What is CSS?
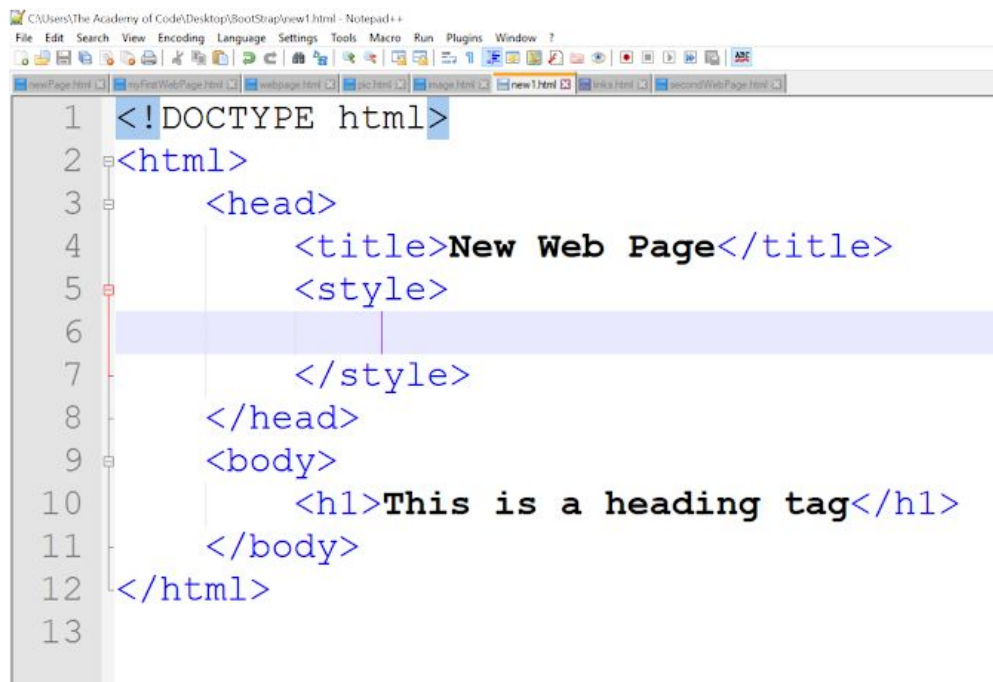
CSS stands for cascading style sheets. This is how web pages are designed and made to look really cool!

To write CSS we need to use the <style> tag inside the <head> tag. This is how we do it!
All the CSS we're going to write will be found inside these two style tags!

```
C:\Users\The Academy of Code\Desktop\BootStrap\new1.html - Notepad++
File  Edit  Search  View  Encoding  Language  Settings  Tools  Macro  Run  Plugins  Window  ?

 1  <!DOCTYPE html>
 2  <html>
 3      <head>
 4          <title>New Web Page</title>
 5          <style>
 6
 7          </style>
 8      </head>
 9      <body>
10          <h1>This is a heading tag</h1>
11      </body>
12  </html>
13
```
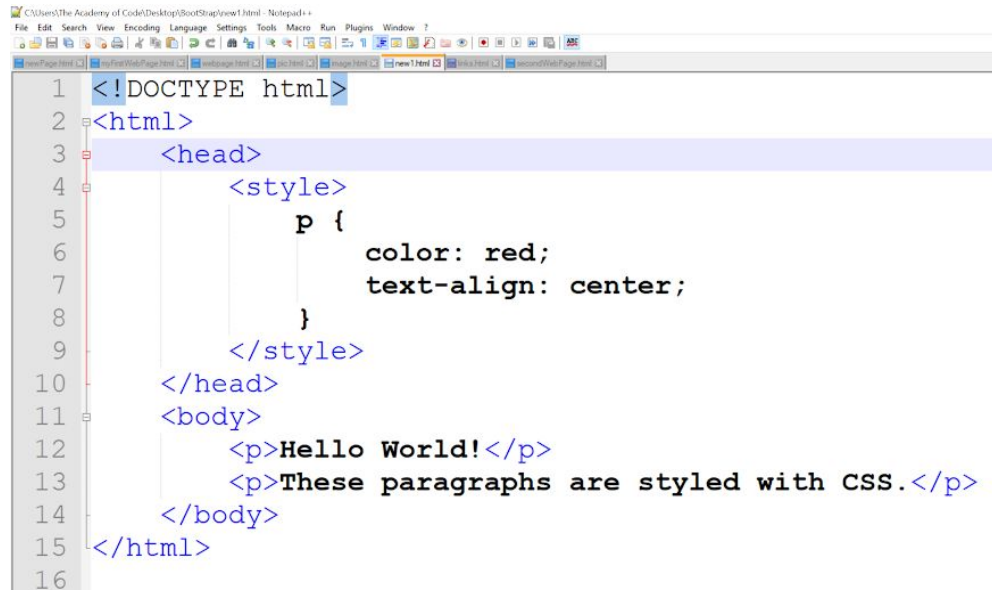
```
<head>
    <title>New Web Page</titl
    <style>

    </style>
</head>
```

Now it's time to write some CSS!


```
C:\Users\The Academy of Code\Desktop\BootStrap\new1.html - Notepad++
File  Edit  Search  View  Encoding  Language  Settings  Tools  Macro  Run  Plugins  Window  ?

 1  <!DOCTYPE html>
 2  <html>
 3      <head>
 4          <style>
 5              p {
 6                  color: red;
 7                  text-align: center;
 8              }
 9          </style>
10      </head>
11      <body>
12          <p>Hello World!</p>
13          <p>These paragraphs are styled with CSS.</p>
14      </body>
15  </html>
16
```
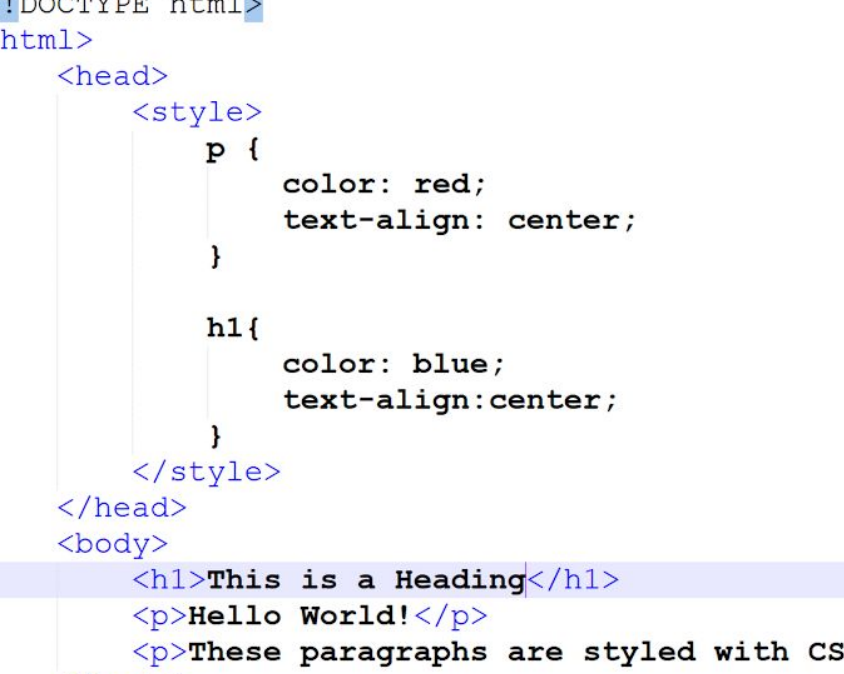
Copy the code above into a new file and see what happens when you run your code!

What happens when you run your code?

```
<style>
    p {
        color: red;
        text-align: center;
    }
</style>
```

The p sign means you are picking all the <p> tags in the html page to make them look different and cool! Inside the curly brackets { } is where we write our code.

Colour here is a property and red is a value. This means that the property is the thing you want to change and the value what your changing it to!

C:\Users\The Academy of Code\Desktop\BootStrap\new1.html - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

```
 1  <!DOCTYPE html>
 2  <html>
 3      <head>
 4          <style>
 5              p {
 6                  color: red;
 7                  text-align: center;
 8              }
 9
10              h1{
11                  color: blue;
12                  text-align:center;
13              }
14          </style>
15      </head>
16      <body>
17          <h1>This is a Heading</h1>
18          <p>Hello World!</p>
19          <p>These paragraphs are styled with CSS.</p>
20      </body>
21  </html>
22
```
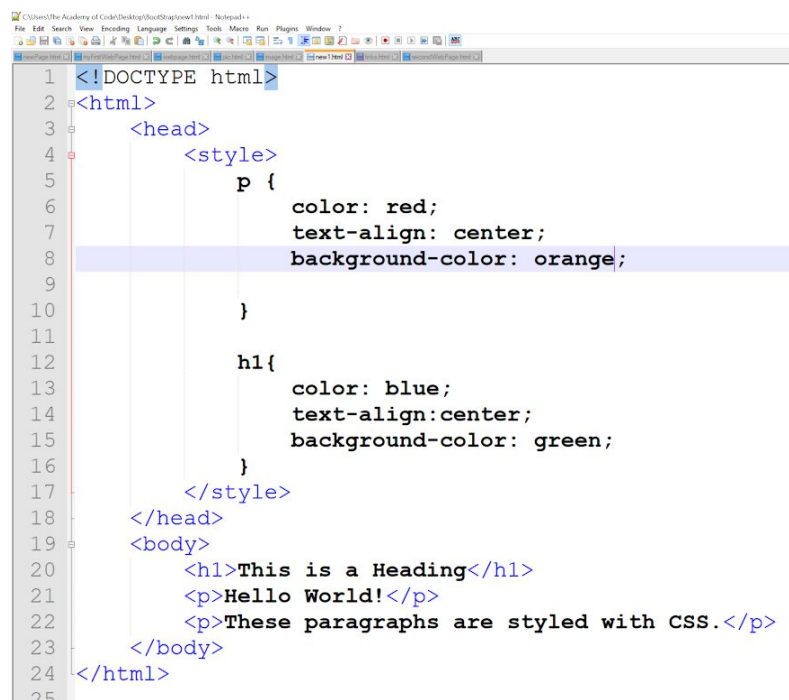
Add the extra code above to Notepad++. This time we're styling all the
<h1> tags in the file!

Tasks:

● Try changing the color from red to blue! See what other colors you can make it!

● Change the text-align from center to left. Then change it to right. What has changed?

● Try style a <h2> tag. Remember make the tag first and then write the code to style it!

● Now try add a new property called background color. Look at the example below if you're not sure how to do this! Set it to whatever color you want!

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <style>
5              p {
6                  color: red;
7                  text-align: center;
8                  background-color: orange;
9
10             }
11
12             h1{
13                 color: blue;
14                 text-align:center;
15                 background-color: green;
16             }
17         </style>
18     </head>
19     <body>
20         <h1>This is a Heading</h1>
21         <p>Hello World!</p>
22         <p>These paragraphs are styled with CSS.</p>
23     </body>
24 </html>
25
```

Moving Text and Images

Moving text and images is really important when making a cool website! We can use the float property to move images around the screen.

Try the code below to see what it does!

```html
<!DOCTYPE html>
<html>
<head>
<style>
img {
    float: left;
}
</style>
</head>
<body>

<p>In this example, the image will float to the left in the paragraph, and the text in the paragraph will wrap around the image.</p>

<p><img src="pineapple.jpg">This will display and image with a pineapple with some text to the right of it!</p>

</body>
</html>
```
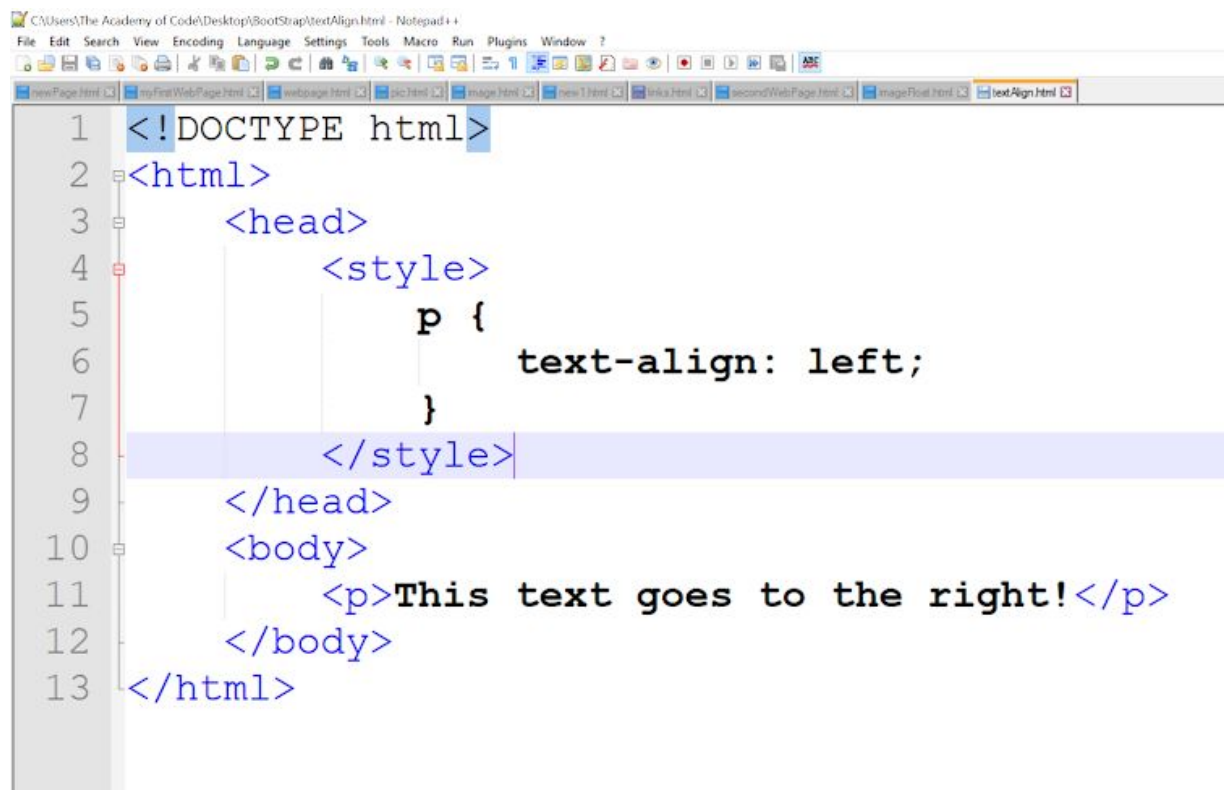
Tasks:
- Change the value after float from left to right. What changes?
- Choose a picture you like and write about it using the code above!

Moving Text

We can also use the text-align property to move text around the screen!
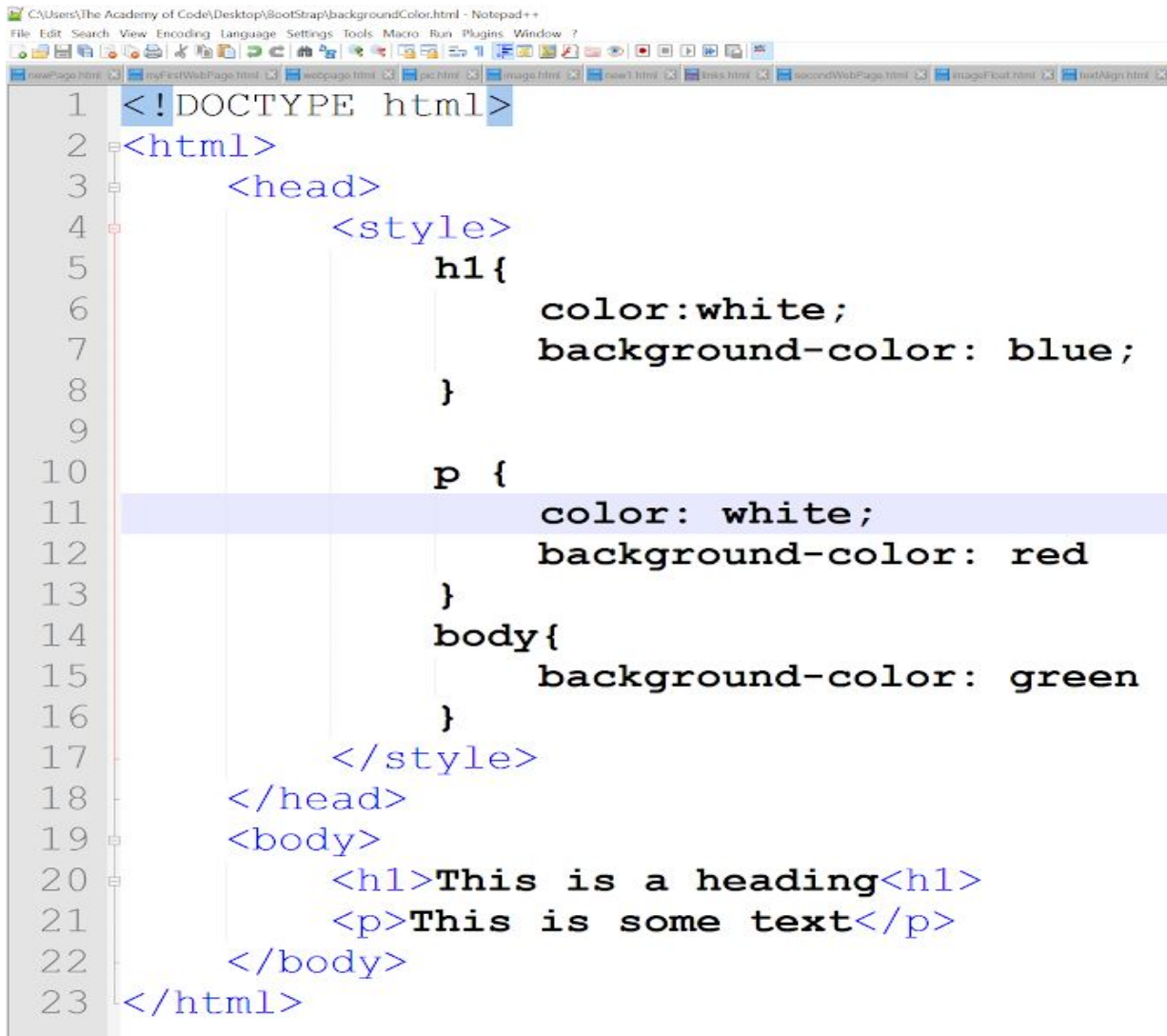
Try running the code below!

The text-align property moves the text to a certain position on the screen! In the code above this means that the left will be on the left hand side of the screen!

<u>Tasks:</u>

- Try changing text-align to the right to see what happens!

Using Background Colors

Having a white background to your web page can be pretty boring! Run the code below and see what happens to the background color of each tag.

```html
<!DOCTYPE html>
<html>
    <head>
        <style>
            h1{
                color:white;
                background-color: blue;
            }

            p {
                color: white;
                background-color: red
            }
            body{
                background-color: green
            }
        </style>
    </head>
    <body>
        <h1>This is a heading<h1>
        <p>This is some text</p>
    </body>
</html>
```

What is the difference between the CSS code for the body, p and h1?

<u>Tasks:</u>

- Create a <h2> tag and set the color to white and the background color to black
- Change the background color of the body.
- Change the color of the <p> tags

Project:

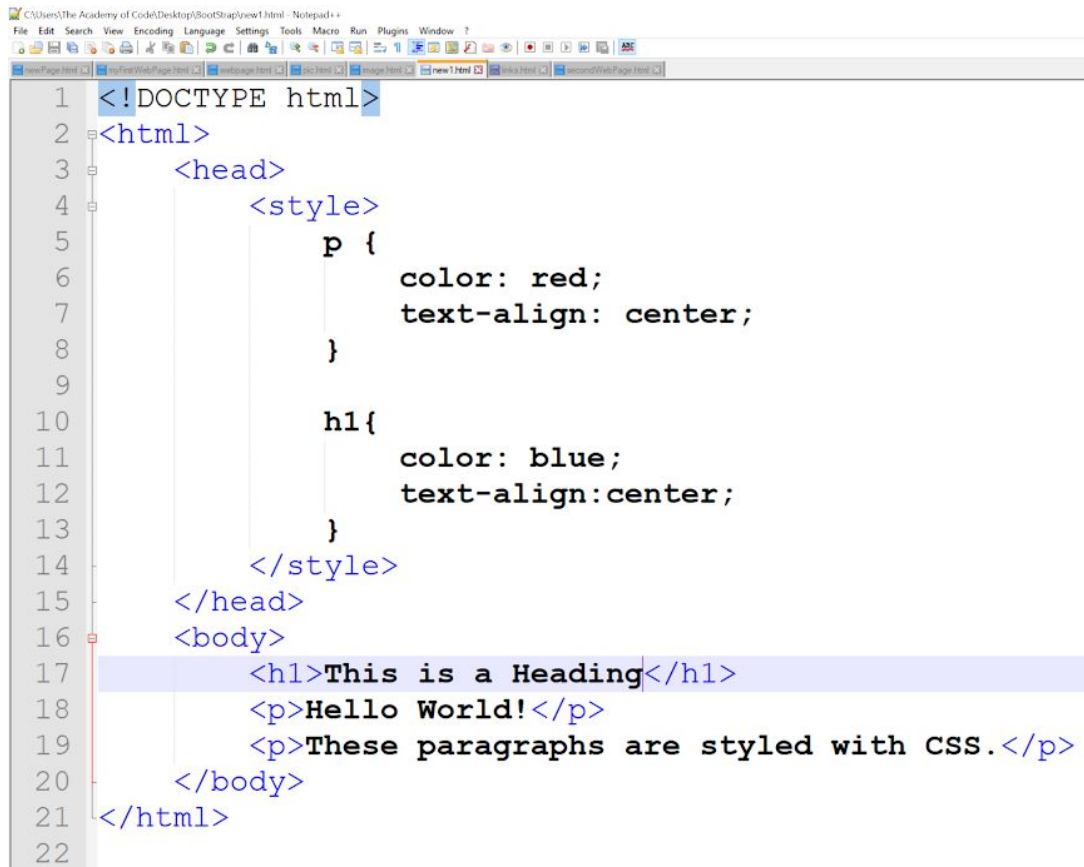# Create your own Business Web Page!

Using what you have learned about CSS start a new web page about your own imaginary business! This can be whatever you want but the more creative the better!

Tasks to complete:
- Write up the HTML code first. You need to do this before you think about writing the CSS
- Remember to include lots of pictures about the fantasy business!
- Write some things about what your business does.
- Use CSS to style your business web page to make it look cool!
- Try and use https://www.w3schools.com/default.asp to find more things you can use in CSS!

ID's in HTML

Let's look at some of the CSS we've done before.

```
C:\Users\The Academy of Code\Desktop\BootStrap\new1.html - Notepad++
File  Edit  Search  View  Encoding  Language  Settings  Tools  Macro  Run  Plugins  Window  ?

 1   <!DOCTYPE html>
 2   <html>
 3       <head>
 4           <style>
 5               p {
 6                   color: red;
 7                   text-align: center;
 8               }
 9
10               h1{
11                   color: blue;
12                   text-align:center;
13               }
14           </style>
15       </head>
16       <body>
17           <h1>This is a Heading</h1>
18           <p>Hello World!</p>
19           <p>These paragraphs are styled with CSS.</p>
20       </body>
21   </html>
22
```

The CSS we've done changes ALL the paragraph tags in the document but what happens if we just want to change ONE tag?
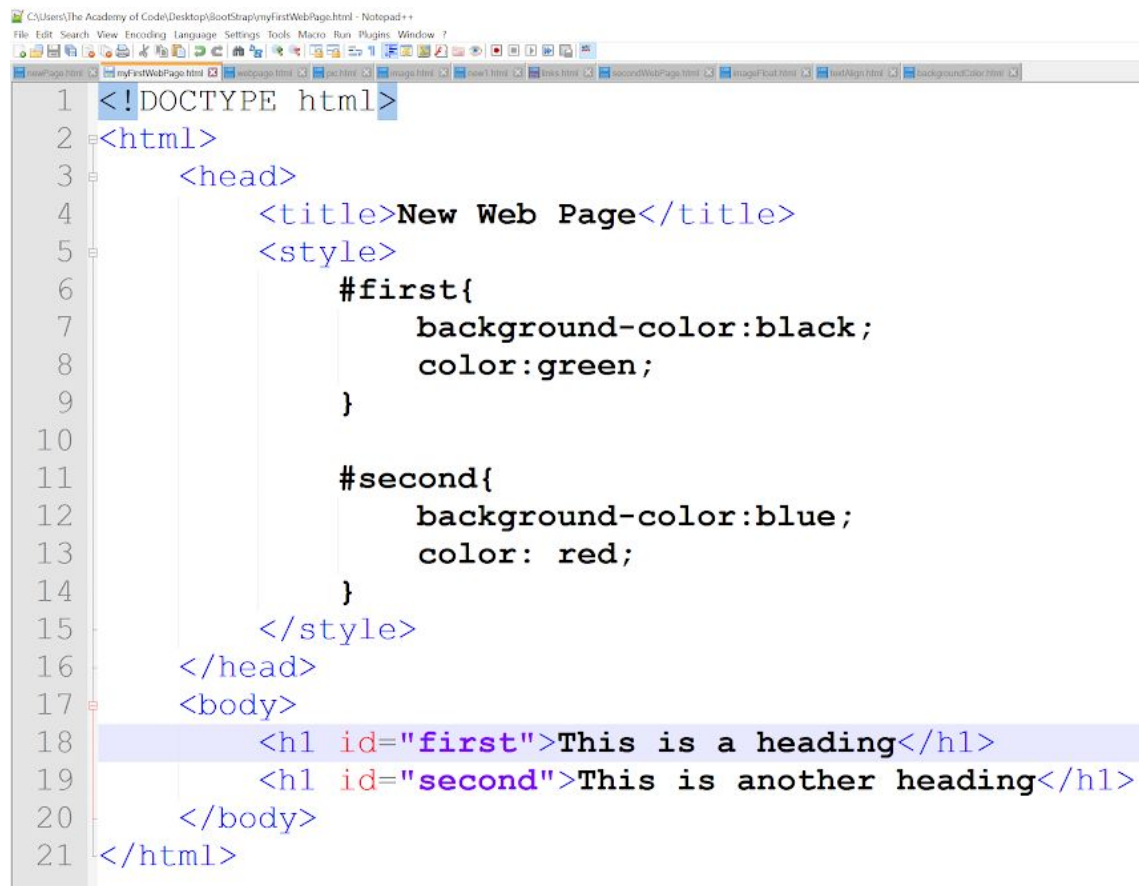
We need to use ID's!

ID's are given to html tags so that if we want to change them we can use the ID name. Let's look at this now!

This is how we set up IDs in html.

```
17    <body>
18        <h1 id="first">This is a heading</h1>
19        <h1 id="second">This is another heading</h1>
20    </body>
```

We can then call these IDs and change their color, background color, positioning or whatever you want to change in CSS.

To call these IDs we need to put a Hash symbol before the ID name E.g "#first".

C:\Users\The Academy of Code\Desktop\BootStrap\myFirstWebPage.html - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

```
1   <!DOCTYPE html>
2   <html>
3       <head>
4           <title>New Web Page</title>
5           <style>
6               #first{
7                   background-color:black;
8                   color:green;
9               }
10
11              #second{
12                  background-color:blue;
13                  color: red;
14              }
15          </style>
16      </head>
17      <body>
18          <h1 id="first">This is a heading</h1>
19          <h1 id="second">This is another heading</h1>
20      </body>
21  </html>
```

Tasks:

- Create a <p> tag and give it an ID name. Then call the name in CSS and change the color and background color.

- Try Changing the font-family to something different. You can find out how to do this here: https://www.w3schools.com/css/css_font.asp

- Look at https://www.w3schools.com/css/default.asp and see if you can find some cool CSS elements to style your elements!

Changing the Size of Something!

We can change the size of something using CSS.

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <style>
5              p {
6                      height: 200px;
7                      width: 200px;
8                      background-color: powderblue;
9              }
10         </style>
11     </head>
12     <body>
13         <h1>Changing the size of something</h1>
14         <p>This p tag has a height of 200px and a width of 200px.</p>
15     </body>
16 </html>
```

To change the size we use the height and width properties. We can then put a number afterwards that shows how many pixels the width/height is.

Tasks:
- Change the number to something different in the code above to see what happens!
- Select the <h1> tag and set the height and width to 50px. See what happens.
- Create a html <img> tag and set the width and height to whatever value you want. Remember to use px after the number!

Tasks:

- Using your new HTML ID tags update the business web page you made before.

CSS Borders

Borders are the outlines we can put around html tags to make them look interesting! And cool!

Try running the code below to see what happens to the different <p> tags!

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4      <style>
5          #dotted {border-style: dotted;}
6          #dashed {border-style: dashed;}
7          #solid {border-style: solid;}
8          #double {border-style: double;}
9          #groove {border-style: groove;}
10     </style>
11     </head>
12     <body>
13
14         <h2>The border-style property</h2>
15         <p>This property shows the different types of borders are in CSS!</p>
16         <p id="dotted">A dotted border.</p>
17         <p id="dashed">A dashed border.</p>
18         <p id="solid">A solid border.</p>
19         <p id="double">A double border.</p>
20         <p id="groove">A groove border.</p>
21     </body>
22 </html>
```
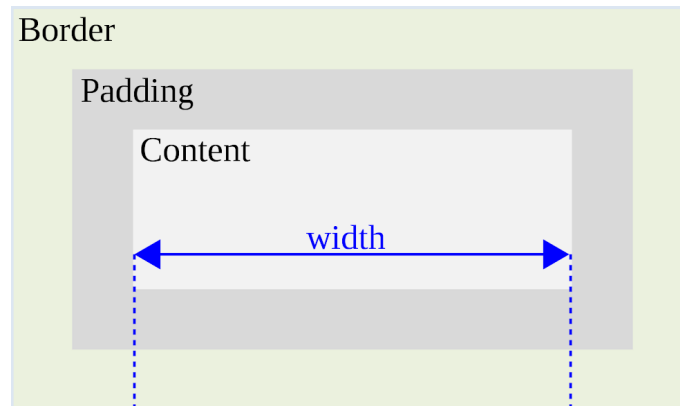
Tasks:
- Give the <h2> tag an id and give it the "border style: dotted".
- Create a new tag and give it a border-style you like!

CSS Padding

Padding is the space inbetween the border and the content of a html tag!

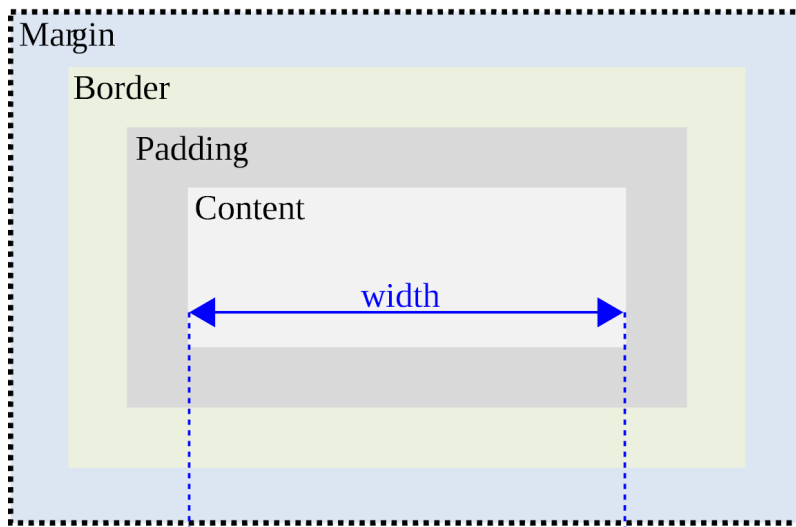## Let's look at this in code!


```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <style>
5              p {
6                  padding: 60px;
7                  border: 1px solid #4CAF50;
8              }
9          </style>
10     </head>
11     <body>
12         <p>This element has 70px padding all around it.</p>
13     </body>
14 </html>
```

Write out this code to see what it does. Try changing the padding number to see what changes!

Margins

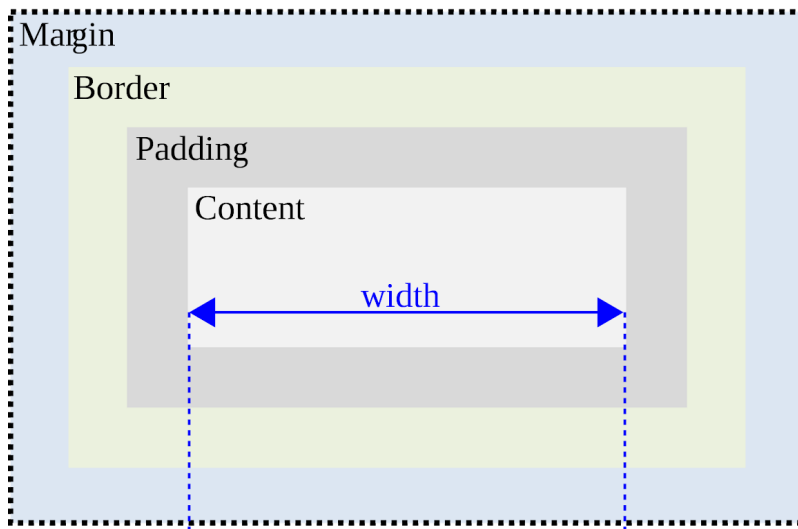The margin is the area outside the border! Let's look at how to change this in code.

Try writing the code below to see how the Margins change!

```
<!DOCTYPE html>
<html>
    <head>
        <style>
            h2 {
                border: 1px solid black;
                margin-top: 100px;
                margin-bottom: 100px;
                margin-right: 150px;
                margin-left: 80px;
                background-color: lightblue;
            }
        </style>
    </head>
    <body>
        <h2>Try changing the margin properties to see what happens!</h2>
    </body>
</html>
```

Tasks: CSS Box

When we put the margin, border, padding and content together we get the CSS Box Model! This is how we move and change parts of the web page.

- Create a new web page that puts the margin, border, padding and content all together using one html tag! Show your teacher once you have finished!