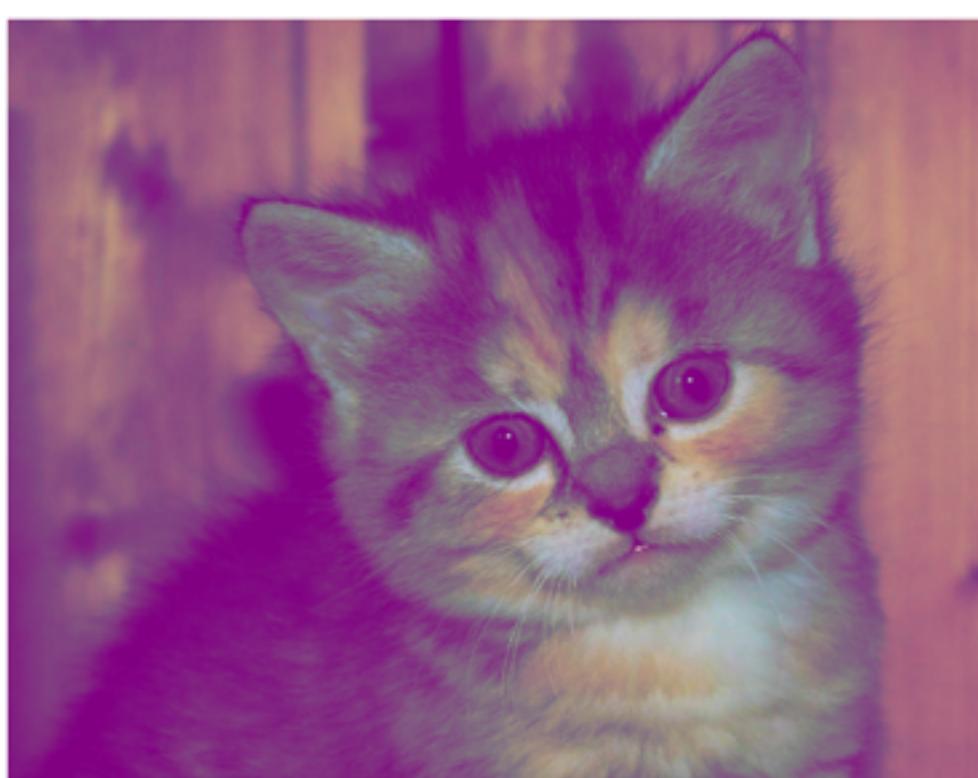
Multiply



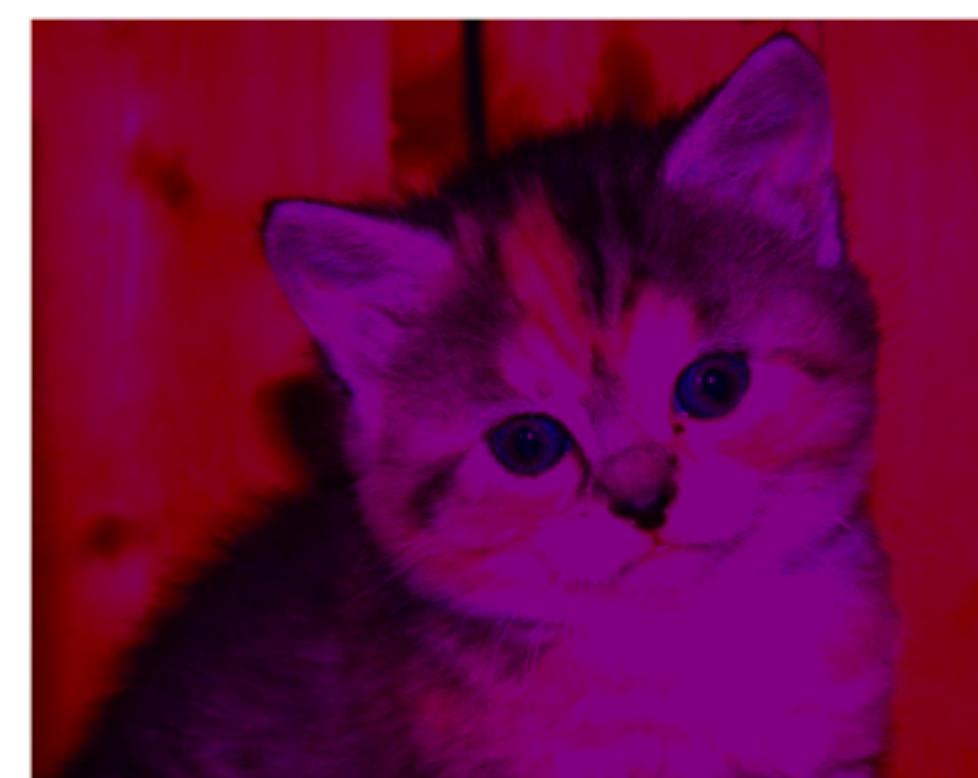
Screen



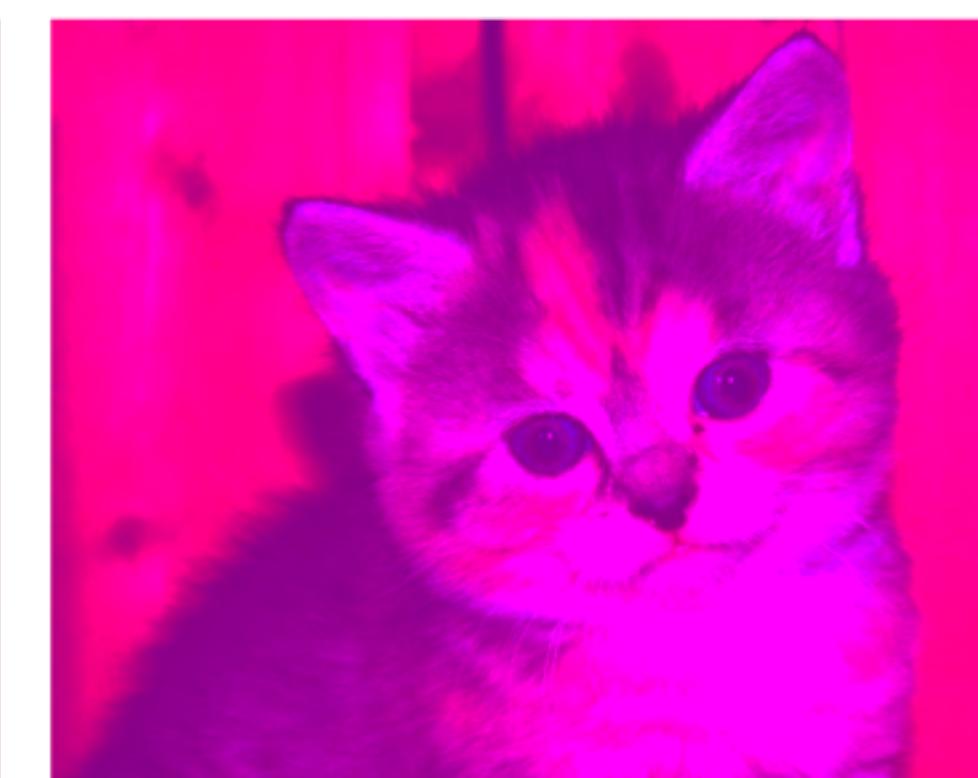
Overlay



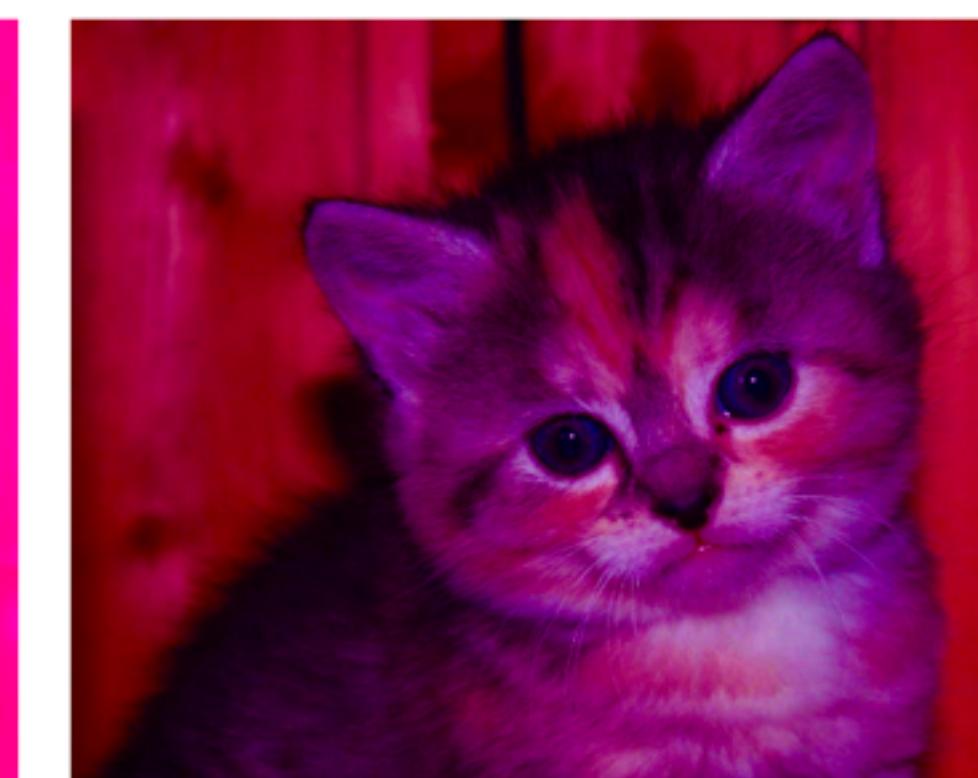
Lighten



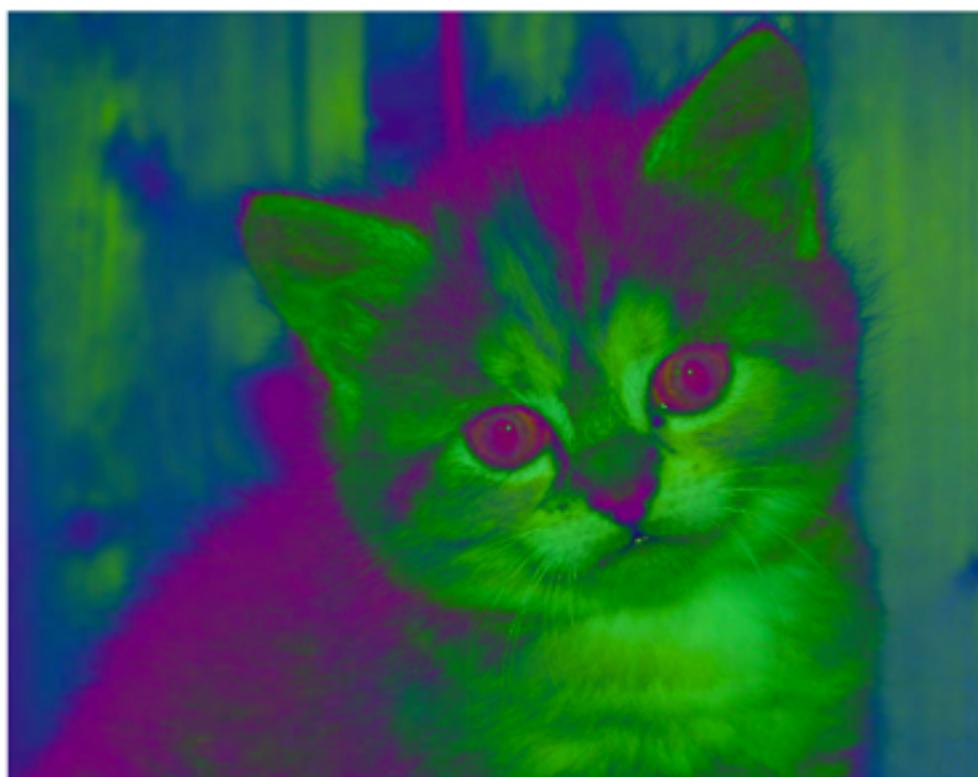
Darken



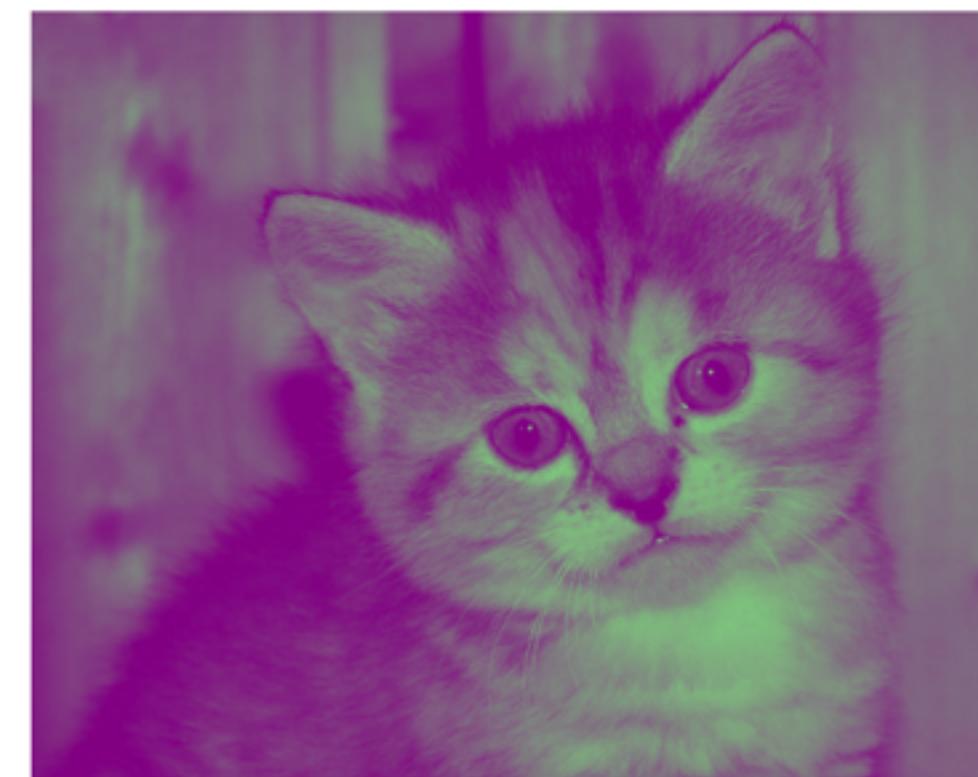
Color Dodge



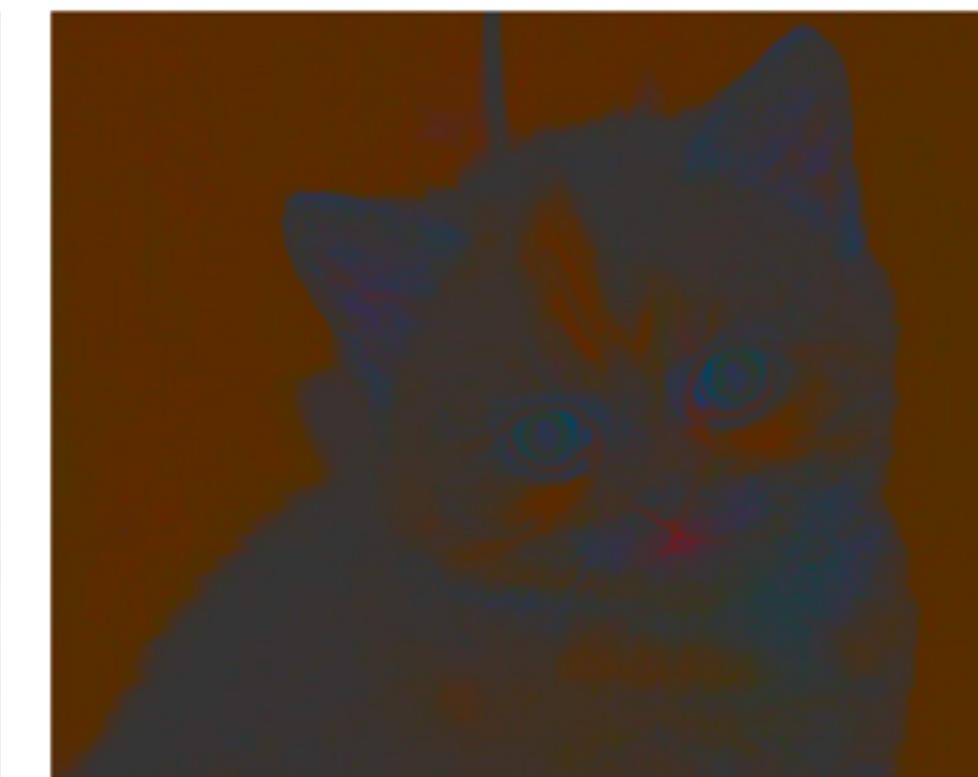
Hard Light



Difference



Exclusion



Color



Luminosity



Normal



Multiply



Screen



Overlay



Lighten



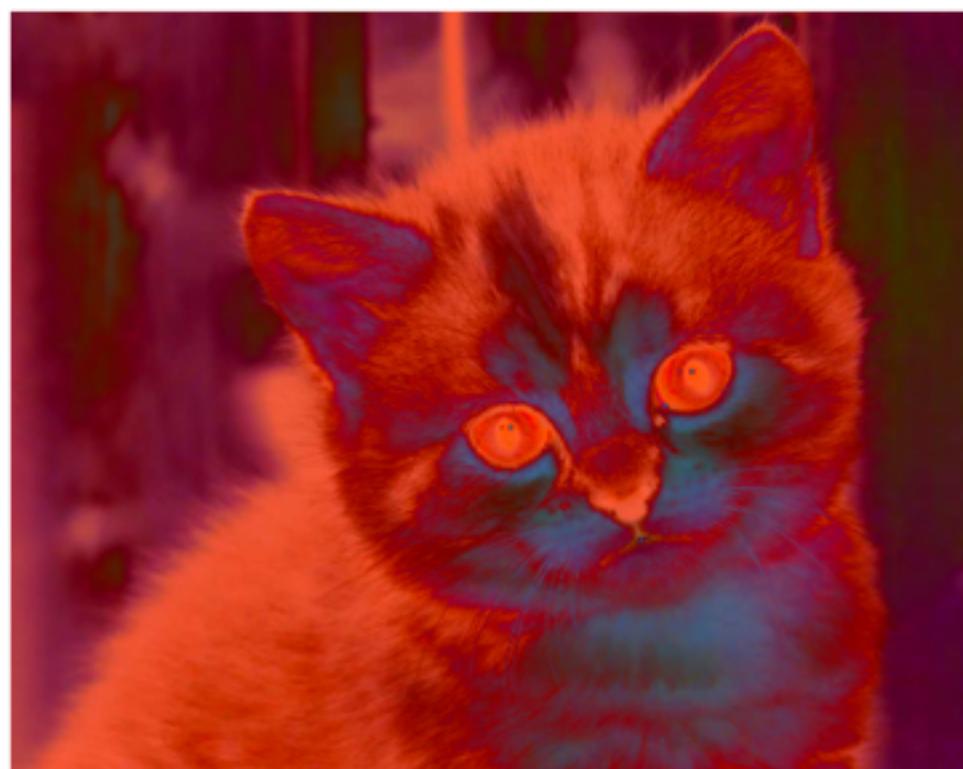
Darken



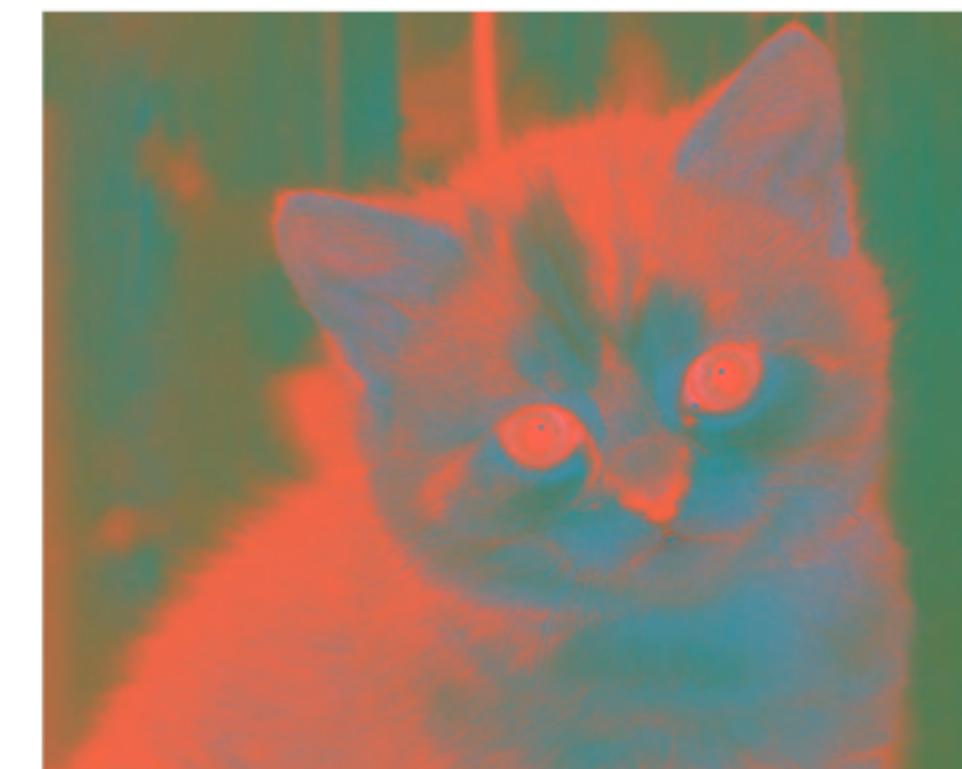
Color Dodge



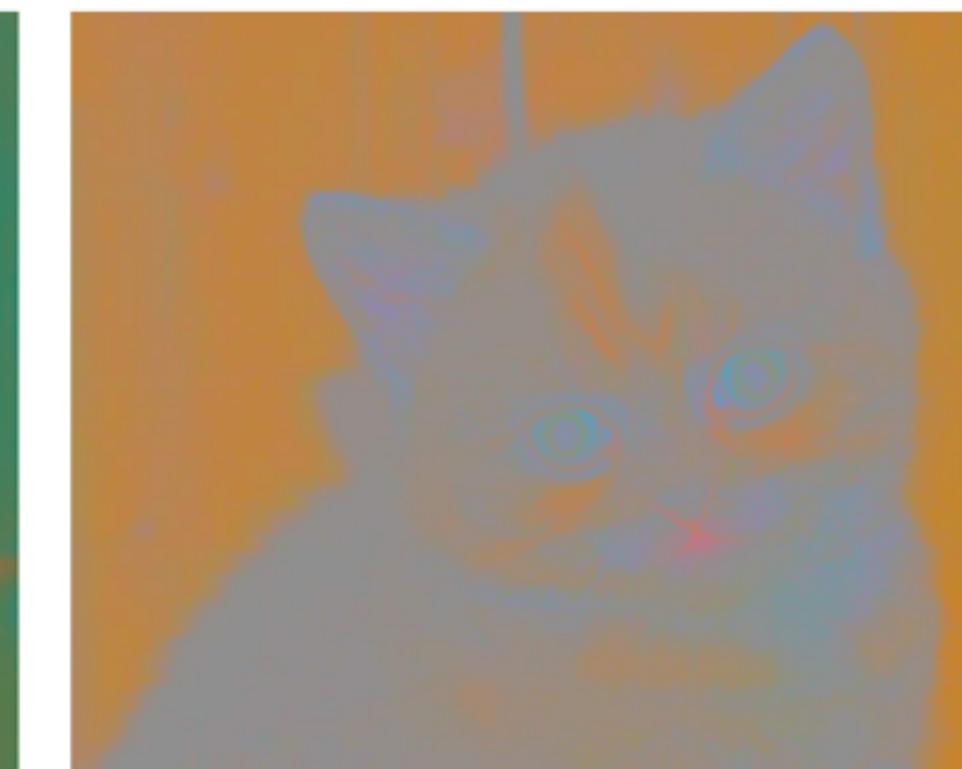
Hard Light



Difference



Exclusion



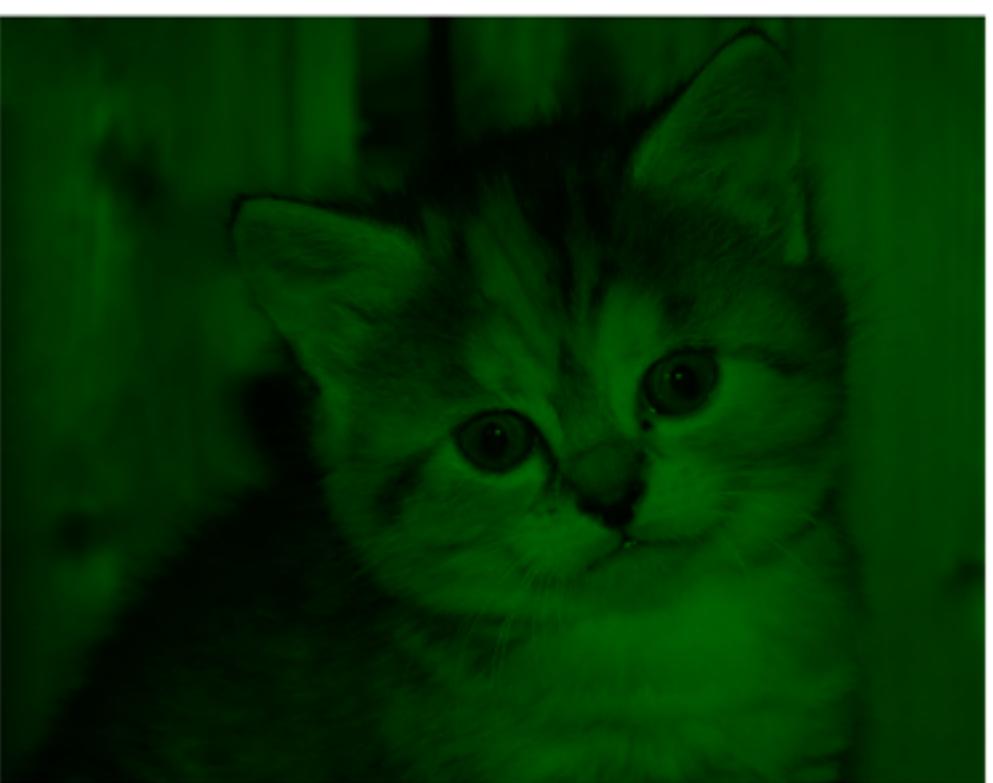
Color



Luminosity



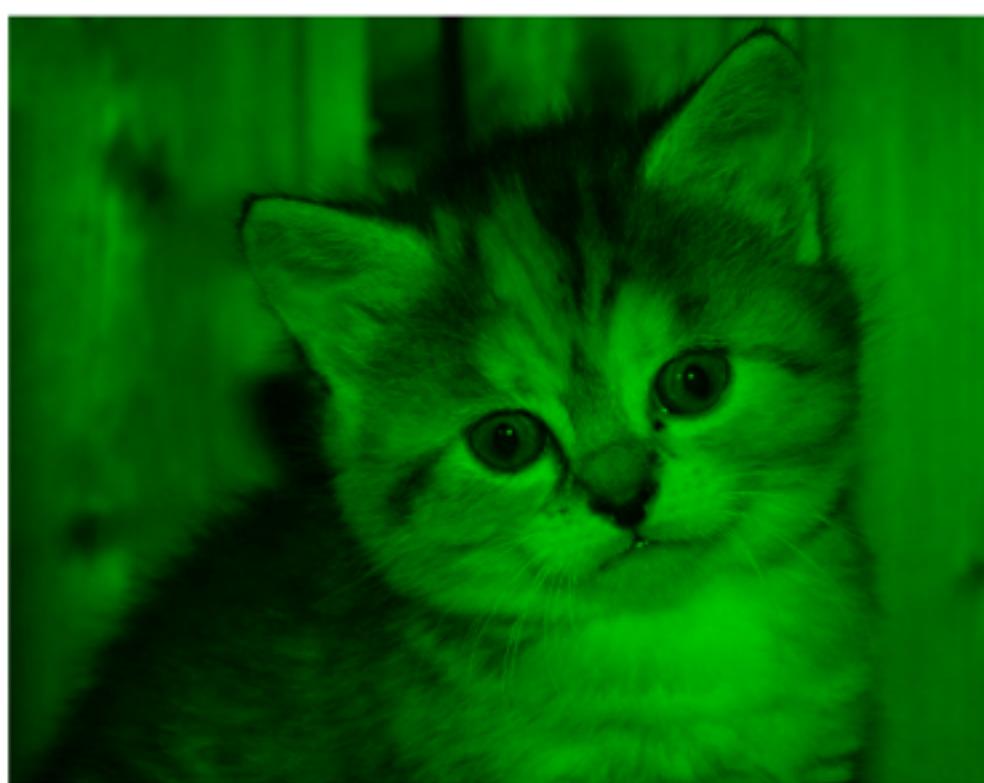
Normal



Multiply



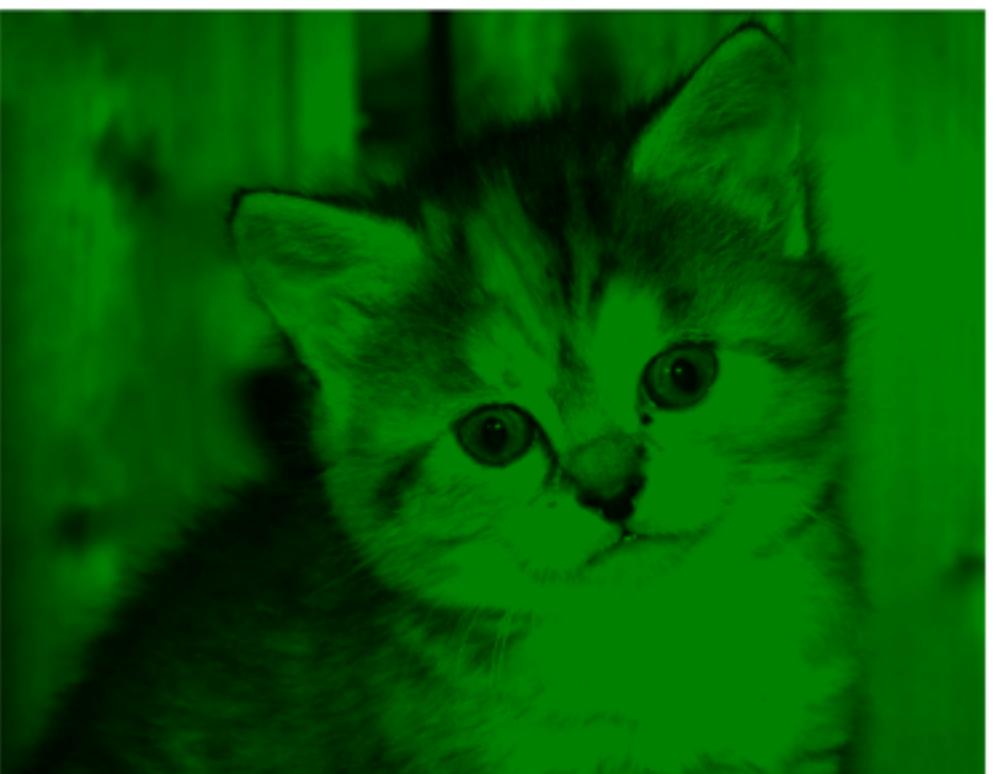
Screen



Overlay



Lighten



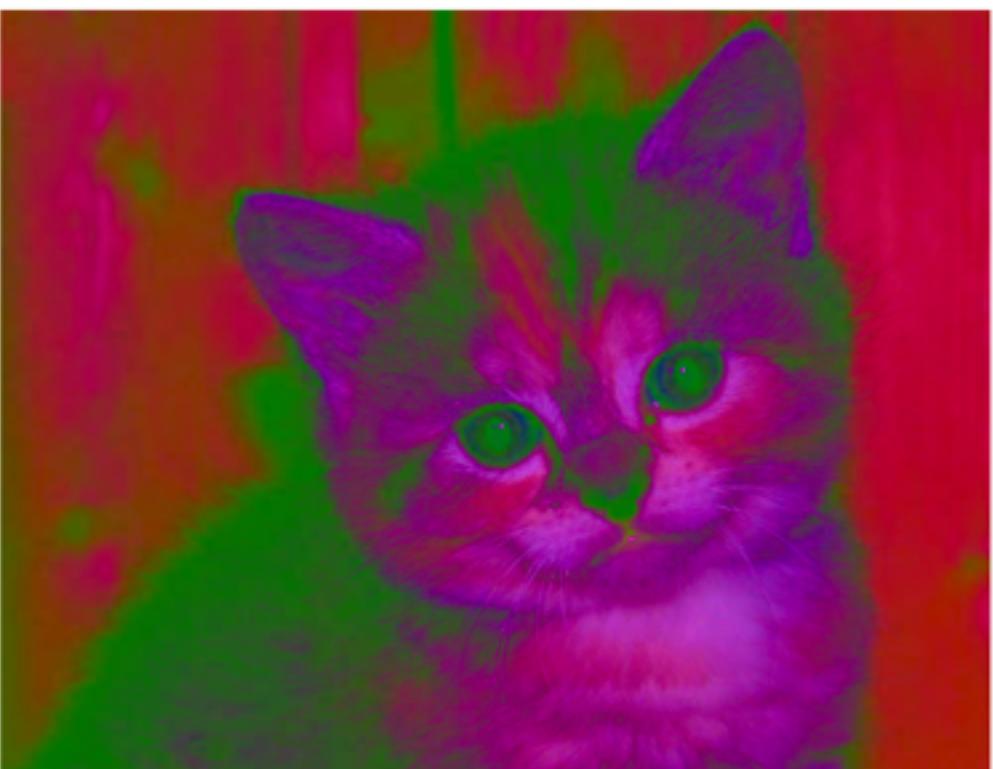
Darken



Color Dodge



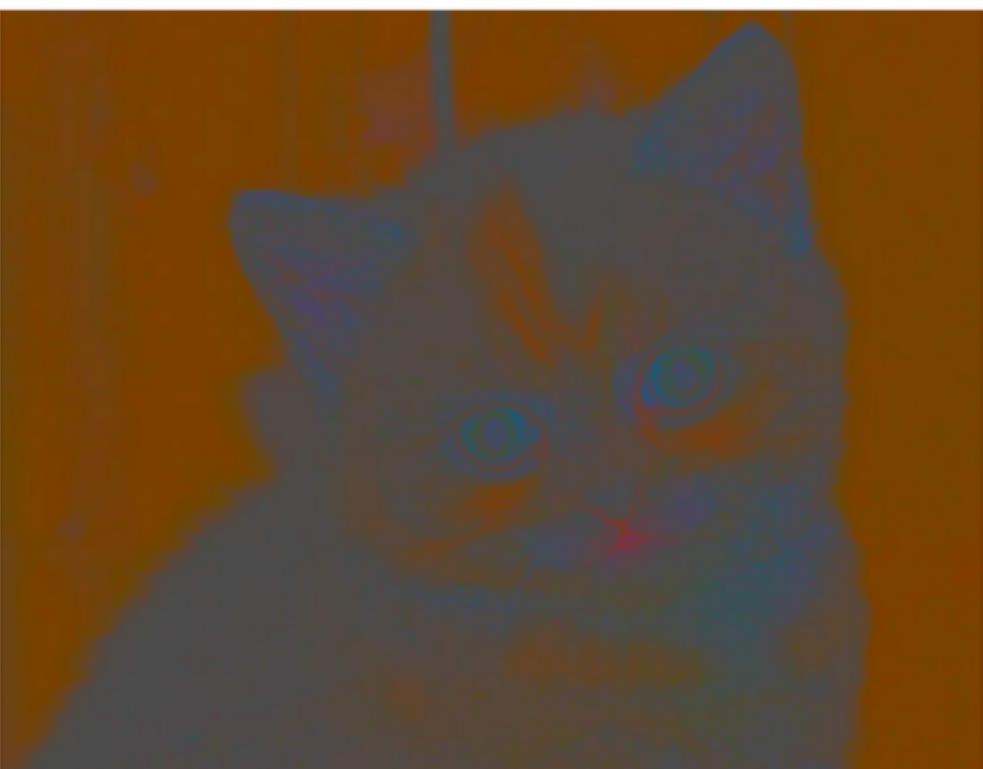
Hard Light



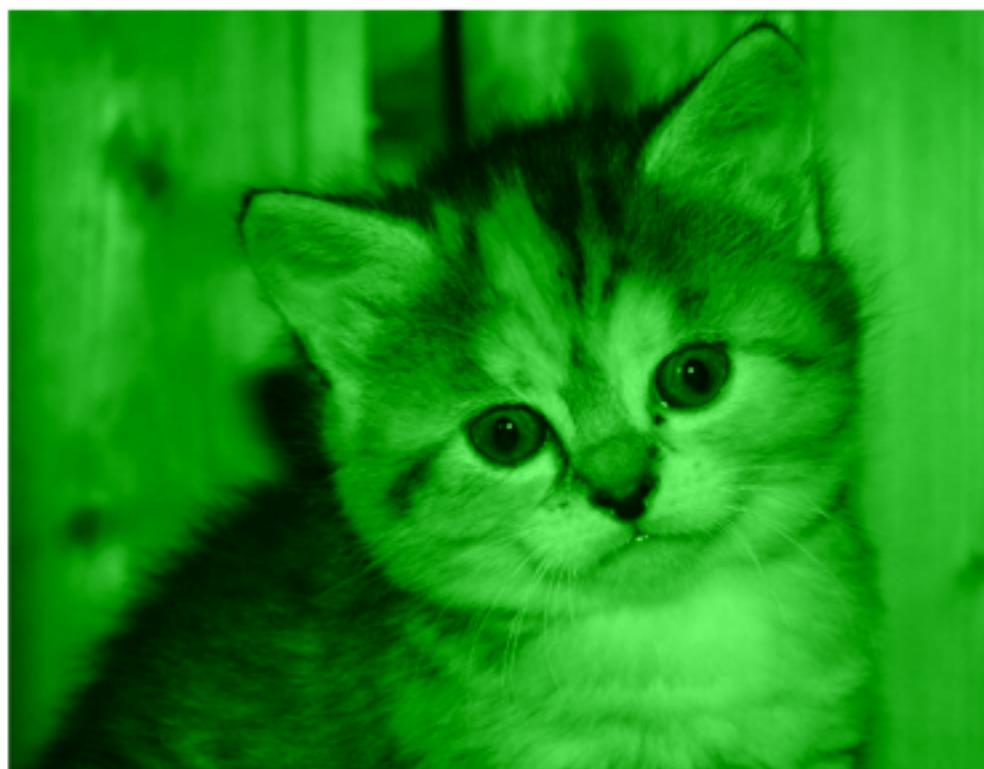
Difference



Exclusion



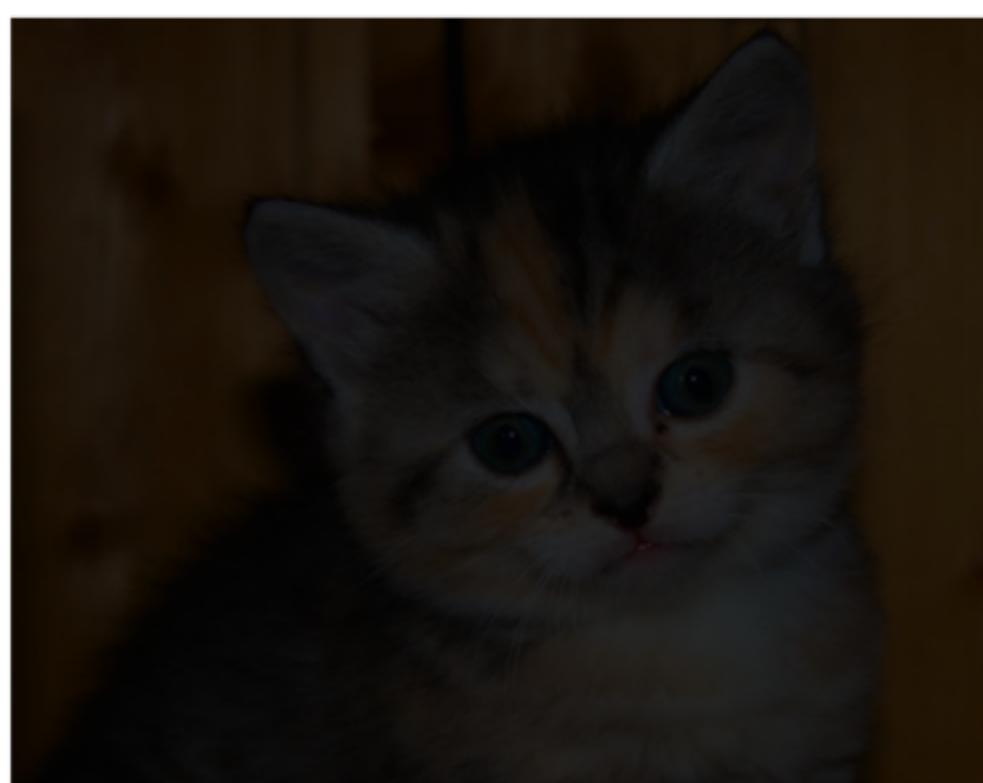
Color



Luminosity



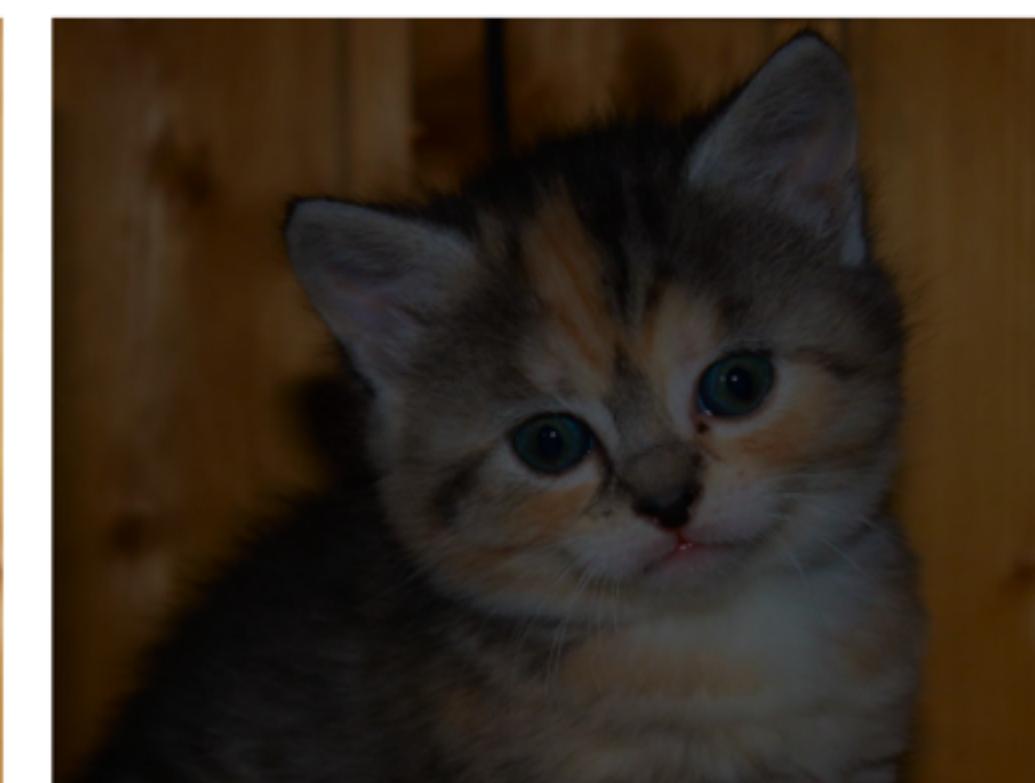
Normal



Multiply



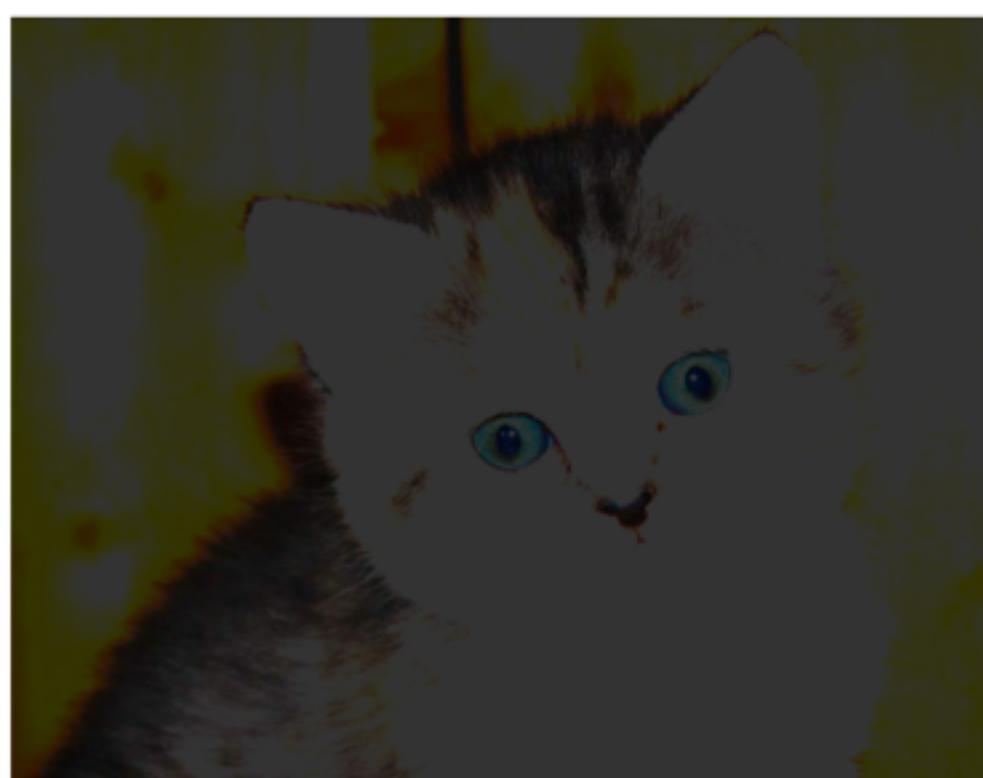
Screen



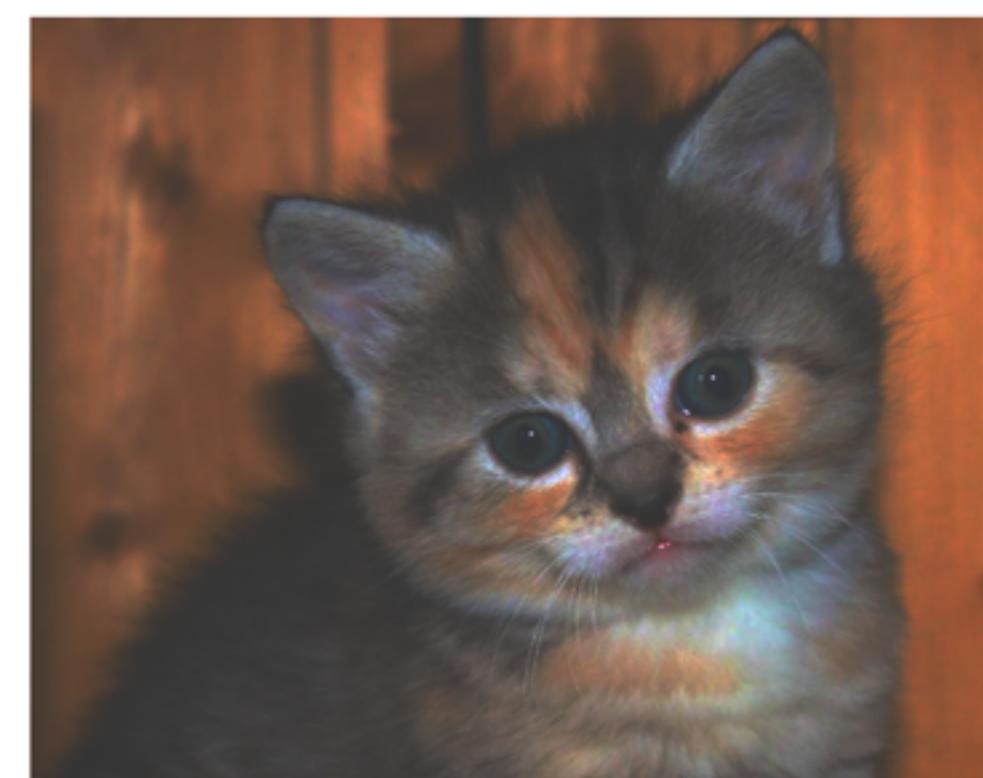
Overlay



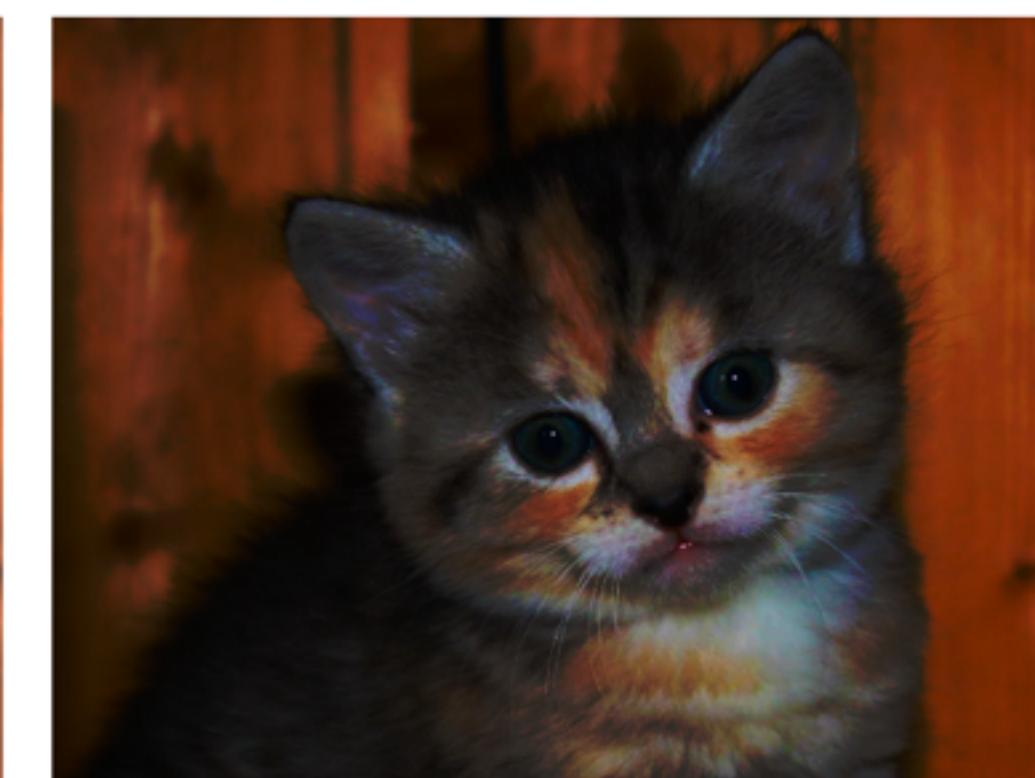
Lighten



Darken



Color Dodge



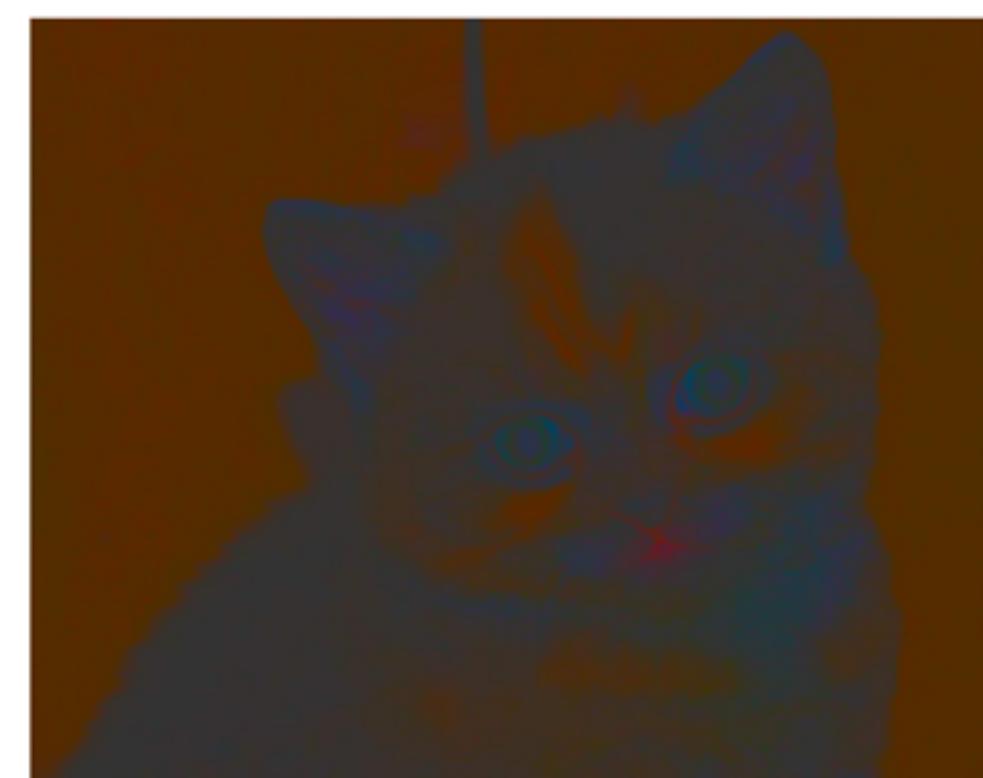
Hard Light



Difference



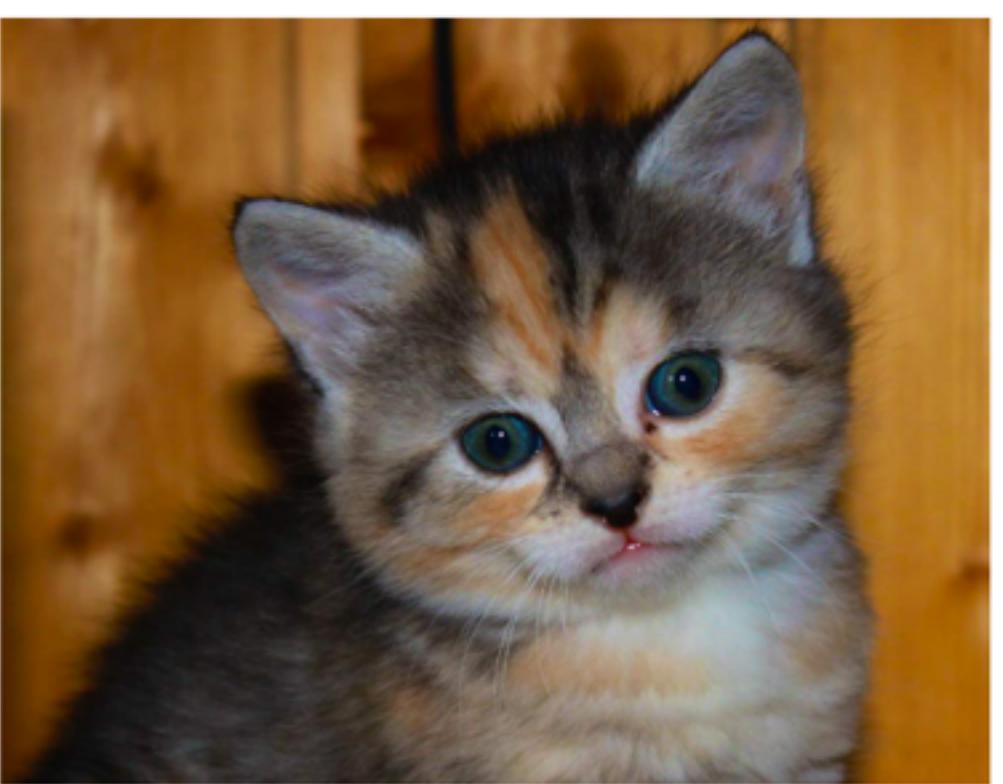
Exclusion



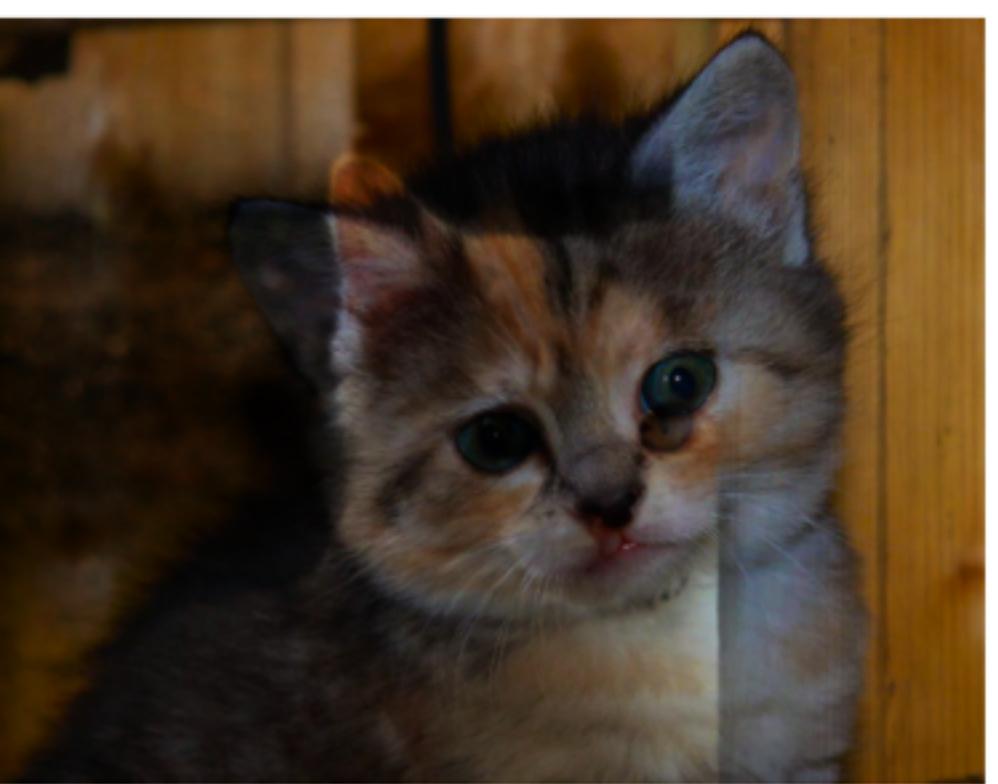
Color



Luminosity



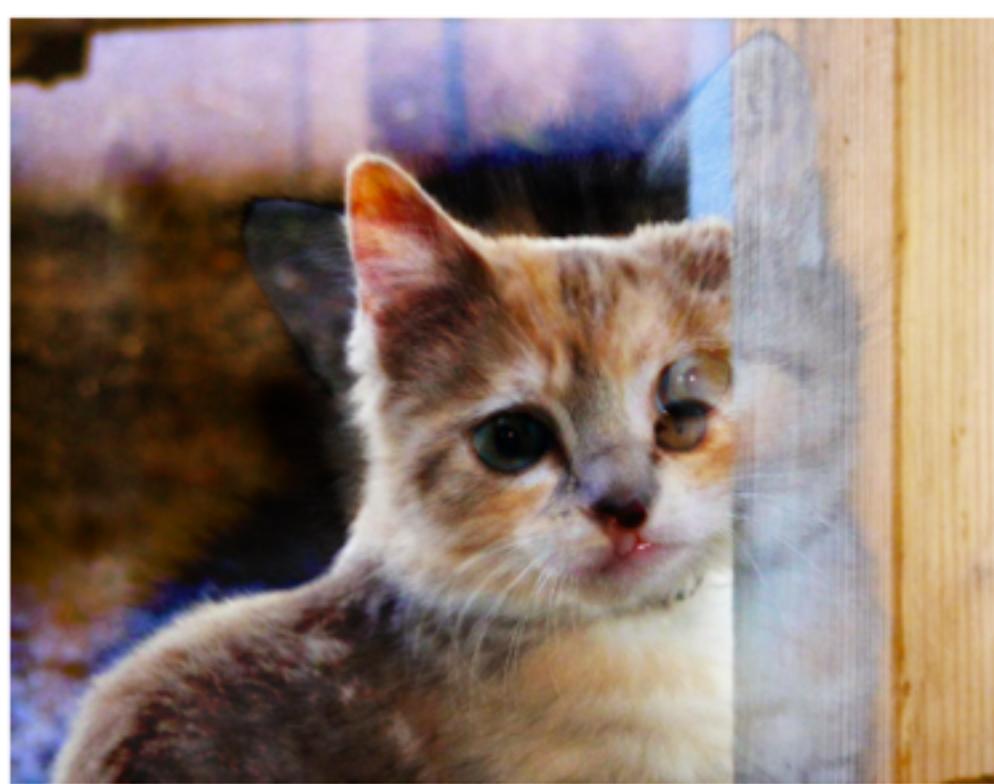
Normal



Multiply



Screen



Overlay



Lighten



Darken



Color Dodge



Hard Light



Difference



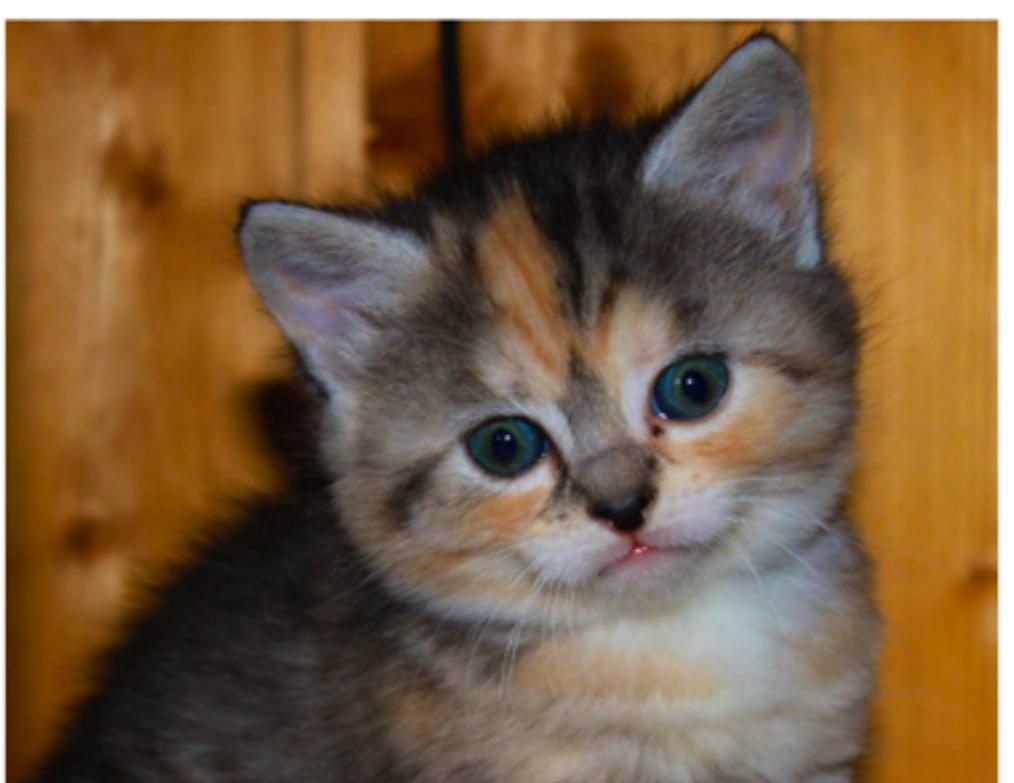
Exclusion



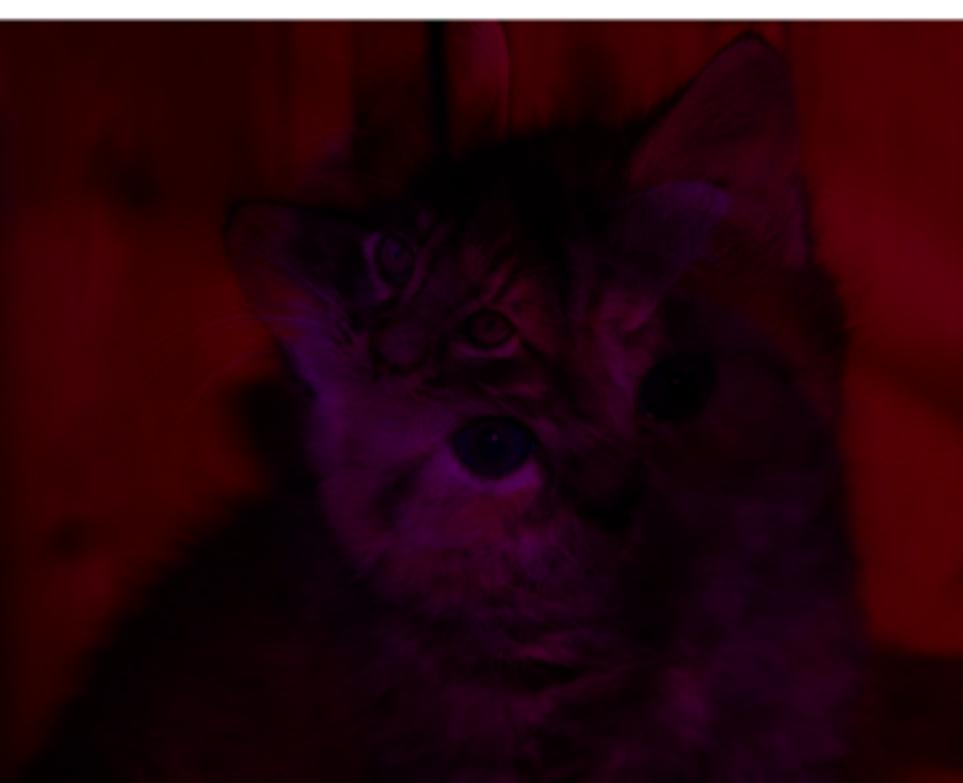
Color



Luminosity



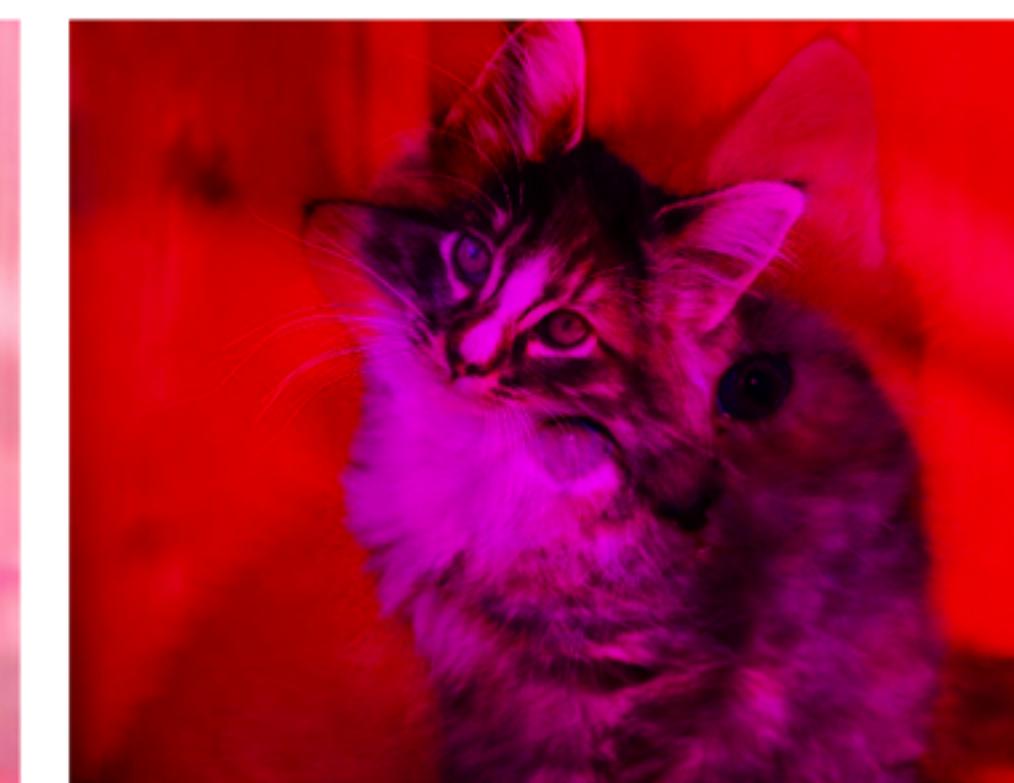
Normal



Multiply



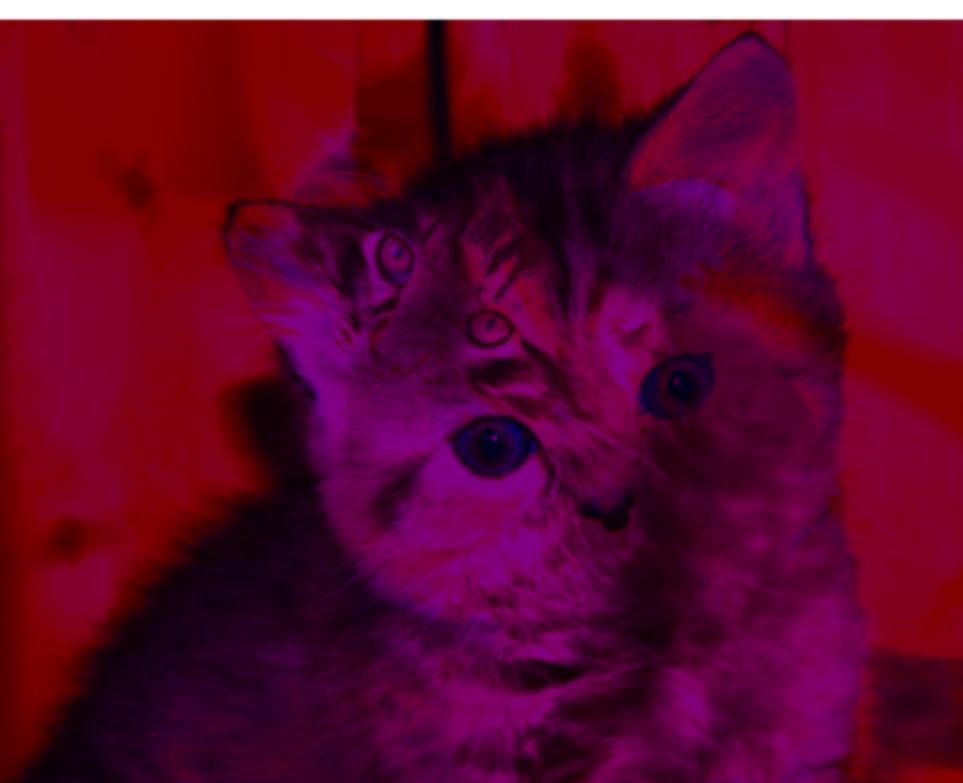
Screen



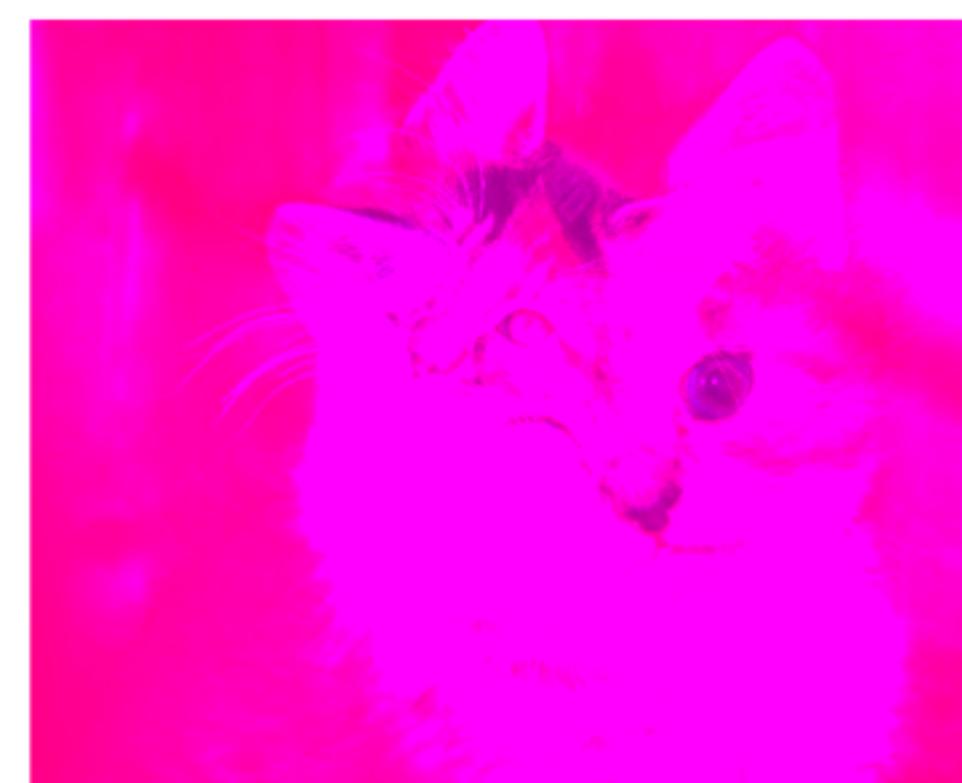
Overlay



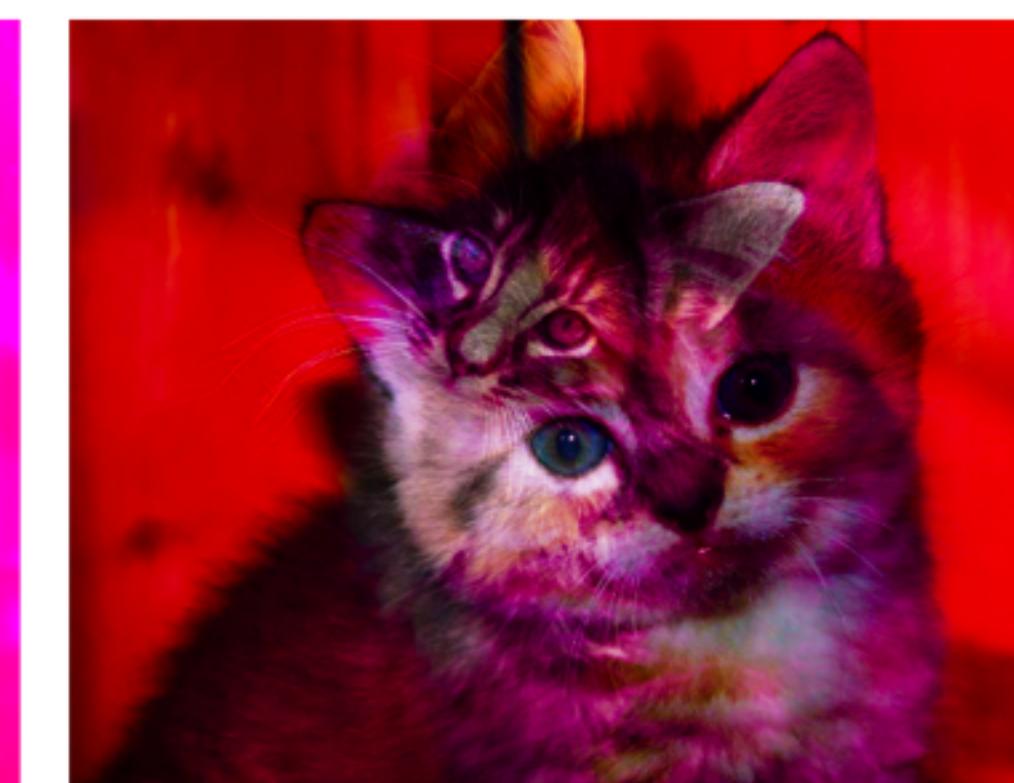
Lighten



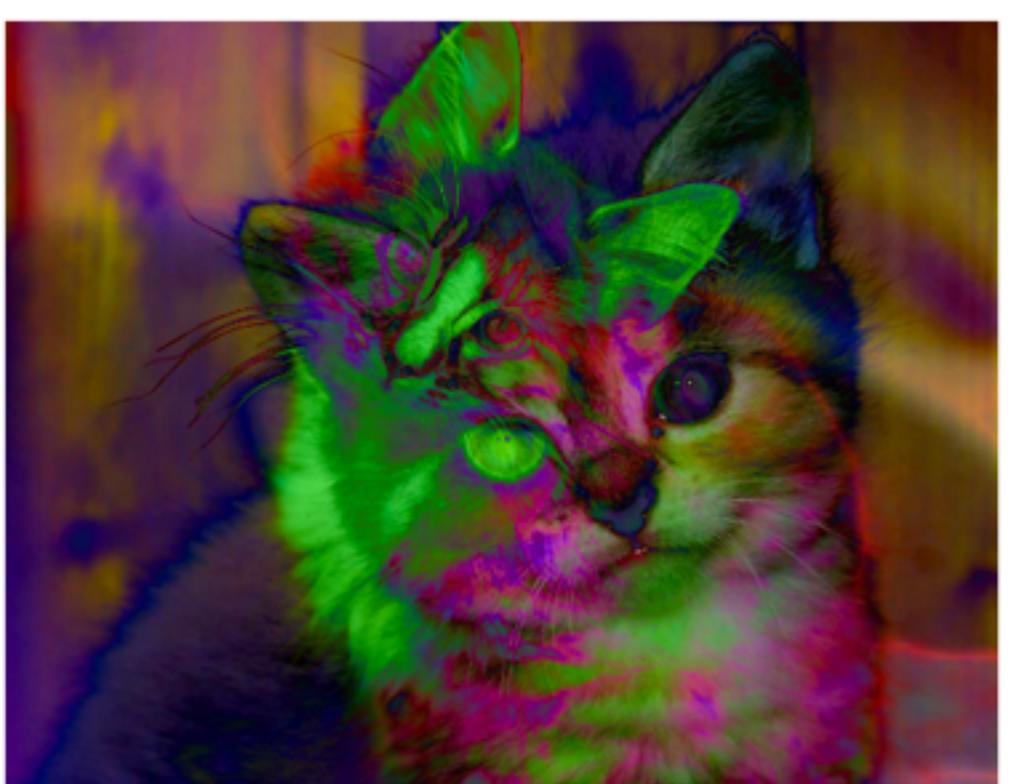
Darken



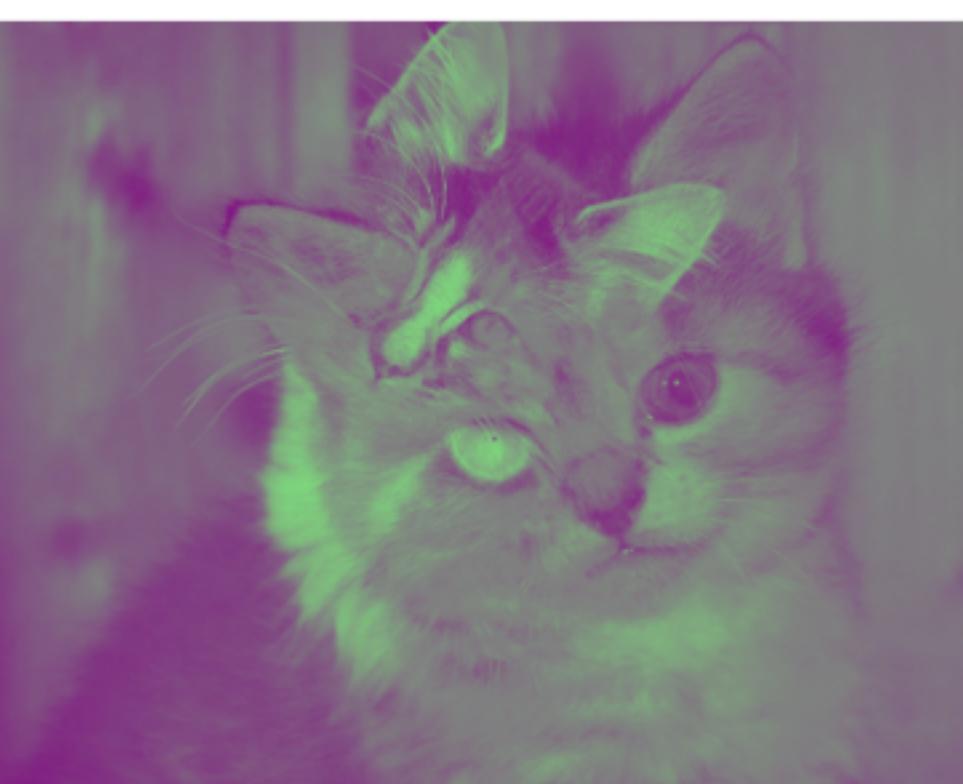
Color Dodge



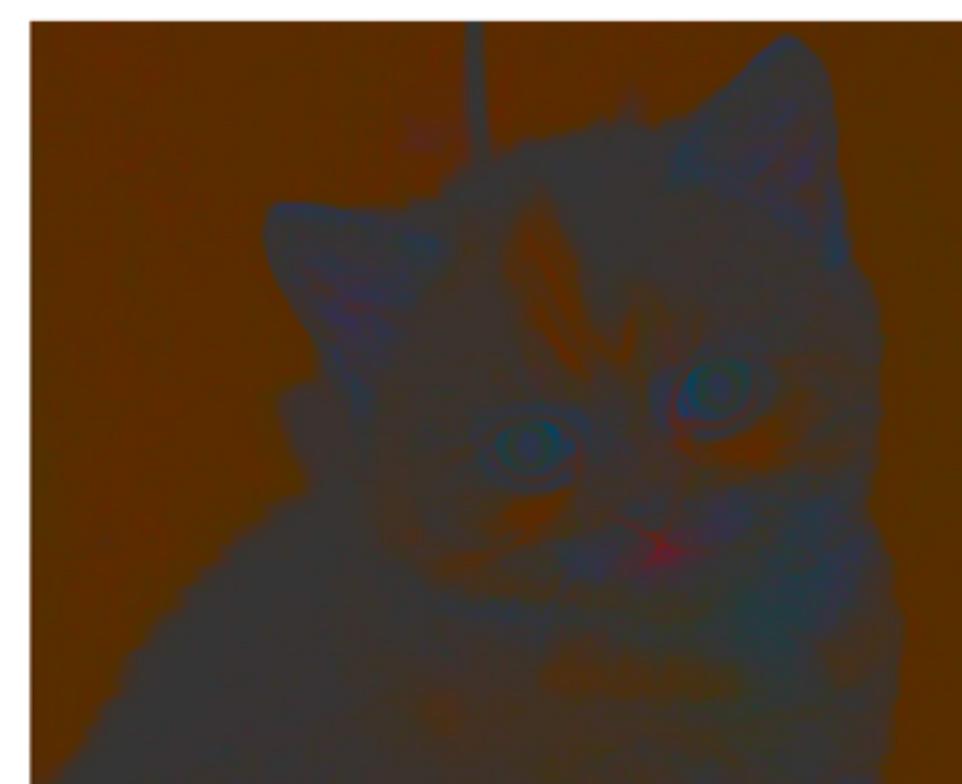
Hard Light



Difference



Exclusion



Color



Luminosity

Grid Layout

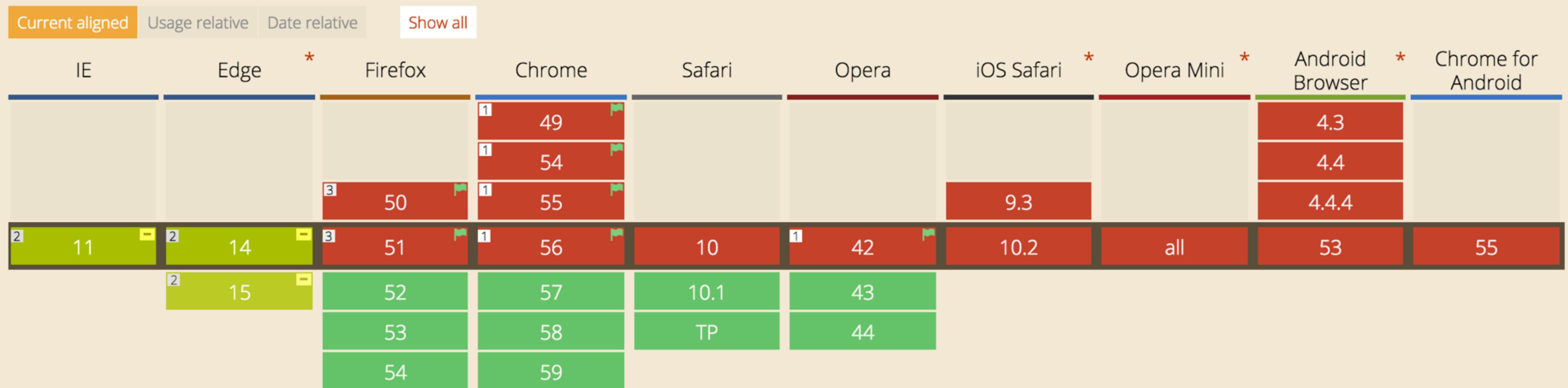
TWO-DIMENSIONAL LAYOUT AT ITS FINEST. ALMOST HERE!

Support (LEARN NOW. THANK ME LATER)

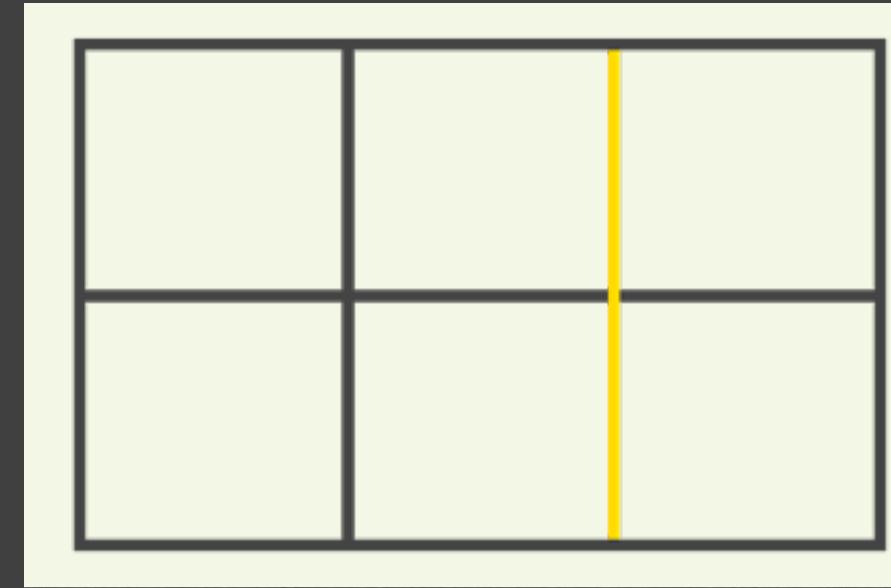
CSS Grid Layout - CR

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for lay out into columns and rows using a set of predictable sizing behaviors

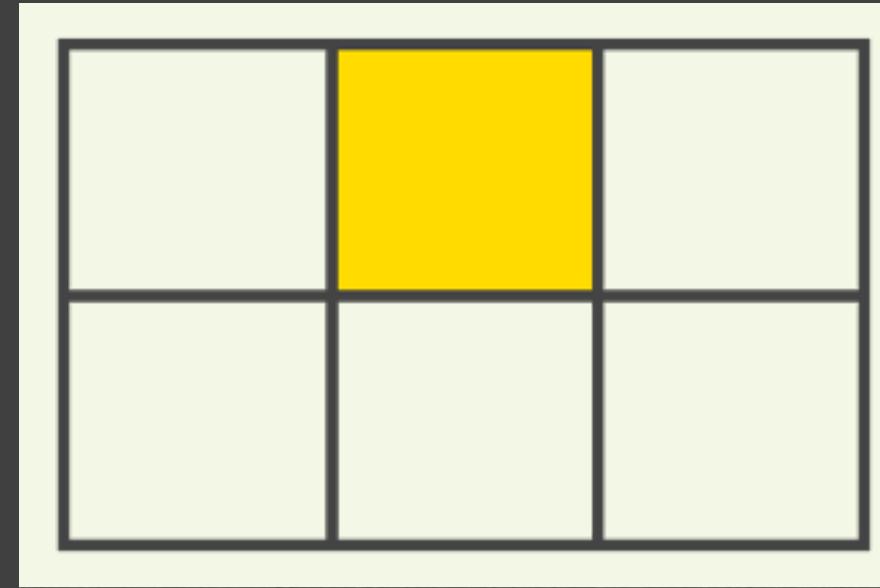
Global
unprefixed:
U.S.A.
unprefixed:
0.1% + 6.25% = 6.35%
0.1%
0.08% + 12.56% = 12.64%
0.08%



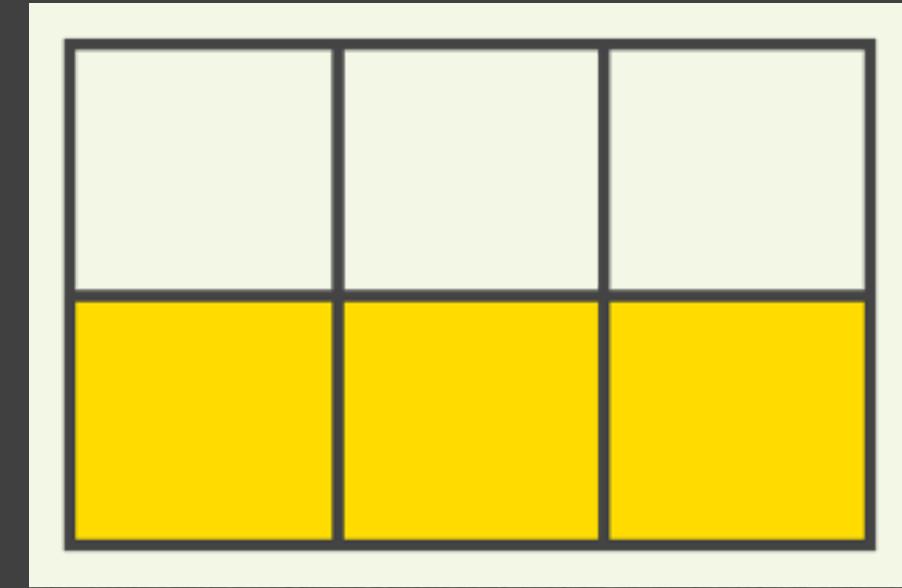
Grid Terminology



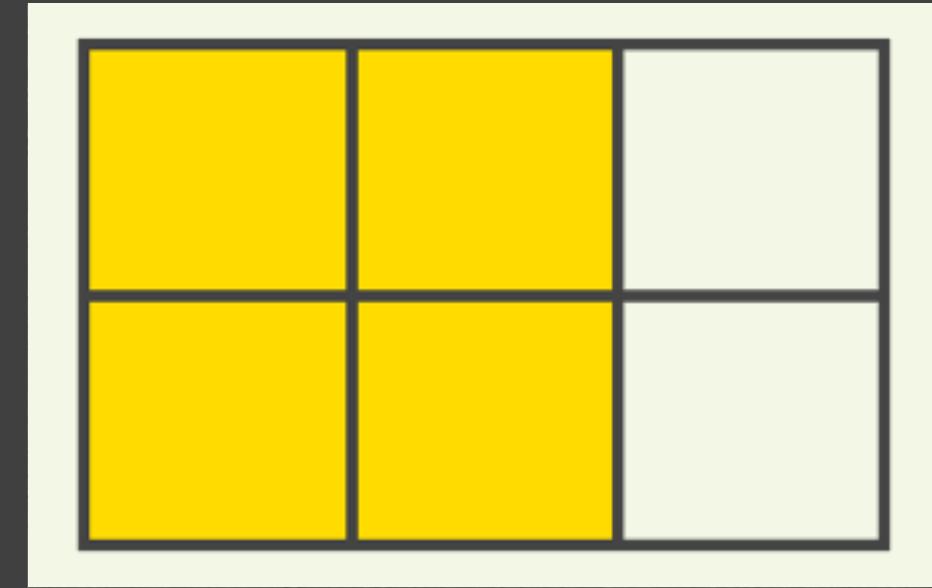
Grid Line



Grid Cell

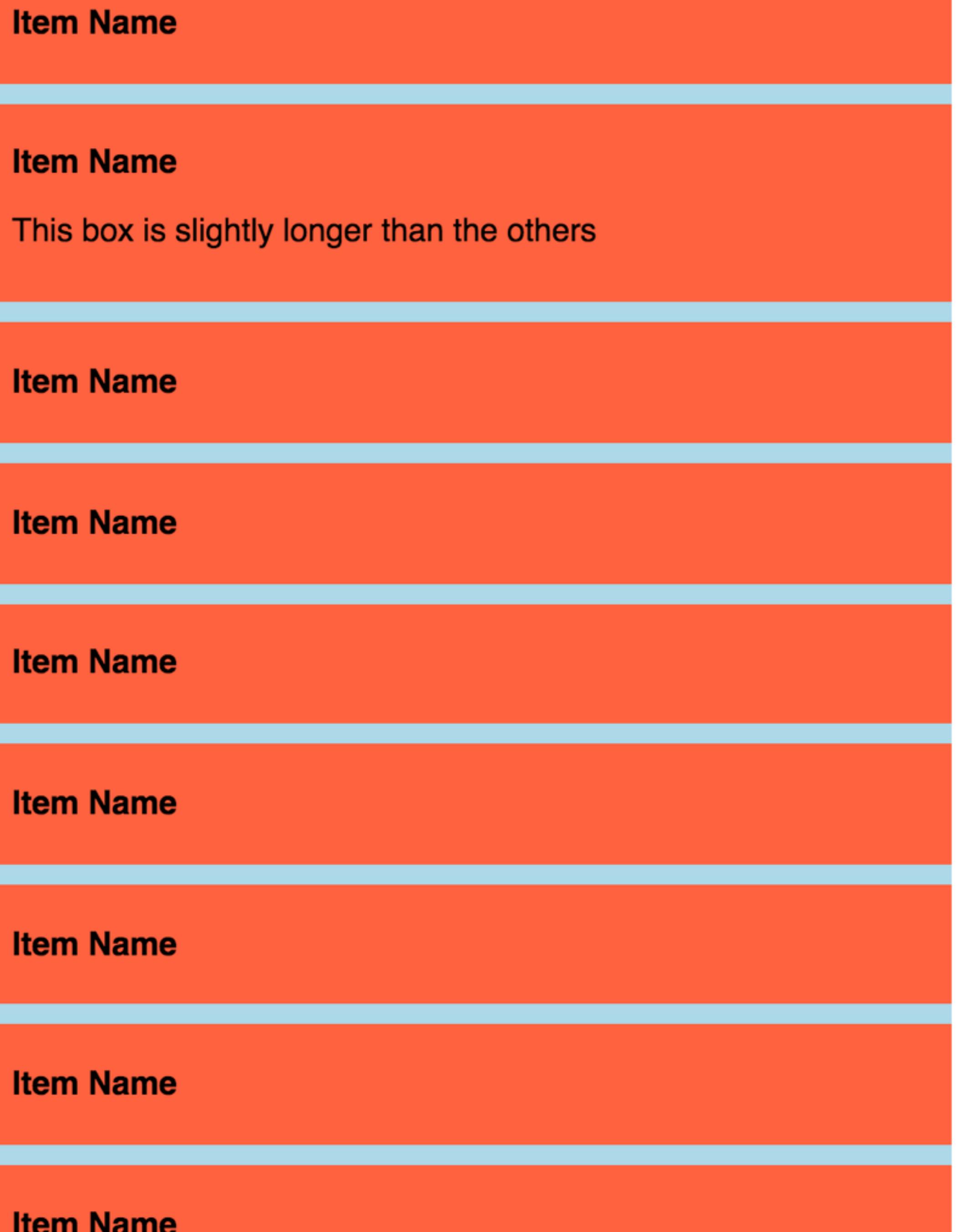


Grid Track



Grid Area

SOURCE: [COMPLETE GUIDE TO GRID CSS-TRICKS](#)



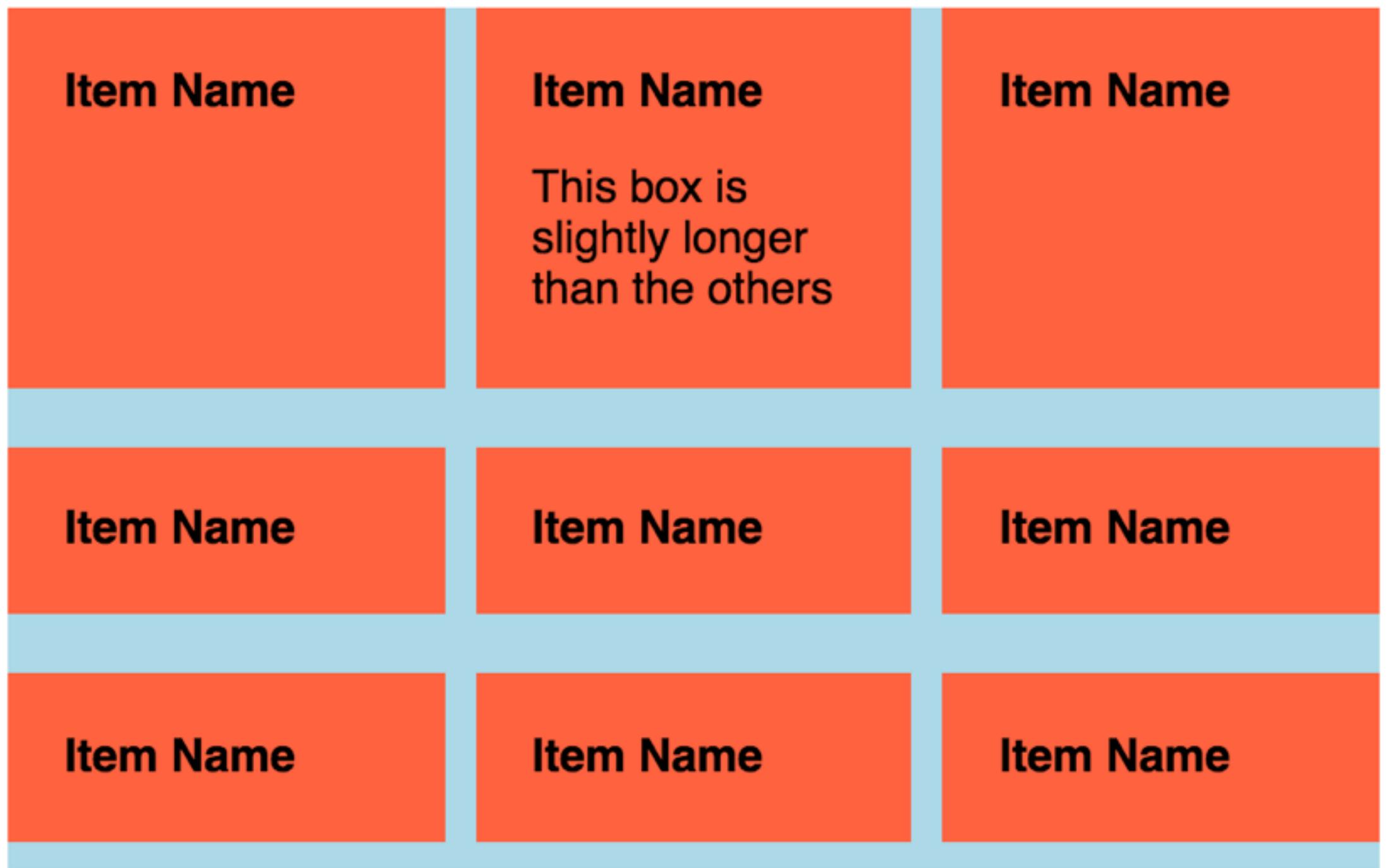
```
.container {  
    width: 90%;  
    background-color: lightblue;  
    margin: 30px auto;  
}  
.box {  
    background-color: tomato;  
    padding: 10px 20px;  
    box-sizing: border-box;  
    margin-bottom: 10px;  
}
```

Grid Template Construction

```
grid-template-columns: 1fr 1fr 1fr;  
grid-template-rows: 1fr 1fr;
```

Grid Template Construction

`grid-template-columns: 100px 1fr 10vw 10%;`



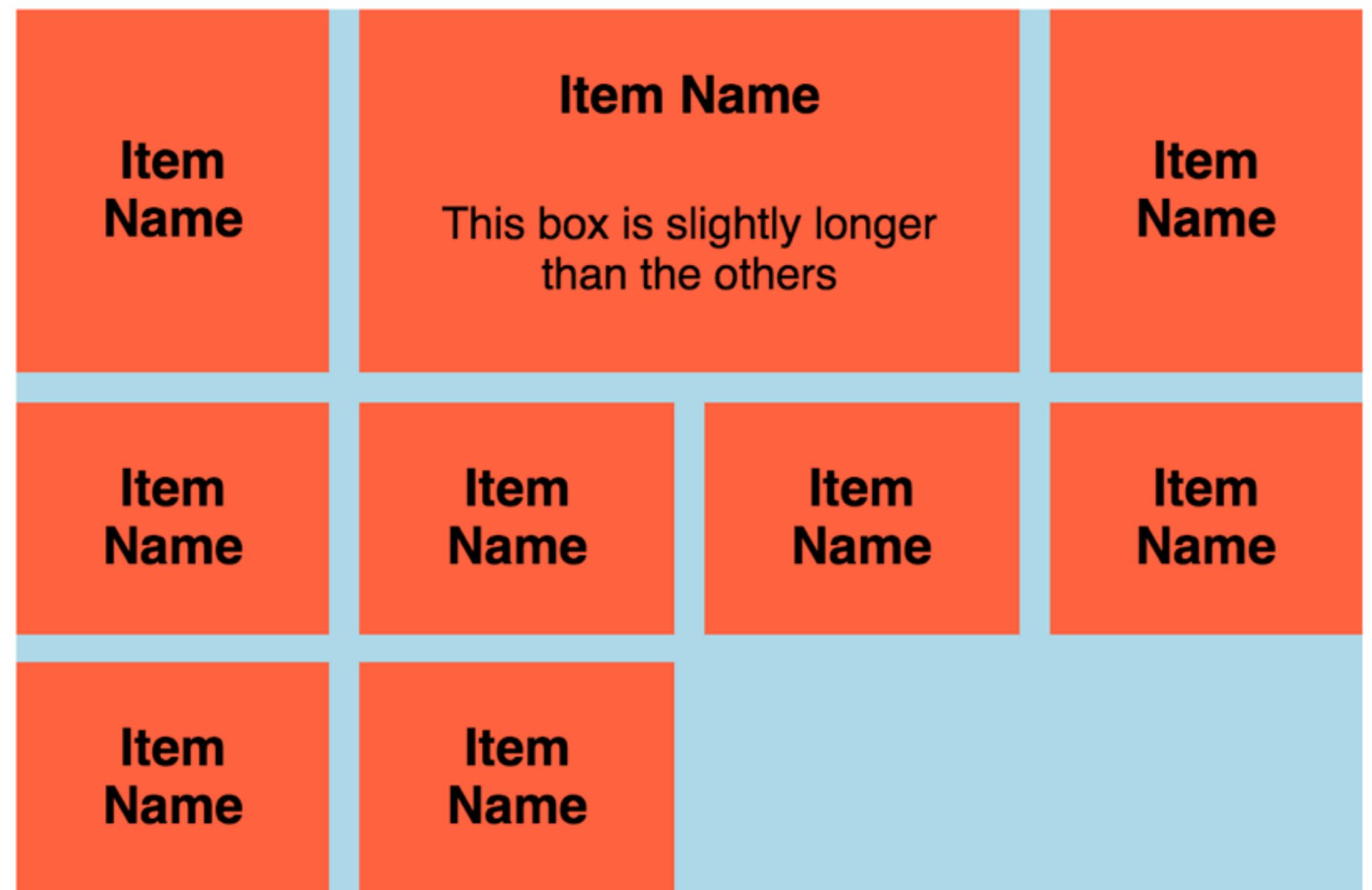
```
.container {  
    display: grid;  
    grid-template-columns: 1fr 1fr  
1fr;  
    grid-gap: 2vw;  
}
```

Grid Item Placement

```
grid-column: span 2;  
grid-column: 1 / 4;  
grid-column: 2 / 3;  
grid-column: 1 span 2;
```

Grid Item Placement

```
grid-row: span 2;  
grid-row: 1 / 4;  
grid-row: 2 / 3;  
grid-row: 1 span 2;
```



```
.container {  
    grid-template-columns: 1fr 1fr  
    1fr 1fr;  
}  
.box:nth-child(2) {  
    grid-column: span 2;  
}
```

Item Name	Item Name	Item Name	Item Name
Item Name	Item Name This box is slightly longer than the others		Item Name
Item Name	Item Name		

```
.box:nth-child(2) {  
  grid-row: 2 / 3;  
  grid-column: 2 / span 2;  
}
```

Item Name	Item Name	Item Name
Item Name	This box is slightly longer than the others	Item Name
Item Name	Item Name	Item Name

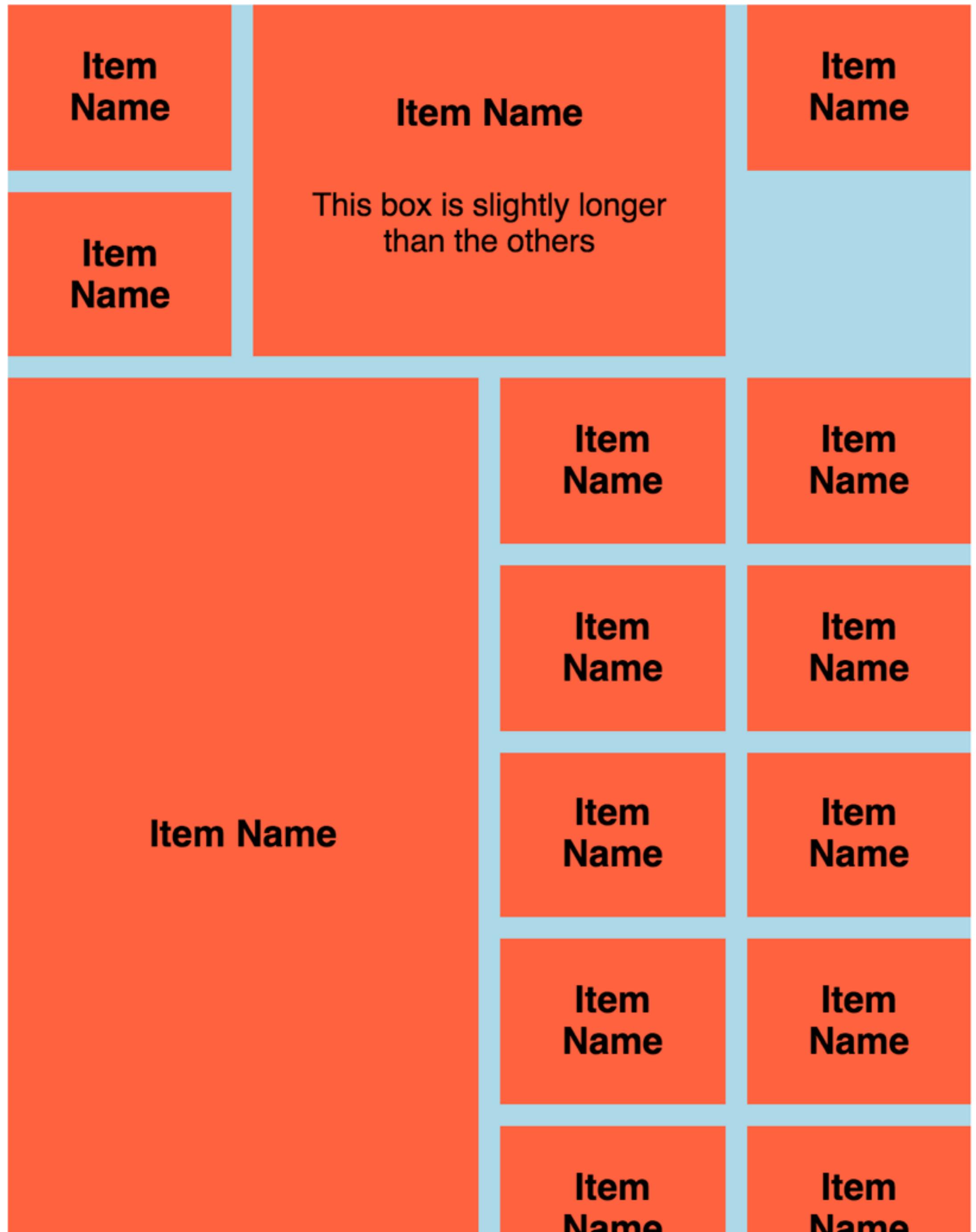
```
.box:nth-child(2) {  
  grid-row: 1 / 3;  
  grid-column: 2 / span 2;  
}
```

or

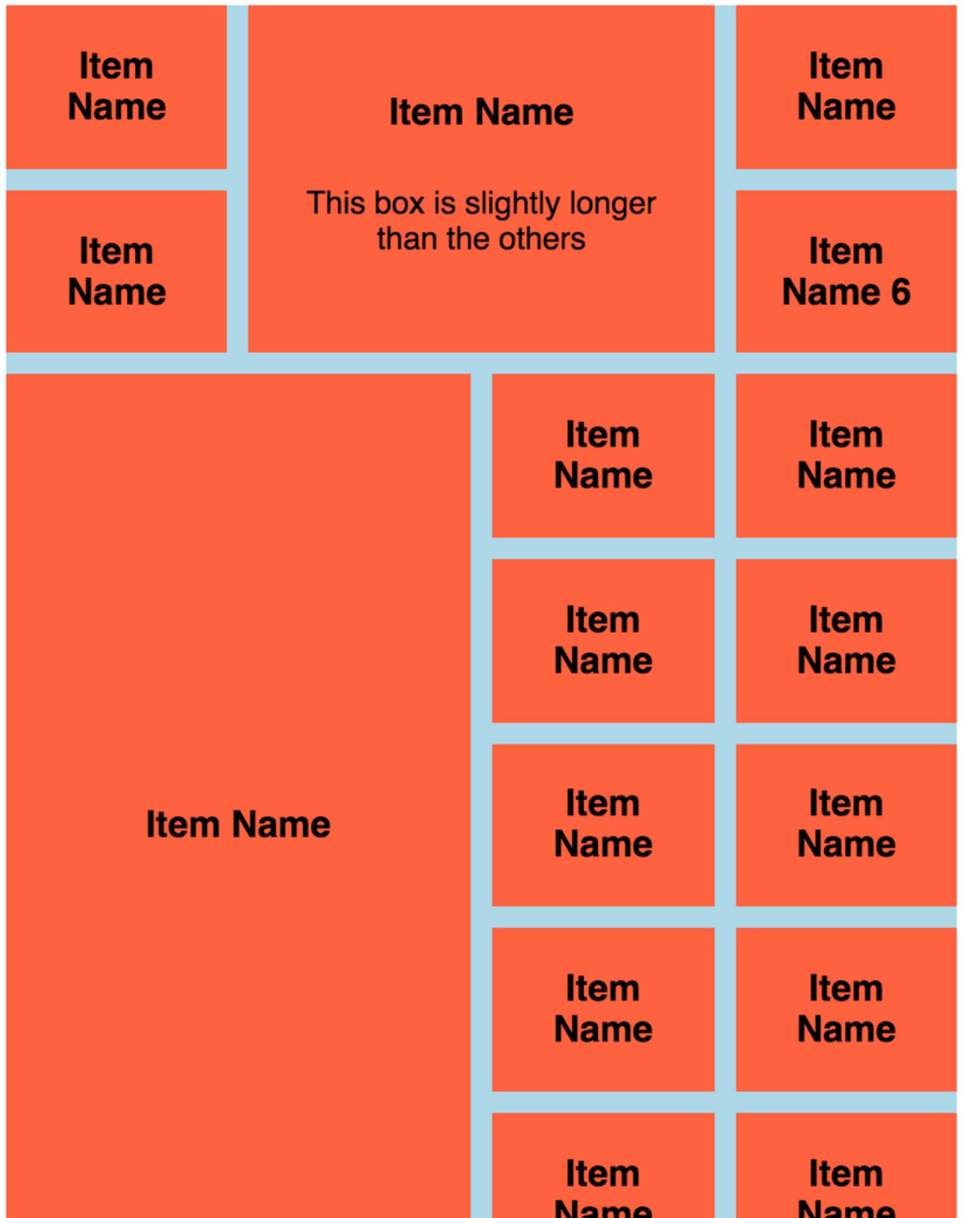
```
.box:nth-child(2) {  
  grid-row: span 2;  
  grid-column: span 2;  
}
```

Item Name	Item Name	Item Name
Item Name	This box is slightly longer than the others	Item Name
Item Name	Item Name	Item Name
Item Name	Item Name	Item Name
Item Name	Item Name	Item Name
Item Name	Item Name	Item Name
Item Name	Item Name	Item Name

```
.container {  
    grid-template-columns: 1fr 1fr  
    1fr 1fr;  
}  
.box:nth-child(2) {  
    grid-row: span 2;  
    grid-column: span 2;  
}
```

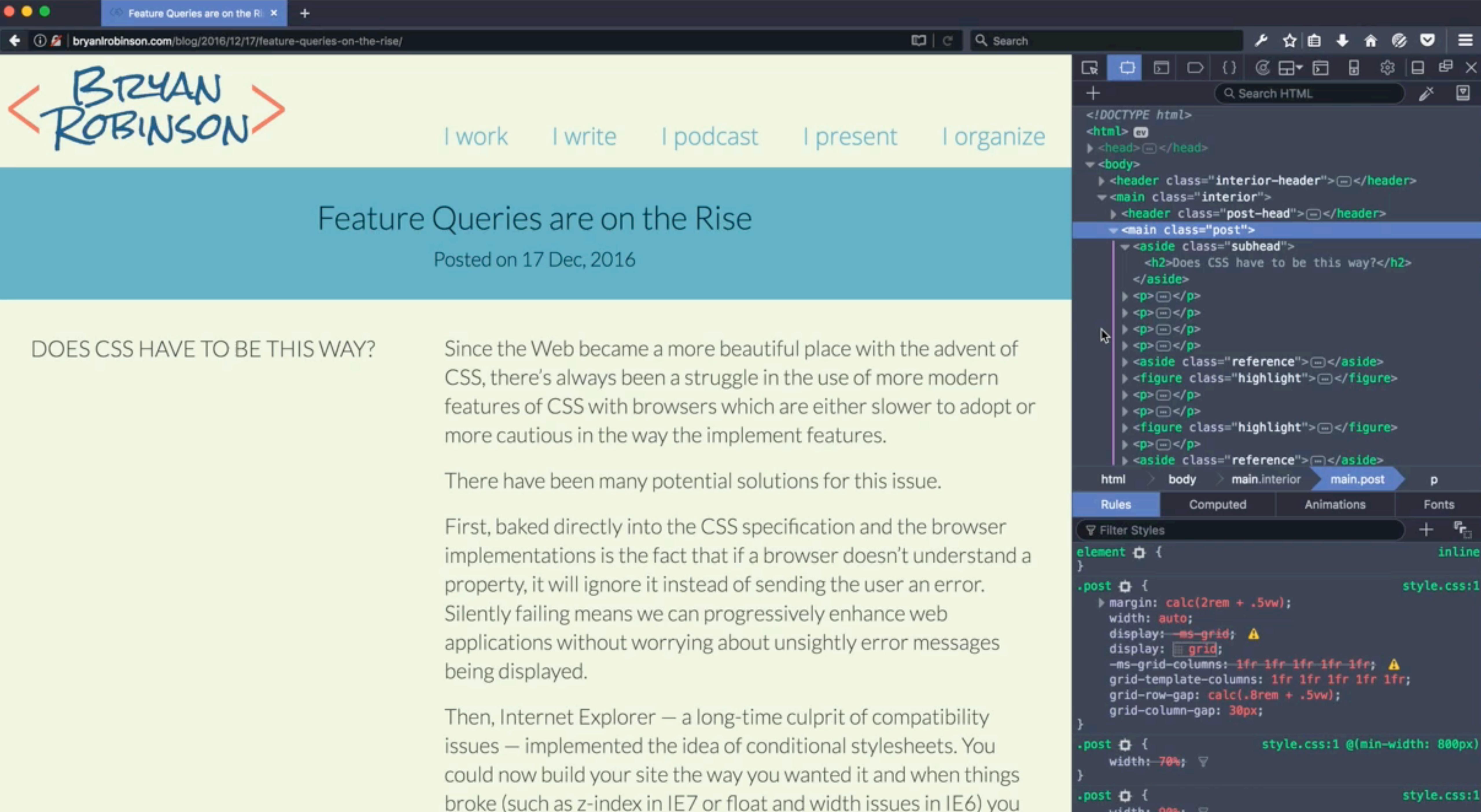


```
.box:nth-child(2) {  
    grid-row: span 2;  
    grid-column: span 2;  
}  
.box:nth-child(5) {  
    grid-row: span 5;  
    grid-column: span 2;  
}
```



```
.container {  
  ...  
  grid-auto-flow: dense;  
}
```

1	2	3	5		6	7		8	12
9		11	10				13		14
4							15		16
		17		18	19		20	21	
		22	23		24	25		26	28
		27		29		30			



BRYAN ROBINSON

Howdy. My NAME IS BRYAN.

I'm a designer and developer. It's nice to meet you!

I live in Memphis, Tenn., with my wife, son and two cats.

I've been in the industry for over a decade now, and I have learned to embrace my professional passions. That's why I care strongly about new web layout, post-modern CSS and building up the developer and designer communities around me.

I WORK

I WRITE

| PODCAST

I PRESENT

I ORGANIZE

LATEST ARTICLES

The screenshot shows the Chrome DevTools interface with the 'Elements' tab selected. The top part displays the DOM tree for a web page. The bottom part shows the 'Elements' panel with the path `html > body > section.grid.grid--latest`. The 'Rules' tab is active, showing the following CSS rule:

```
element { inline }
.grid--latest {
    display: -ms-grid; ▲
    display: grid;
    -ms-grid-columns: 1fr 1fr 1fr 1fr 1fr 1fr; ▲
    grid-template-columns: 1fr 1fr 1fr 1fr 1fr 1fr;
    grid-gap: calc(.5rem + .5vw);
    grid-template-areas: "main main main second third
fourth" "main main main fifth fifth fifth" "promo promo
promo promo promo promo" "sixth sixth seventh seventh
eighth eighth" "sixth sixth seventh seventh ninth
tenth";
}
```

```
display: grid;  
grid-template-columns: 1fr 1fr 1fr 1fr 1fr 1fr;  
grid-gap: calc(.5rem + .5vw);  
  
grid-template-areas: "main main main second third fourth"  
                      "main main main fifth fifth fifth"  
                      "promo promo promo promo promo promo"  
                      "sixth sixth seventh seventh eighth eighth"  
                      "sixth sixth seventh seventh ninth tenth";
```

```
&:nth-child(1) {  
    grid-area: main;  
}  
&:nth-child(2) {  
    grid-area: second;  
}  
&:nth-child(3) {  
    grid-area: third;  
}  
&:nth-child(4) {  
    grid-area: fourth;  
}  
&:nth-child(5) {  
    grid-area: fifth;  
}  
  
&:nth-child(6) {  
    grid-area: sixth;  
}  
&:nth-child(7) {  
    grid-area: seventh;  
}  
&:nth-child(8) {  
    grid-area: eighth;  
}  
&:nth-child(9) {  
    grid-area: ninth;  
}  
&:nth-child(10) {  
    grid-area: tenth;  
}
```



```
.about {  
  display: grid;  
  
  grid-template-columns: 1fr 1fr 1fr 1fr 1fr;  
  grid-auto-rows: minmax(20vw, 1fr);  
  grid-template-areas: " first . . second ." " . . third . ." " fourth . . . fifth" " . sixth sixth . fifth" " . sixth sixth . ." " . . . seventh seventh" "eighth eighth . seventh seventh" "eighth eighth . ." ;  
}
```

```
.banner {  
    display: grid;  
    grid-template-rows: repeat(5, 1fr);  
    grid-template-columns: repeat(5, 1fr);  
}  
.headline {  
    font-size: calc(1.5rem + 6vw);  
    grid-row: 4 / 5;  
    grid-column: 2 / 6;  
}  
.subhead {  
    grid-column: 2 / 6;  
    grid-row: 5 / 6;  
    font-size: calc(1rem + 2vw);  
}
```

Learn More

- [Rachel Andrew's Get Ready for Grid Layout](#)
- [My Simple Primer](#)
- [CSS Tricks Complete Guide to Grid](#)
- [Jen Simmons' Lab](#)

Explore More

Explore More

- Initial Letter
- CSS Transforms
- Object-Fit
- CSS Filters
- Clip Path

No Shame in Templates

BUT UNDERSTAND WHAT THE TEMPLATE DOES AND HOW TO BREAK OUT

CSS is Powerful

LEARN A FEW THINGS AND MAKE INTERESTING DESIGNS

Start Today

YOU DON'T HAVE TO WAIT FOR 100% BROWSER ADOPTION

Homework

LEARN ONE NEW LAYOUT AND ONE NEW STYLE PROPERTY



I'd love to help you

- <http://bryanlrobinson.com>
- Twitter: [@brob](https://twitter.com/@brob)
- Slack:
[http://slack.memphistechnology.org/](https://slack.memphistechnology.org/)
- Today's Examples:
postmoderncss.com