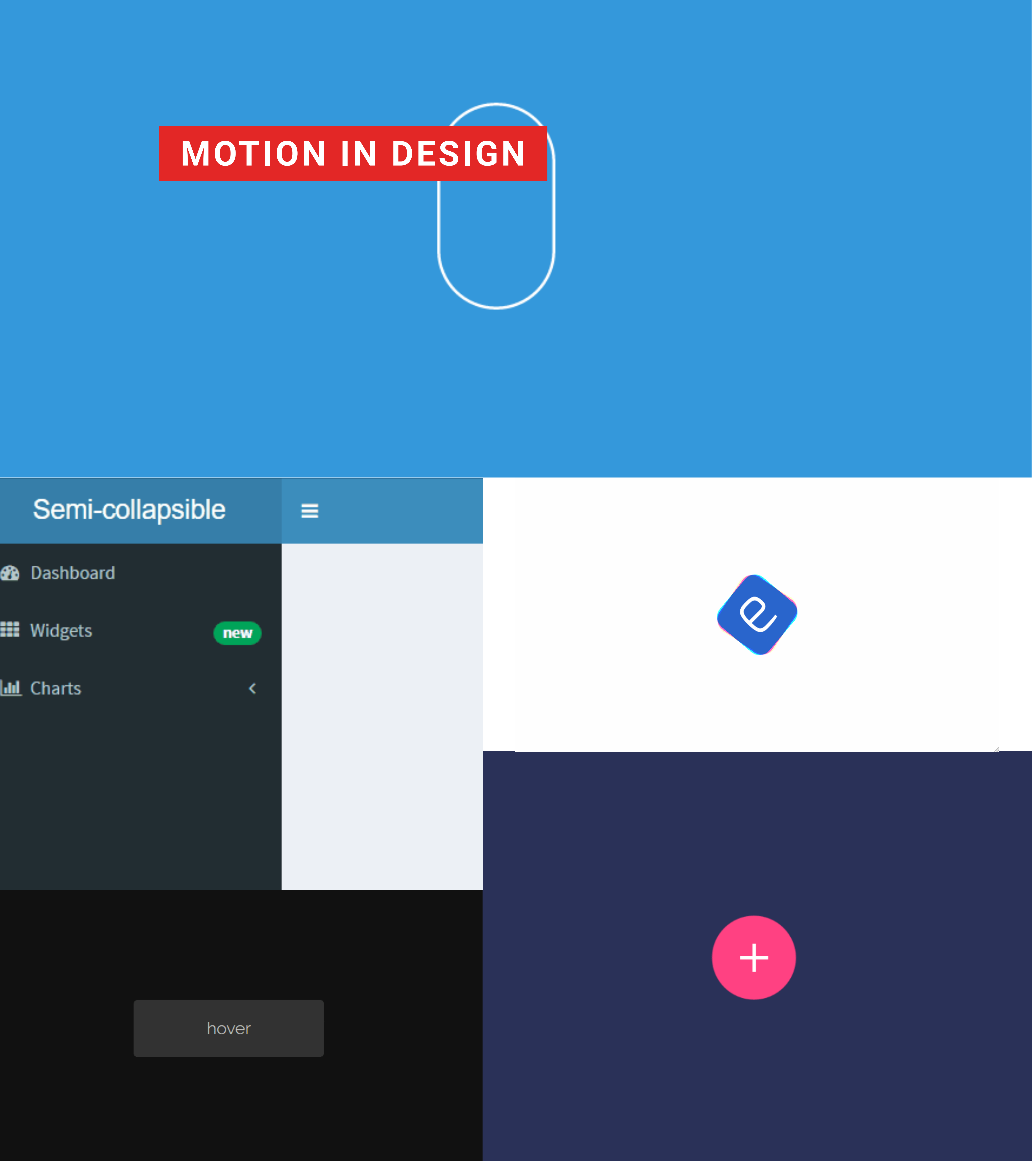
Transitions & Transforms

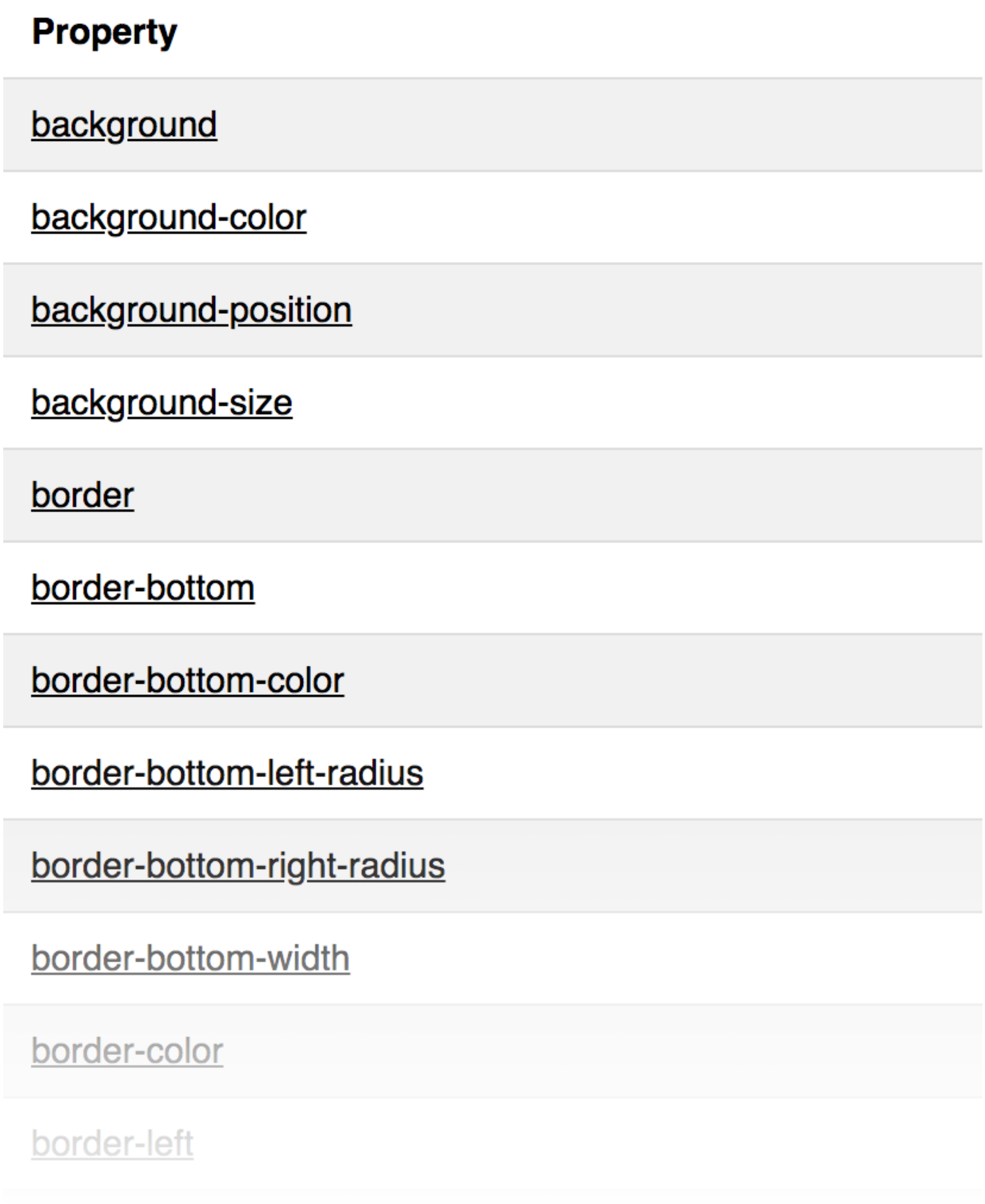
WEEK 6

MOTION IN DESIGN



CSS animation, video and other motion media can improve design not only aesthetically, but also be a practical tool as visual cues and interactivity feedback.

CSS ANIMATABLE



Property
background
background-color
background-position
background-size
border
border-bottom
border-bottom-color
border-bottom-left-radius
border-bottom-right-radius
border-bottom-width
border-color
border-left

[FULL ANIMATABLE >>]

2D TRANSFORMS

translate()

rotate()

scaleX()

scaleY()

scale()

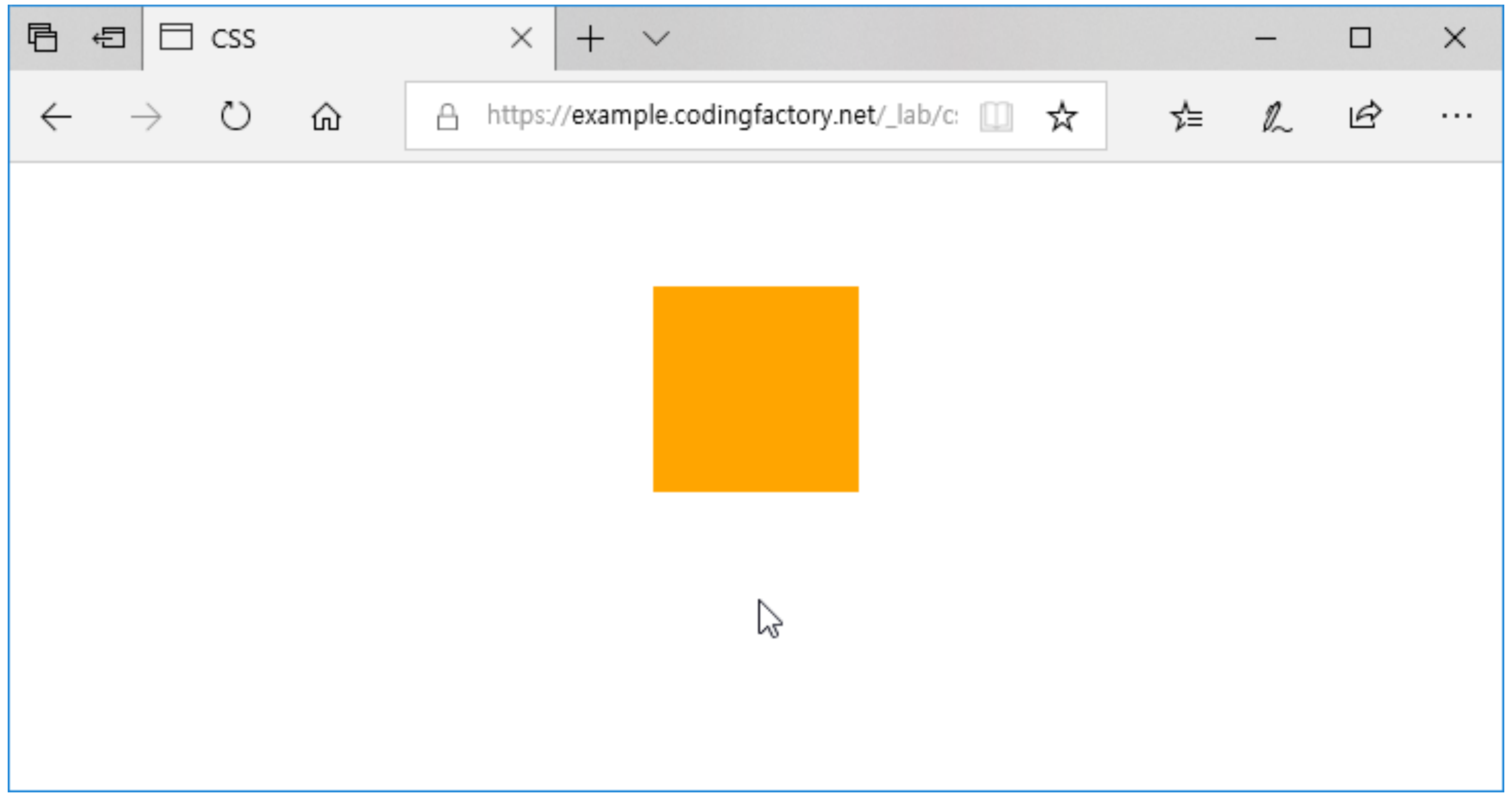
skewX()

skewY()

skew()

matrix()

[W3 Reference >>]



2D TRANSFORMS

translate()

rotate()

scaleX()

scaleY()

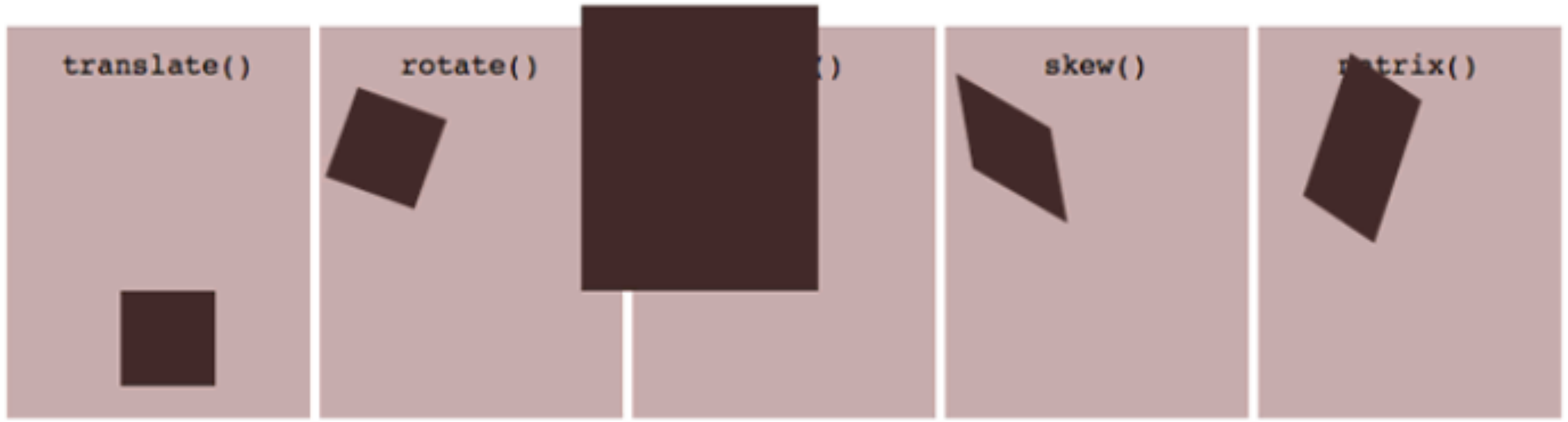
scale()

skewX()

skewY()

skew()

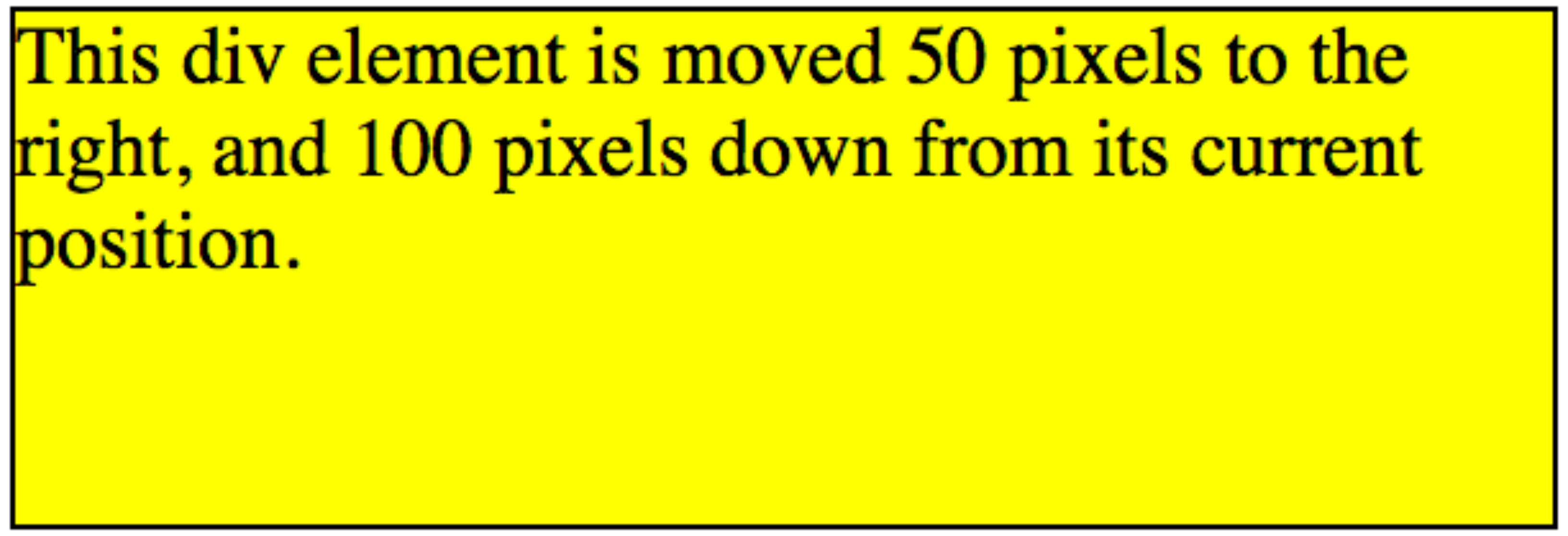
matrix()



[W3 Reference >>]

2D TRANSFORMS

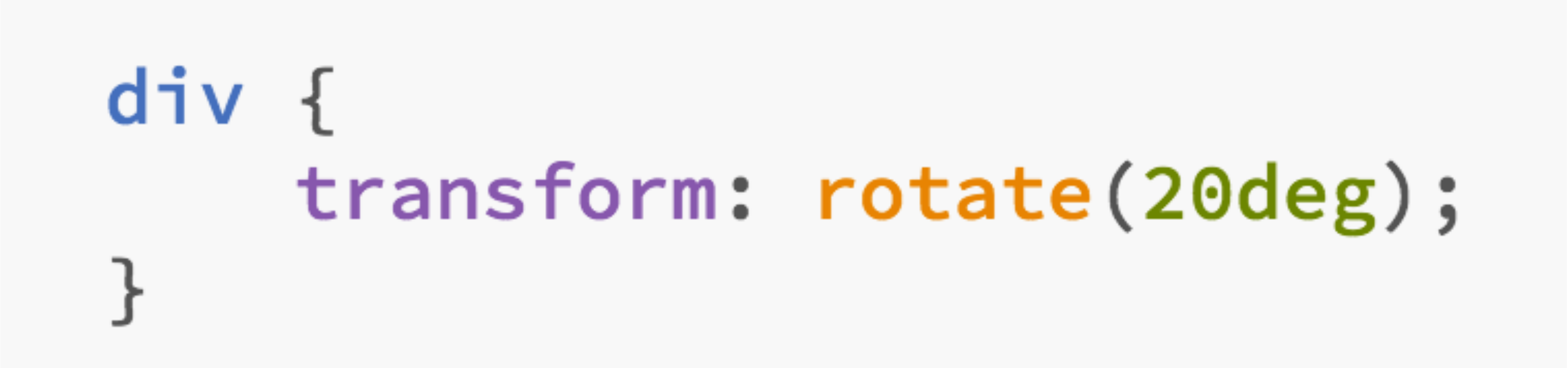
```
div {
    transform:
    translate(50px,100px); /*
    Standard syntax */
}
```



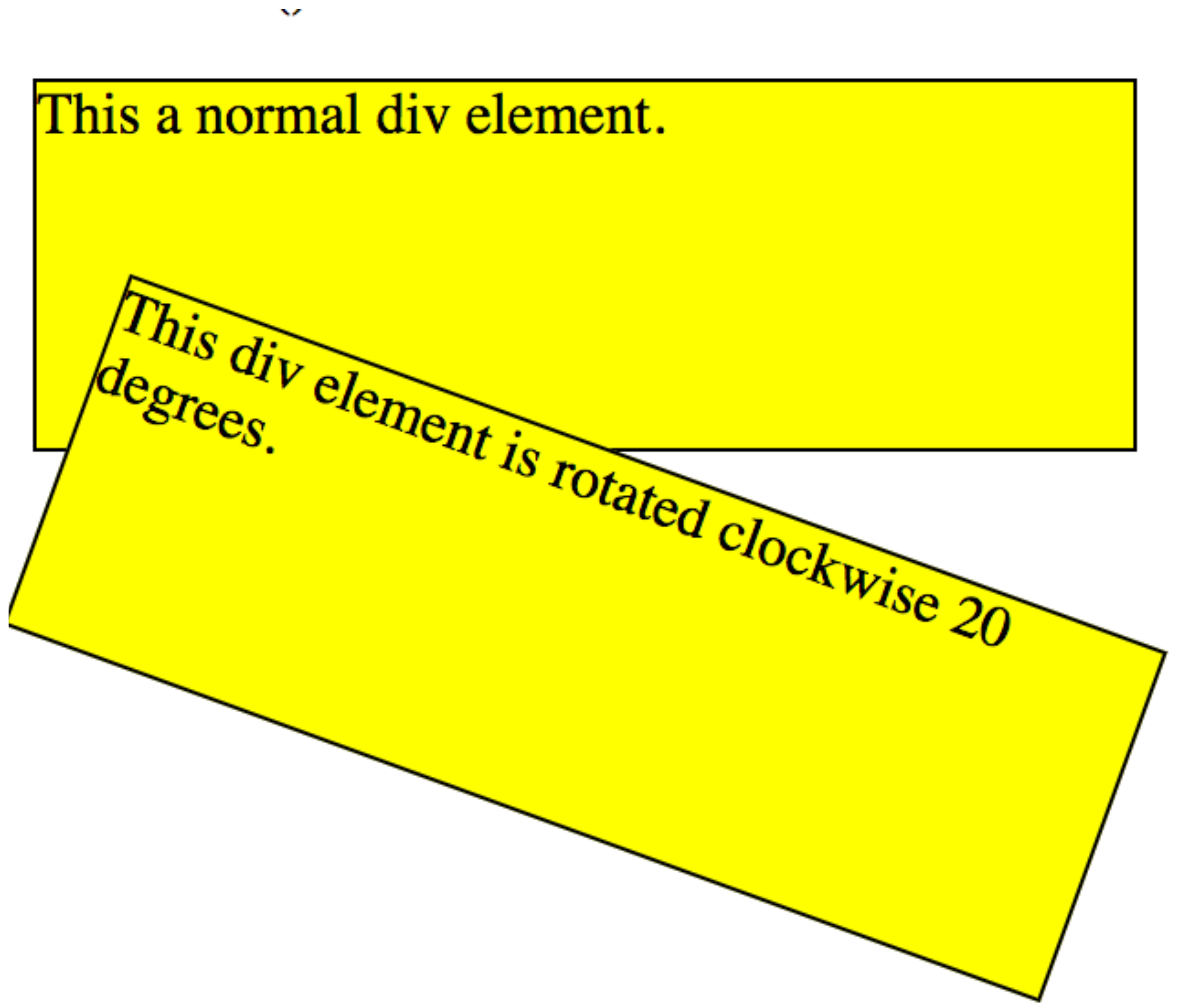
This div element is moved 50 pixels to the right, and 100 pixels down from its current position.

[W3 Example >>]

2D TRANSFORMS



```
div {
    transform: rotate(20deg);
}
```

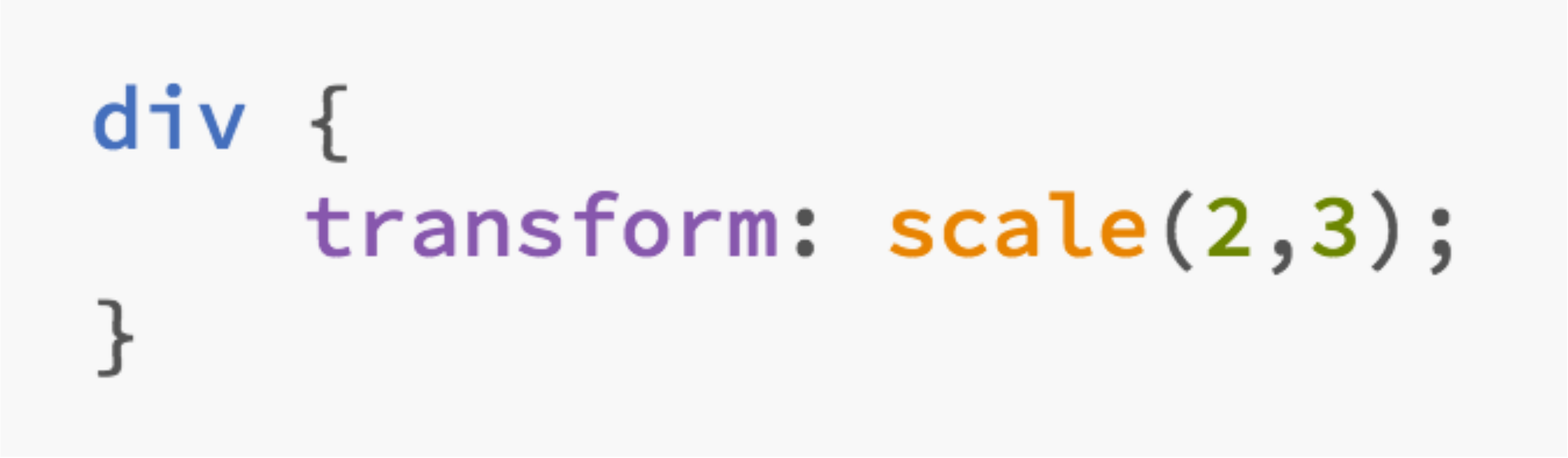


This a normal div element.

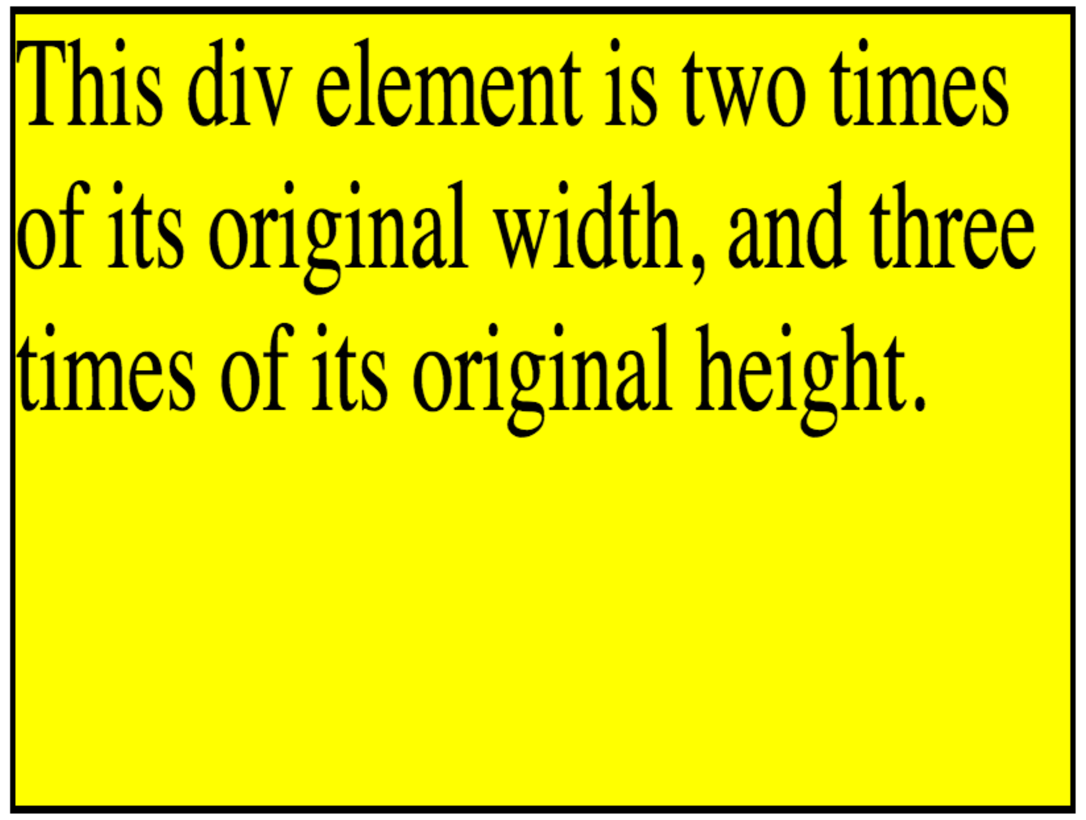
This div element is rotated clockwise 20 degrees.

[W3 Example >>]

2D TRANSFORMS



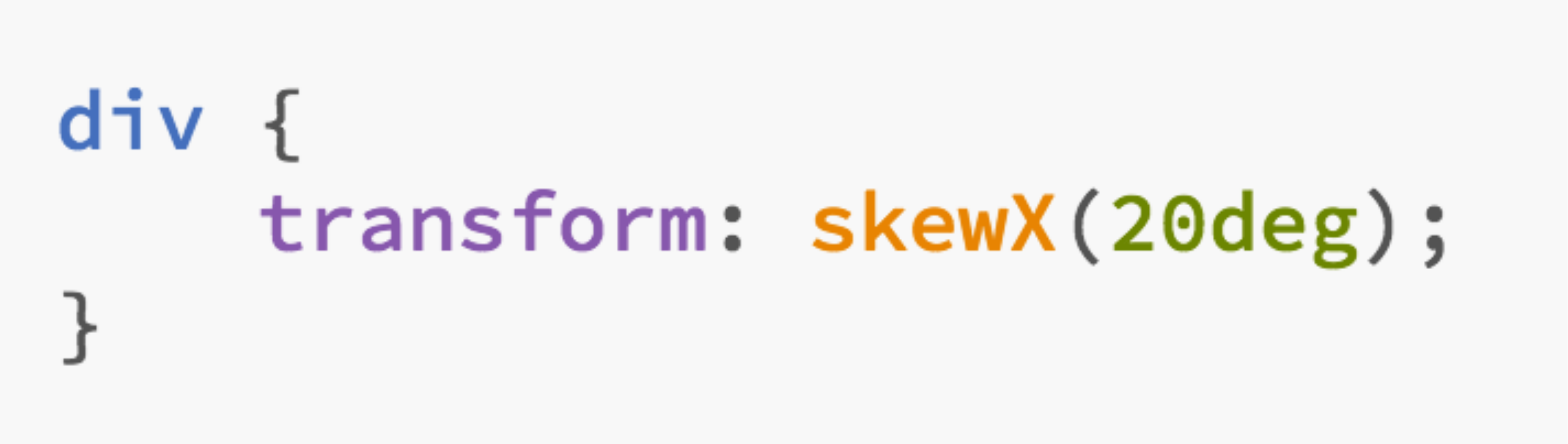
```
div {
    transform: scale(2,3);
}
```



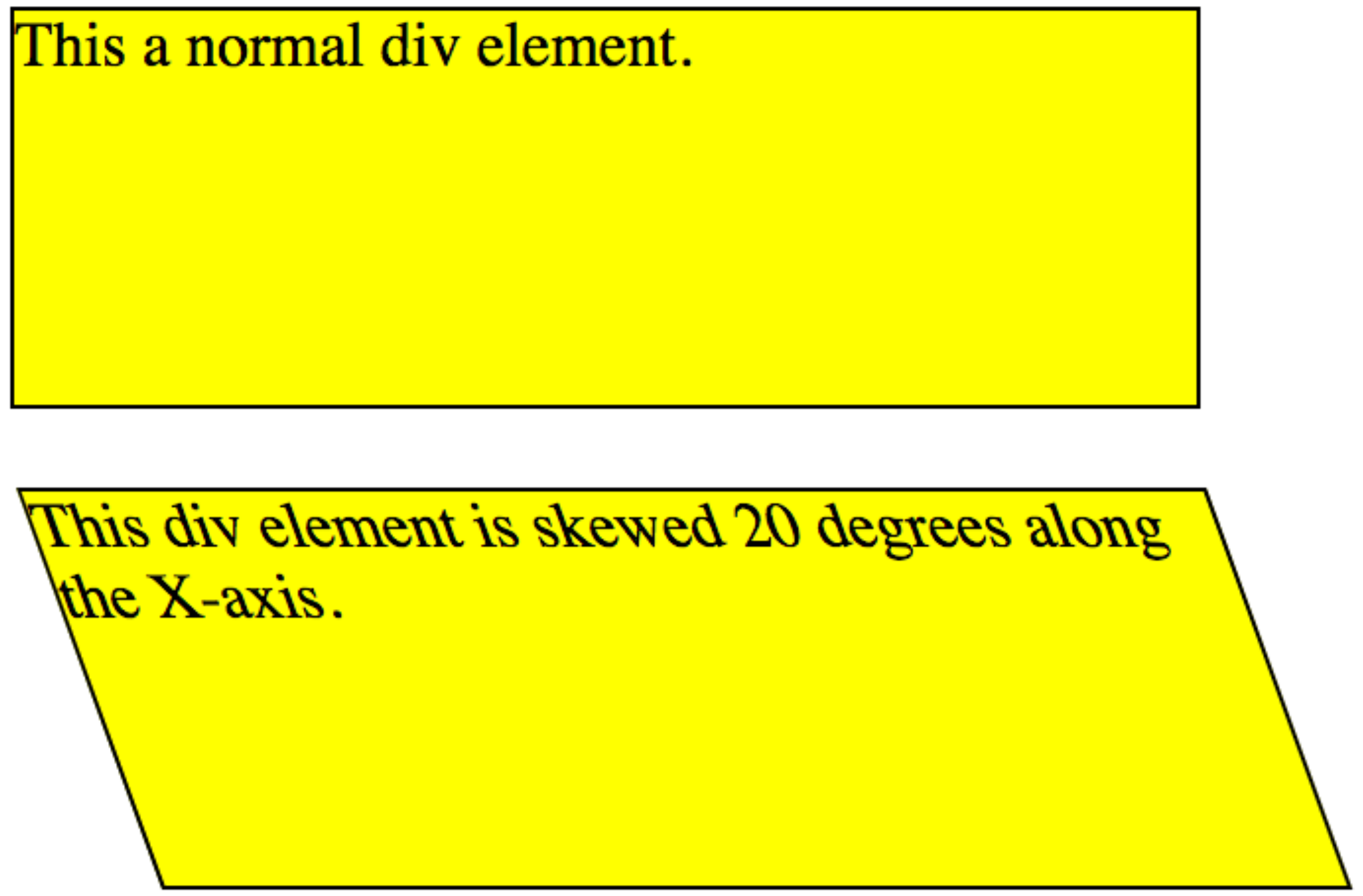
This div element is two times of its original width, and three times of its original height.

[W3 Example >>]

2D TRANSFORMS



```css
div {
    transform: skewX(20deg);
}
```

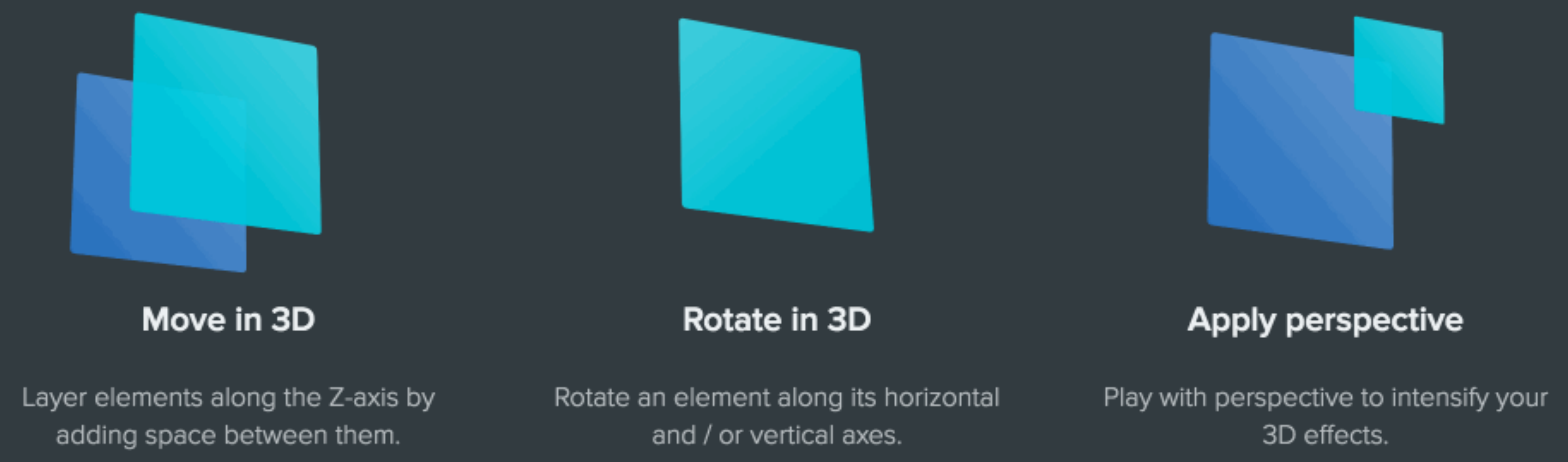


This a normal div element.

This div element is skewed 20 degrees along the X-axis.

[W3 Example >>]

3D TRANSFORMS



Move in 3D

Layer elements along the Z-axis by adding space between them.

Rotate in 3D

Rotate an element along its horizontal and / or vertical axes.

Apply perspective

Play with perspective to intensify your 3D effects.

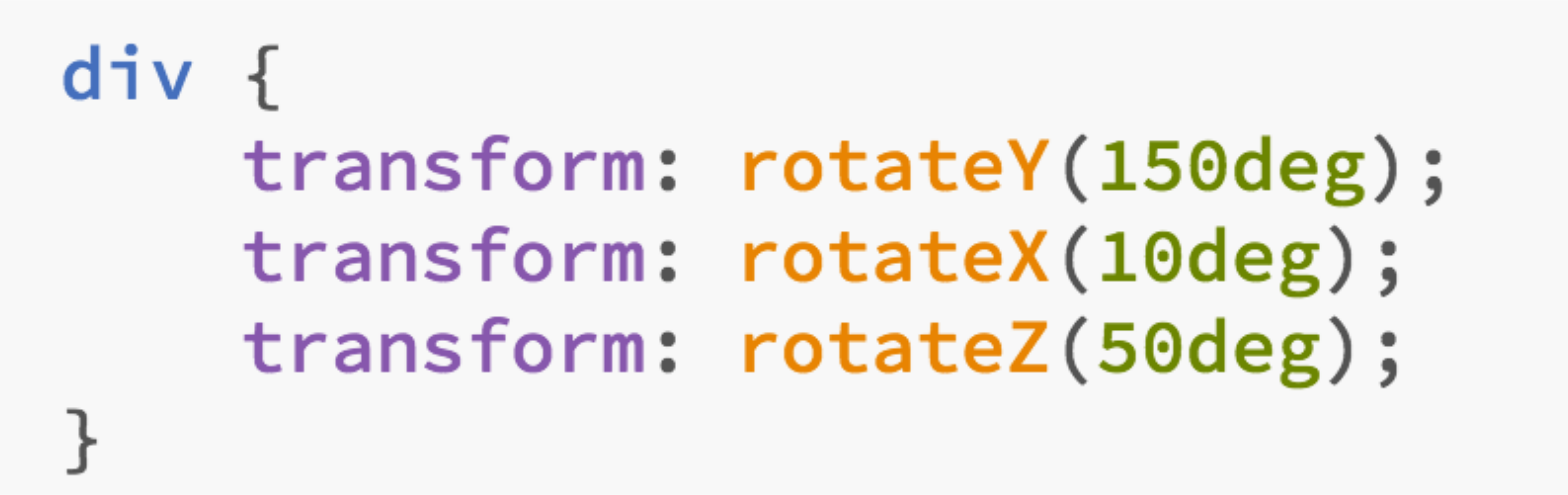
[W3 Reference >>]

3D TRANSFORMS

rotateX()

rotateY()

rotateZ()

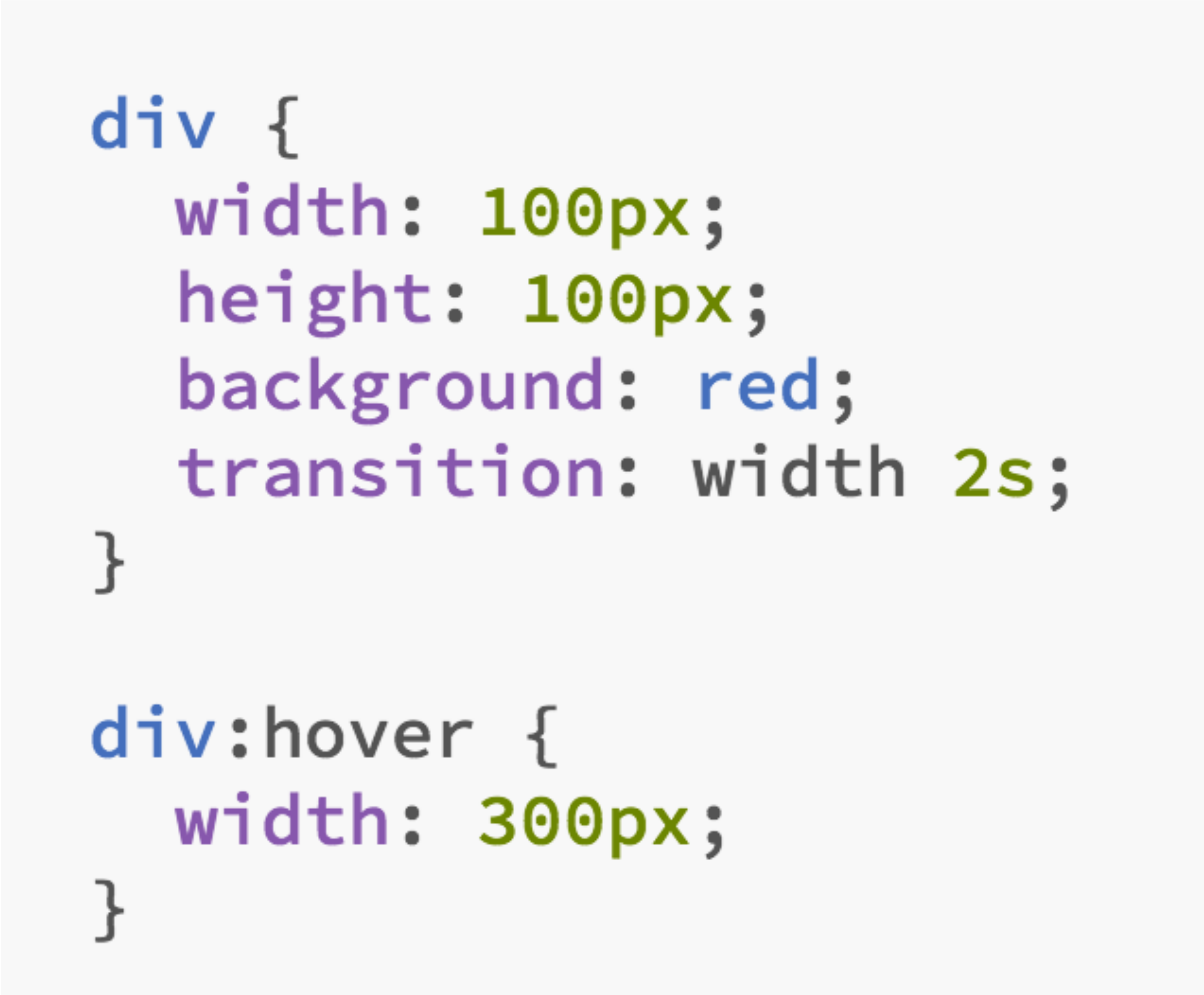


```
div {
    transform: rotateY(150deg);
    transform: rotateX(10deg);
    transform: rotateZ(50deg);
}
```

[W3 Reference >>]

ANIMATION

{transition}



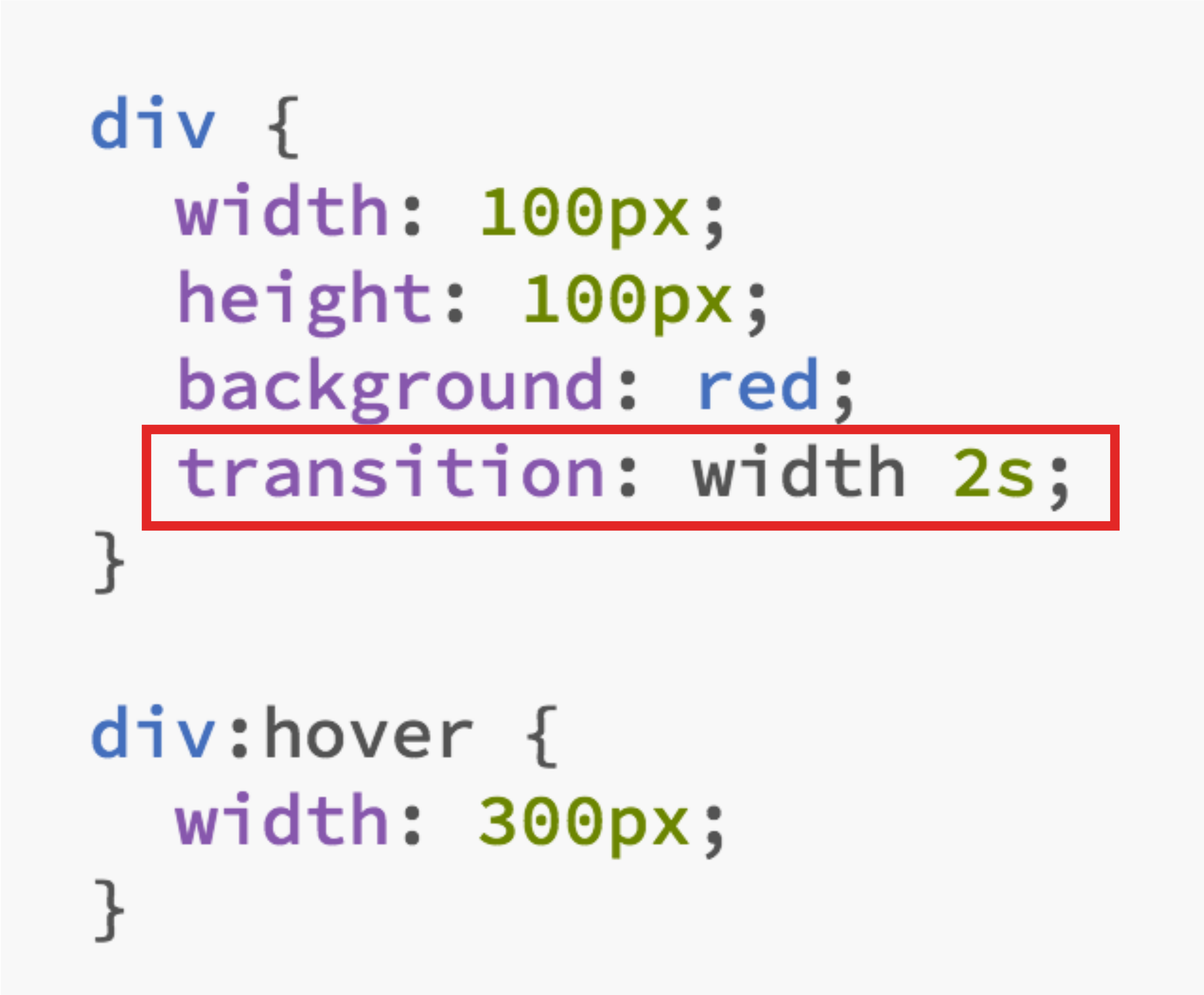
```
div {
  width: 100px;
  height: 100px;
  background: red;
  transition: width 2s;
}

div:hover {
  width: 300px;
}
```

[W3 Reference >>]

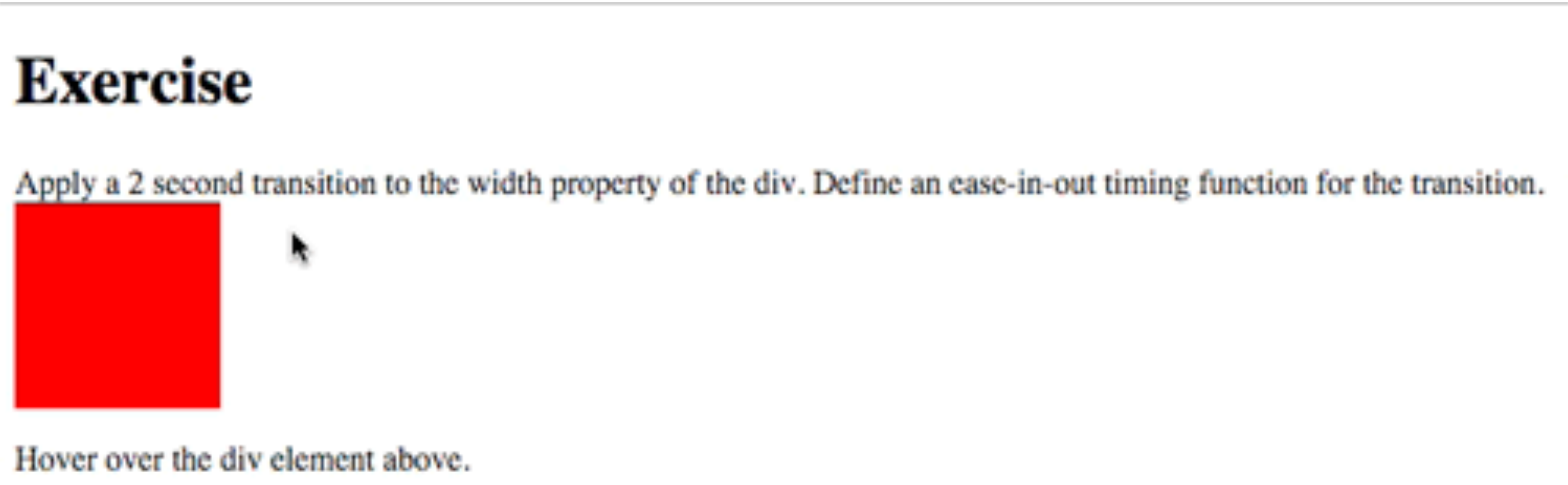
ANIMATION

{transition}



```
div {
  width: 100px;
  height: 100px;
  background: red;
  transition: width 2s;
}

div:hover {
  width: 300px;
}
```



Exercise

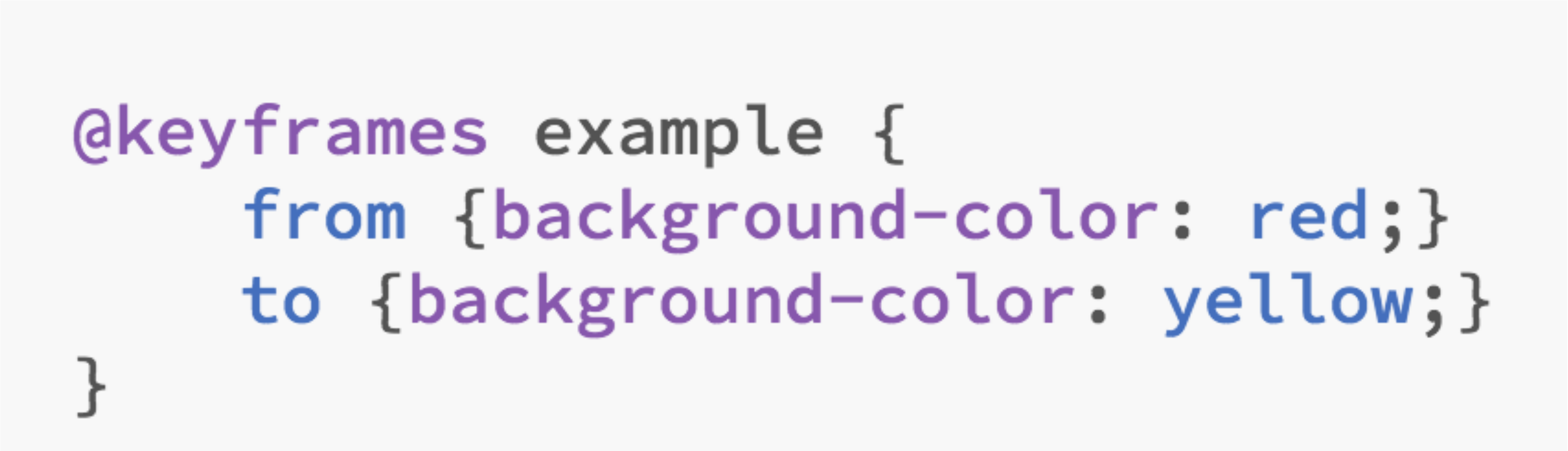
Apply a 2 second transition to the width property of the div. Define an ease-in-out timing function for the transition.

Hover over the div element above.

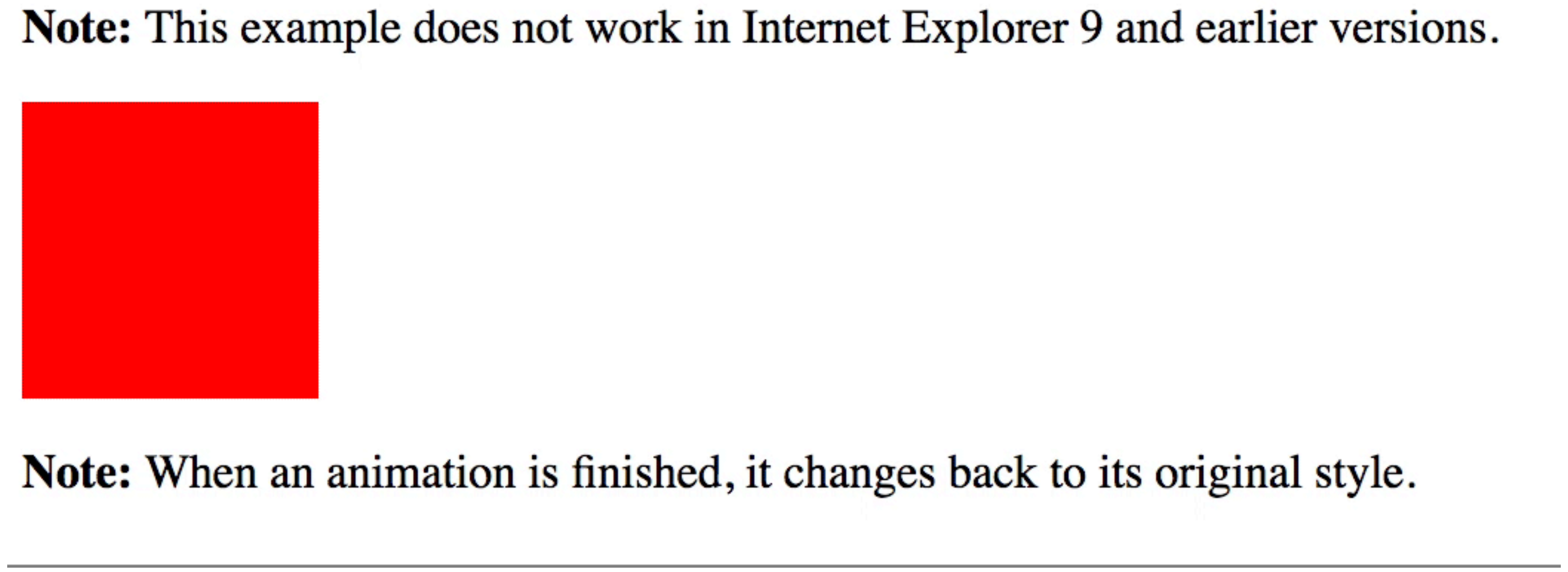
[W3 Reference >>]

ANIMATION

@keyframes { }



```
@keyframes example {
    from {background-color: red;}
    to {background-color: yellow;}
}
```



Note: This example does not work in Internet Explorer 9 and earlier versions.

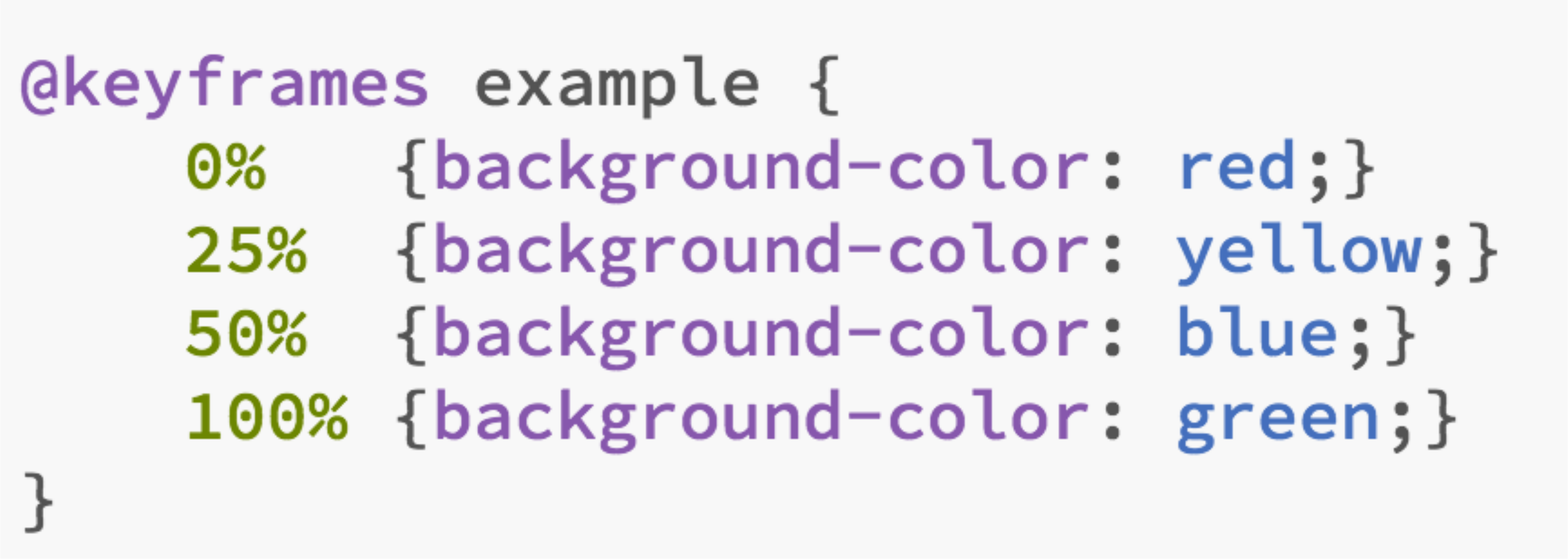
Note: When an animation is finished, it changes back to its original style.

[W3 Reference >>]

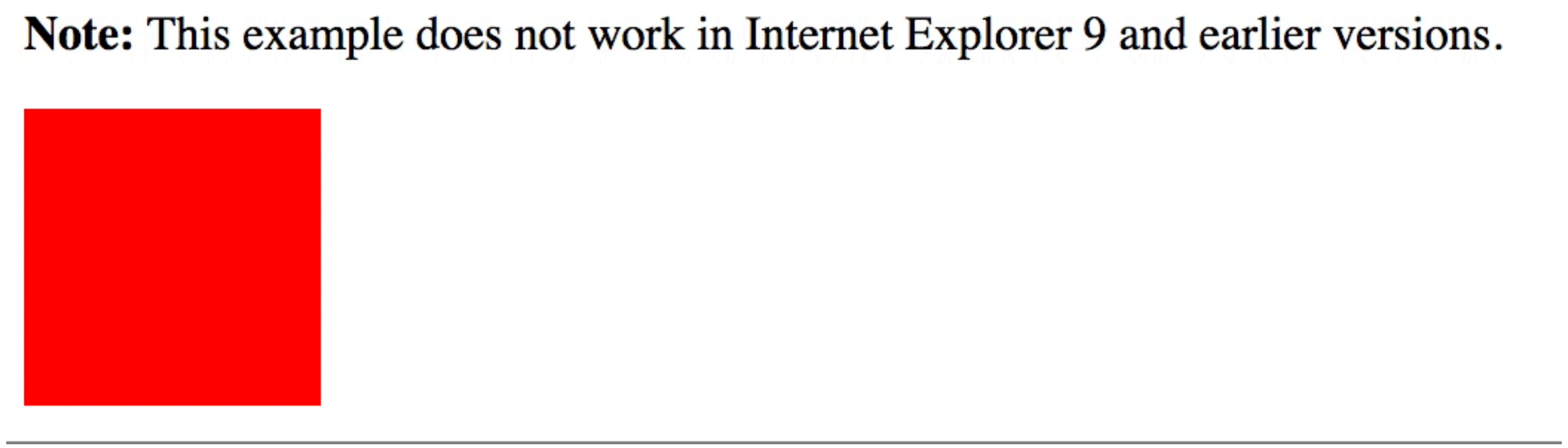
ANIMATION

[W3 Reference >>]

@keyframes { }



```
@keyframes example {
    0%   {background-color: red;}
    25%  {background-color: yellow;}
    50%  {background-color: blue;}
    100% {background-color: green;}
}
```



Note: This example does not work in Internet Explorer 9 and earlier versions.