Special Behavior of Margins

In this lesson, we will explore some special kinds of behavior of the margin property. Let's begin!

```
WE'LL COVER THE FOLLOWING
Listing 10-7: Spacing with percentages
Listing 10-8: Negative margins
```

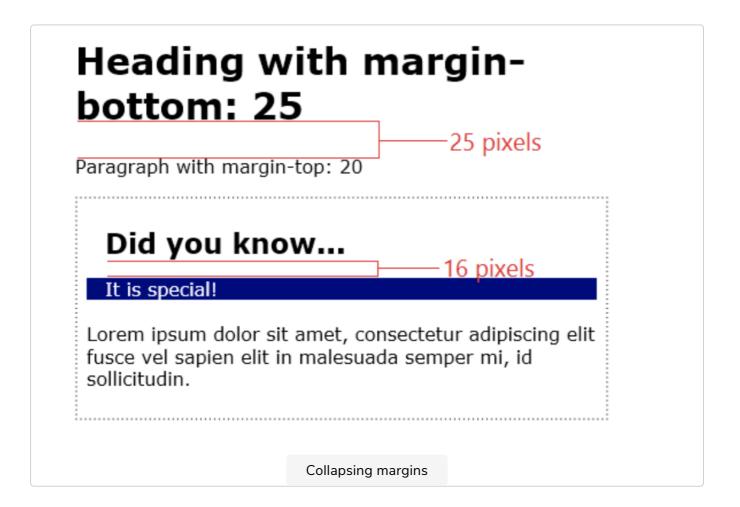
CSS has a feature called collapsing margins where two separate margins become a single margin.

Listing 10-7 shows two situations when this phenomenon occurs.

Listing 10-7: Spacing with percentages

```
<!DOCTYPE html>
<html>
<head>
  <title>Spacing with percentages</title>
  <style>
      font-family: Verdana, Arial, sans-serif;
    h1 { margin-bottom: 25px; }
    p { margin-top: 20px; }
    #warning {
     border: 2px dotted dimgray;
     padding: 8px;
   h2 { margin: 16px; }
    #head {
     background-color: navy;
     color: white;
    #head p { margin: 16px; }
  </style>
</head>
<body>
  <h1>Heading with margin-bottom: 25</h1>
```

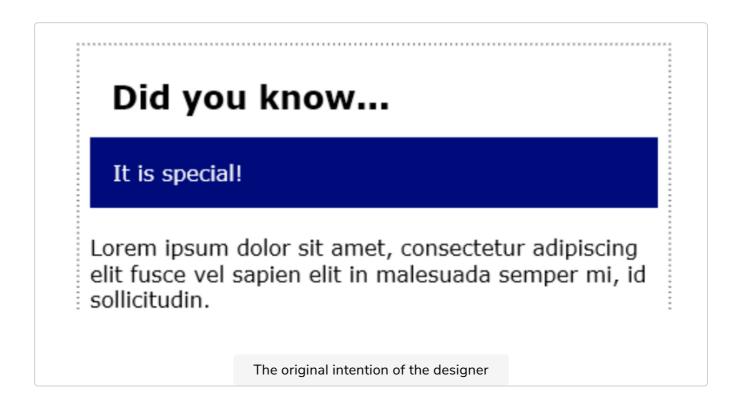
According to the style sheet, the <h1> tag has a 25-pixel bottom margin, and the adjacent tag has a 20-pixel top margin. These two are 45-pixels altogether. However, as shown below, there is only a 25-pixel space between these two tags. This behavior is defined by CSS intentionally: the two margin areas are collapsed to one, keeping the bigger space.



Collapsing margins may occur with non-adjacent HTML tags as well. The <h2>
tag (with the text "Did you know...") is followed by a <div> tag that nests a
. According to the style settings, <h2> has a margin of 16 pixels in all
directions, the subsequent <div> has no margin, but the within the <div> has a 16-pixel margin as well.

According to the CSS specification, the rendering engine collapses the two margins (<h2> and) to a single 16 pixels margin, as the above image indicates.

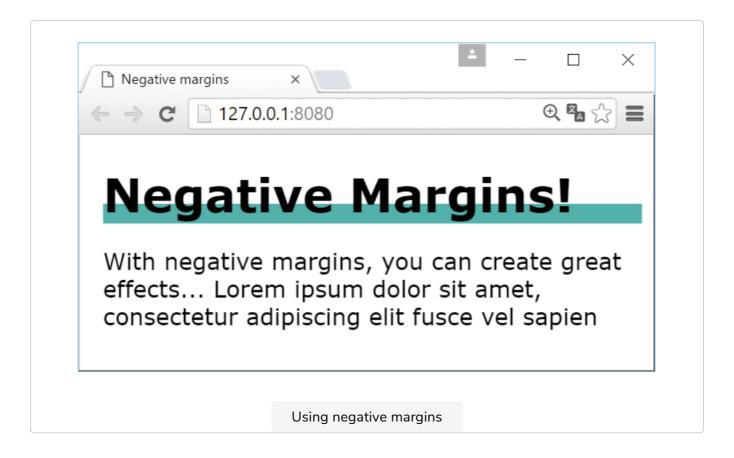
Originally the designer wanted to create a thick blue margin for the "It's special" text, as shown below.



This rendering can be achieved if the rendering engine can be prevented from collapsing the margins. It's pretty easy: You must add a one-pixel padding between the margins to prevent collapsing them. To fix Listing 10-7, simply change the definition of the #head rule by adding this padding:

```
#head {
  background-color: navy;
  color: white;
  padding: 1px;
}
```

There is another great feature of margins: Unlike paddings, margins can have negative values, and with this trick, you can create nice visual effects. The image below shows an example.



The thick bluish line under the heading is actually the top border of the paragraph below. The heading has a negative margin, and this setting moves the paragraph up. Listing 10-8 shows the source of this simple page.

Listing 10-8: Negative margins

```
<!DOCTYPE html>
<html>
<head>
  <title>Negative margins</title>
 <style>
   body {
     font-family: Verdana, Arial, sans-serif;
     margin-left: 16px;
   h1 { margin-bottom: -28px; }
     border-top: solid 14px lightseagreen;
     padding-top: 16px;
  </style>
</head>
<body>
  <h1>Negative Margins!</h1>
   With negative margins, you can create great
   effects... Lorem ipsum dolor sit amet,
   consectetur adipiscing elit fusce vel sapien
```



In the *next lesson*, we will learn how to set up borders in our web page using the magic of CSS.

See you there!