

PHP, MySQL, JavaScript

CHAPTER 2 – HTML & CSS

INTRODUCTION

- How to create web page in HTML
- How to include HTML tags that every page must have
- How to use links in your web pages
- How to organize a page with paragraphs and line breaks
- How to organize your content with headings
- How to use the semantic elements of HTML5
- How to begin using basic CSS



HTML5 – BASIC TAGS

<header>

<section>

<article>

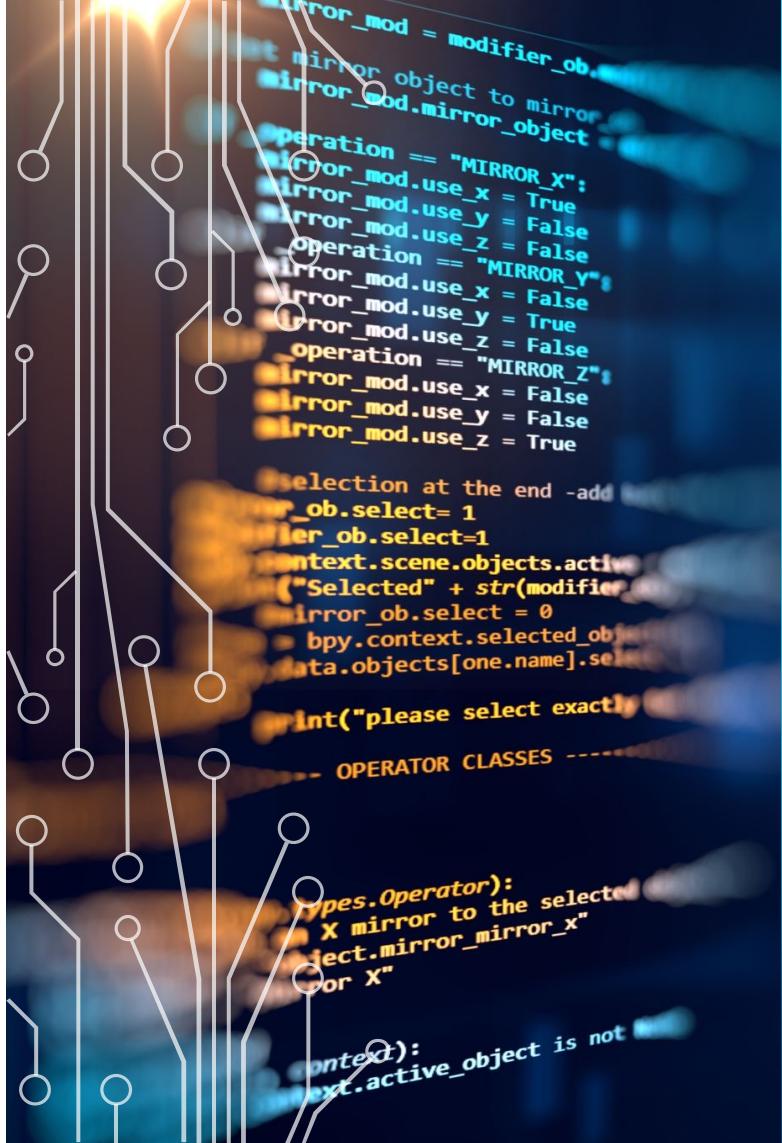
<nav>

<aside>

<footer>

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>The First Web Page</title>
  </head>
  <body>
    <p>
      In the beginning, Tim created the HyperText Markup Lanuage. The
      Internet as without form and void, and text was upon the face of
      the monitor and the Hands of Tim were moving over the face of the
      keyboard.
    </p>
  </body>
</html>
```

Save this in a text editor and open with a browser.

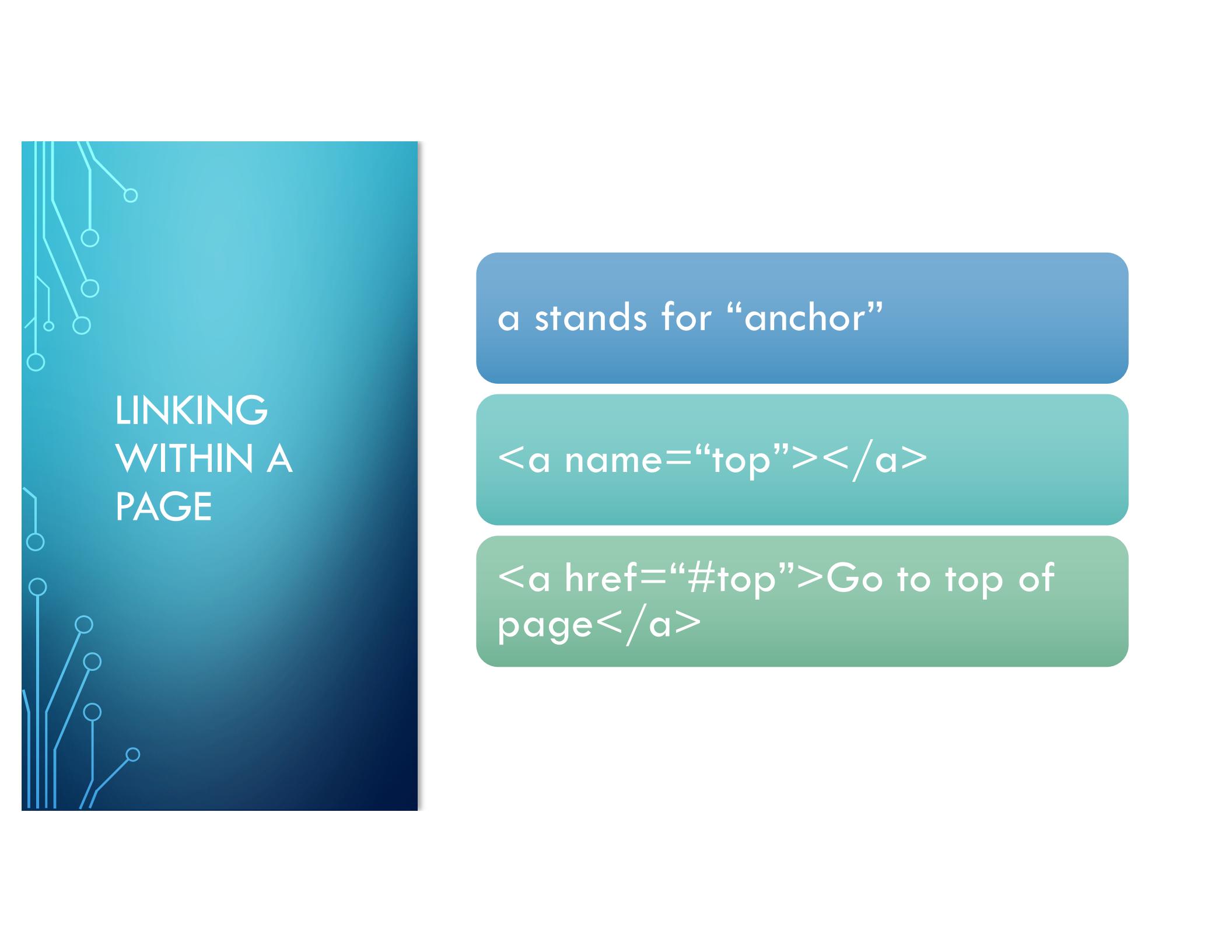


HTML TAGS EXPLAINED

- Opening tag - <html>
- Closing tag - </html>
- Empty tag -
 - no closing tag
- Head – not displayed in the browser window
- Body – displayed in browser window

LINKS

- On virtually all web pages
- <a> tag
- href attribute (hypertext reference)
- Absolute or relative
- Relative pages are within the web server root folder
- Learn about African elephants.

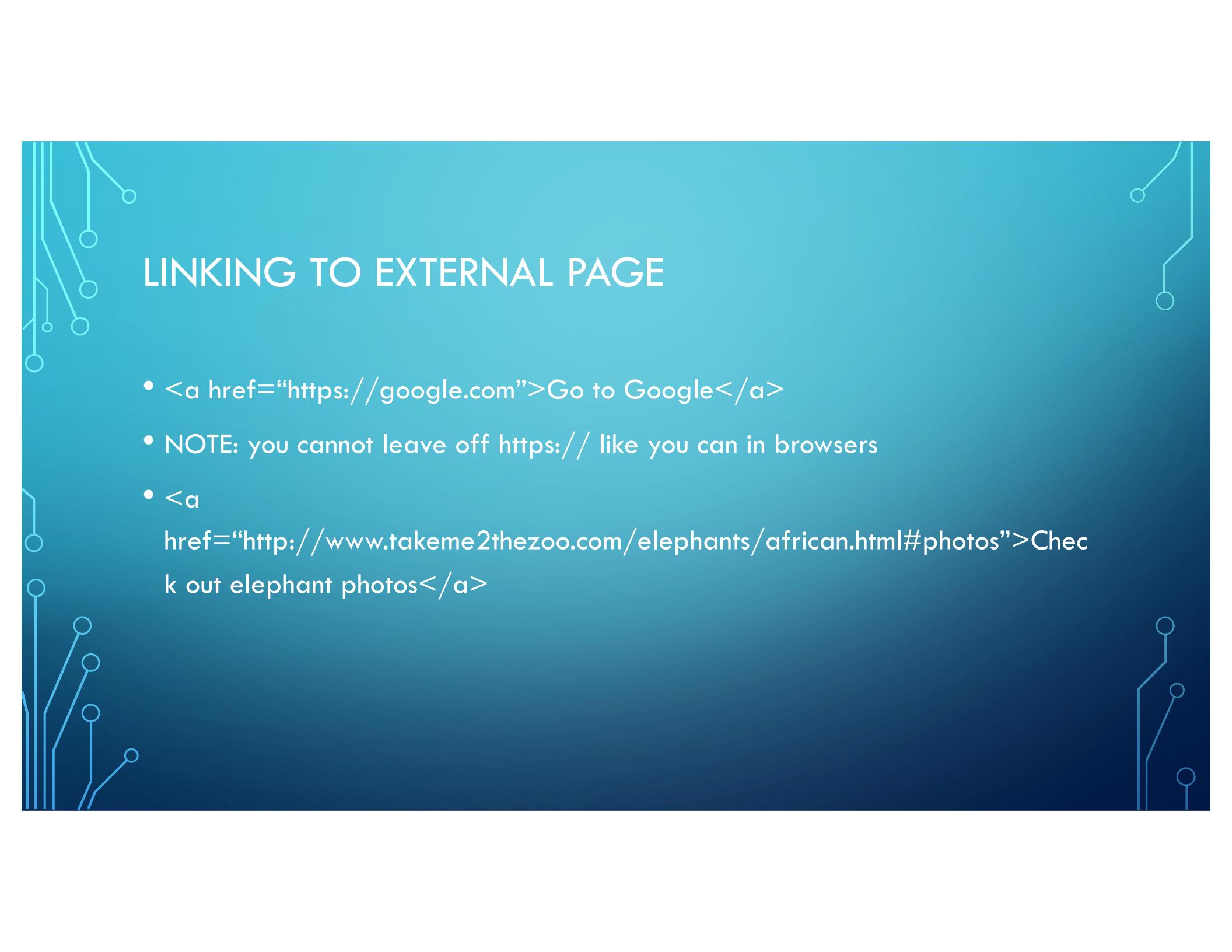


LINKING WITHIN A PAGE

a stands for “anchor”

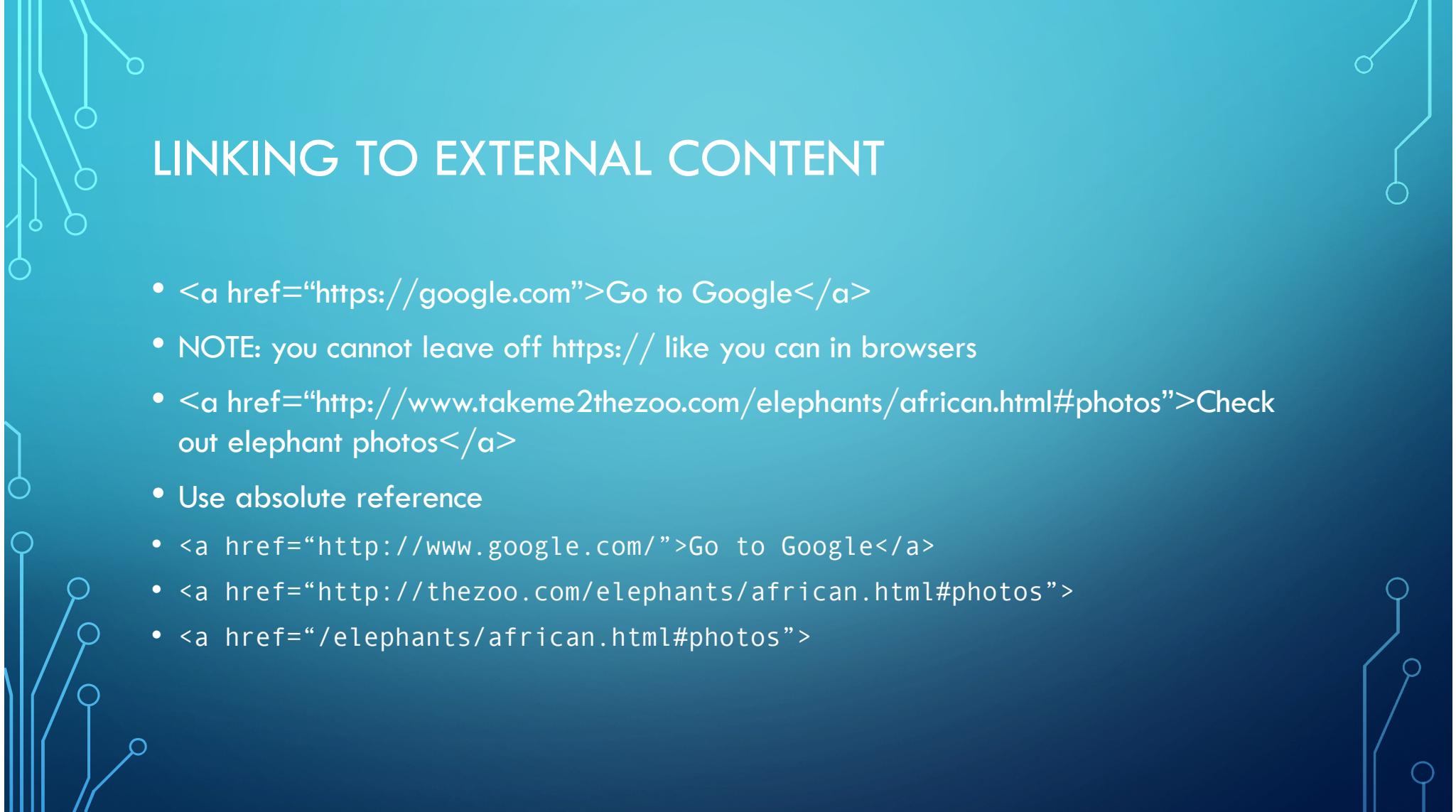
```
<a name="top"></a>
```

```
<a href="#top">Go to top of  
page</a>
```



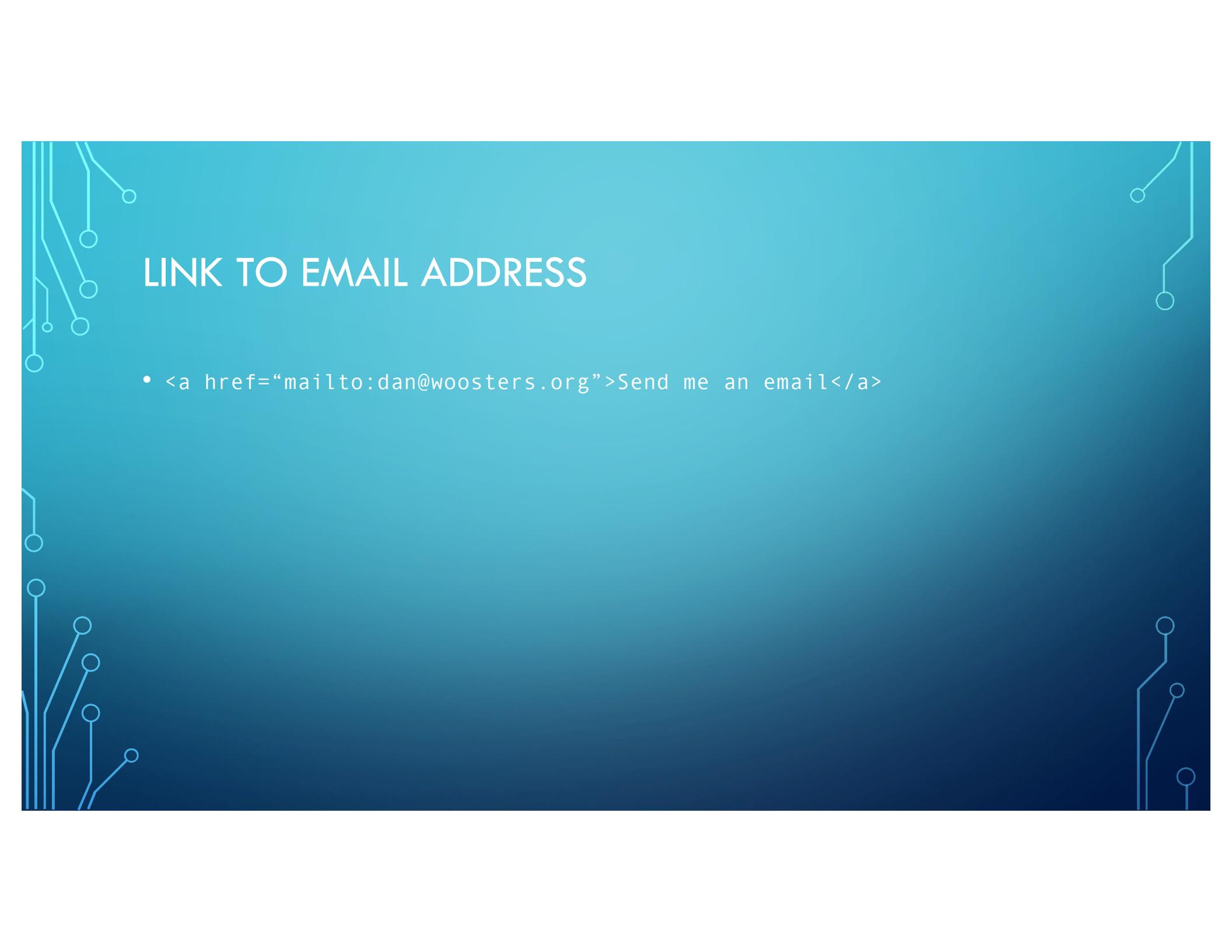
LINKING TO EXTERNAL PAGE

- `Go to Google`
- NOTE: you cannot leave off https:// like you can in browsers
- `Check out elephant photos`



LINKING TO EXTERNAL CONTENT

- Go to Google
- NOTE: you cannot leave off https:// like you can in browsers
- Check out elephant photos
- Use absolute reference
 - Go to Google
 -
 -



LINK TO EMAIL ADDRESS

- Send me an email

PARAGRAPHS AND LINE BREAKS

- <!DOCTYPE html>
- <html lang="en">
- <head>
- <title>The Ad Agency Song</title>
- </head>
- <body>
- <p>
- When your client's hopping mad,
• put his picture in the ad.
- If he still should prove refractory,
• add a picture of his factory.
- </p>
- <hr>
- <p>
- When your client's hopping mad,

• put his picture in the ad.
- </p>
- <p>
- If he still should prove refractory,

• add a picture of his factory.
- </p>
- </body>
- </html>

TRY IT YOURSELF IN GROUPS



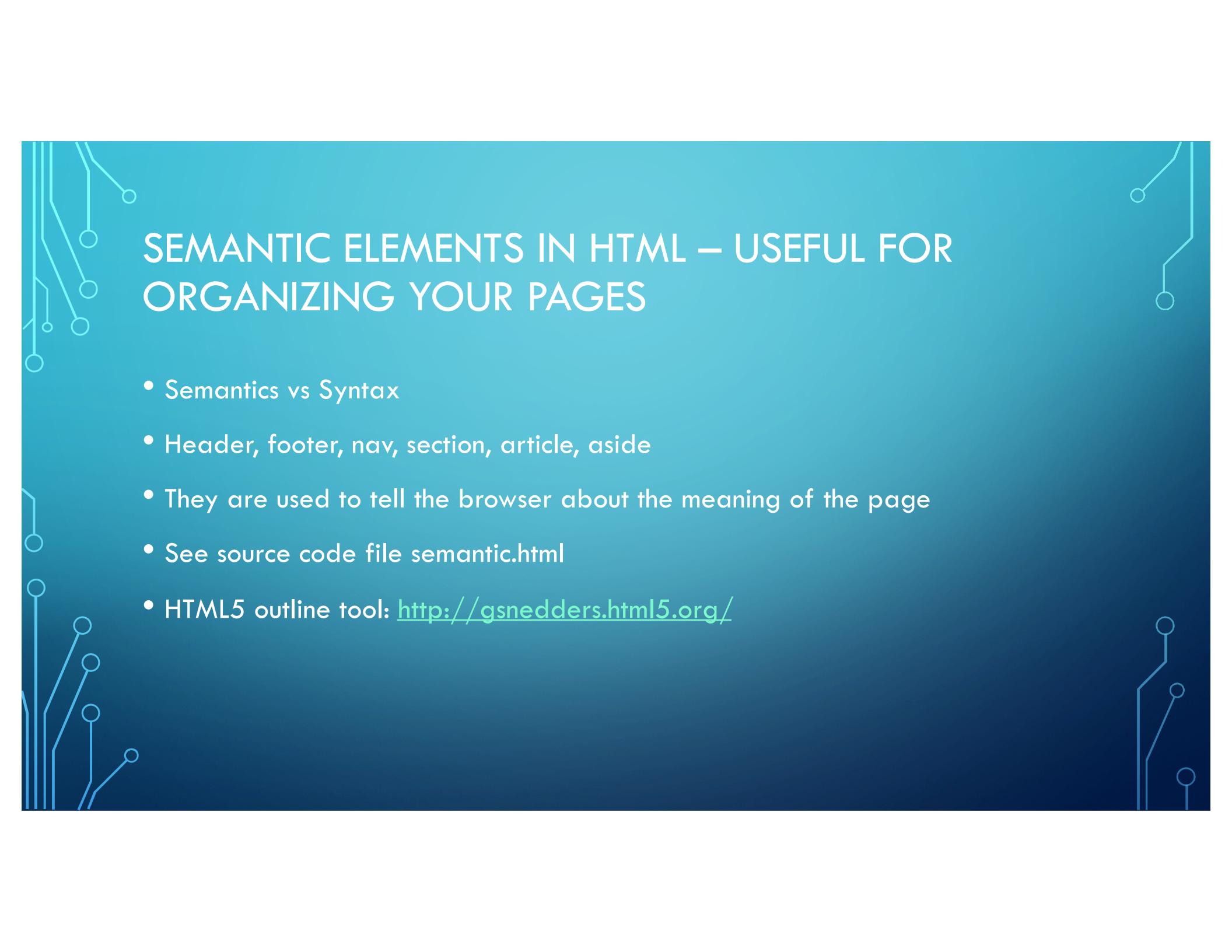
I will divide into breakout
groups



Work on pages 35-36

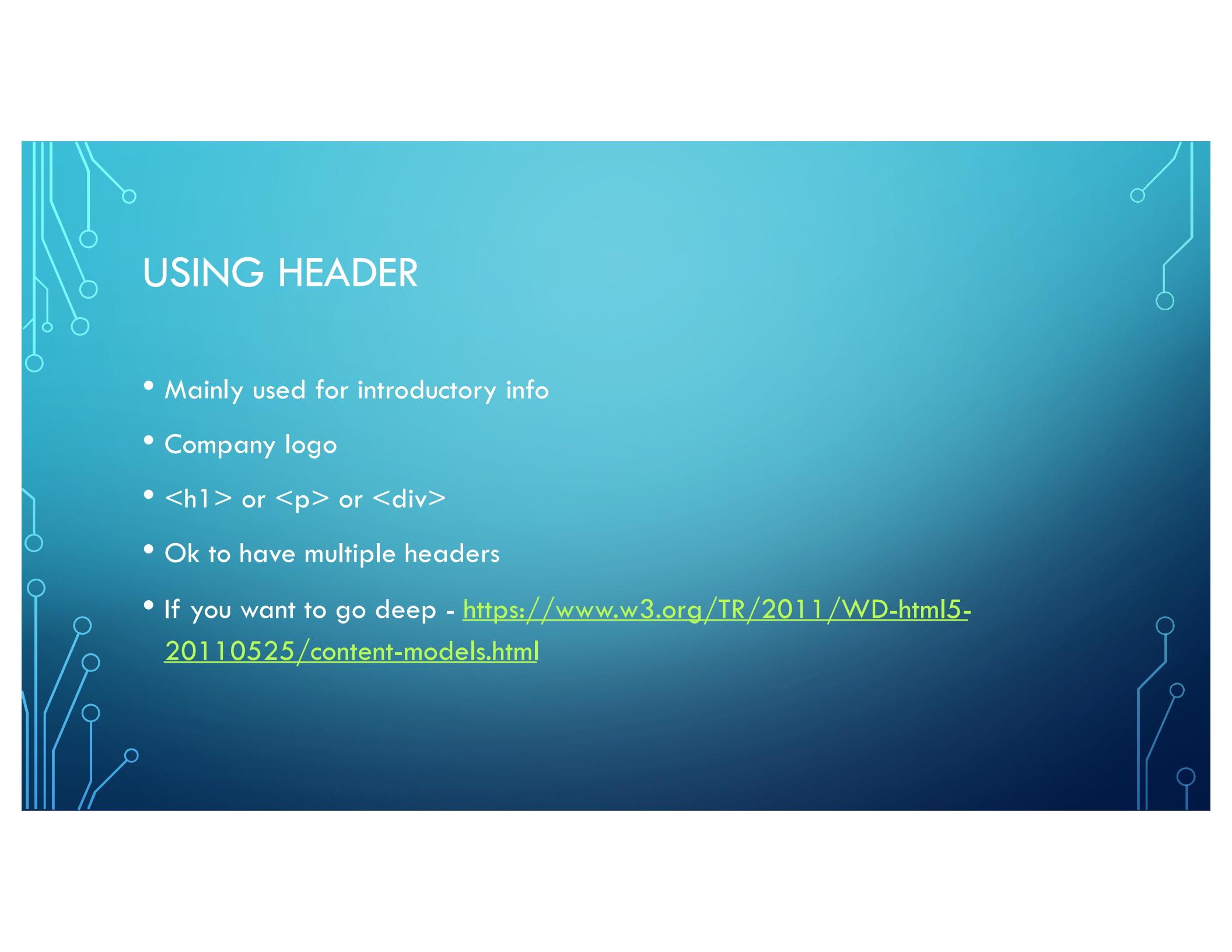
HEADINGS

- <!DOCTYPE html>
- <html lang="en">
- <head>
- <title>My Widgets</title>
- </head>
- <body>
- <h1>My Widgets</h1>
- <p>My widgets are the best in the lang. Continue reading to learn more about my widgets.</p>
- <h2>Widget Features</h2>
- <p>If I had an features I'd put them right here</p>
- <h3>Pricing</h3>
- <p>Talk about pricing here.</p>
- </body>
- </html>



SEMANTIC ELEMENTS IN HTML – USEFUL FOR ORGANIZING YOUR PAGES

- Semantics vs Syntax
- Header, footer, nav, section, article, aside
- They are used to tell the browser about the meaning of the page
- See source code file semantic.html
- HTML5 outline tool: <http://gsnedders.html5.org/>



USING HEADER

- Mainly used for introductory info
- Company logo
- <h1> or <p> or <div>
- Ok to have multiple headers
- If you want to go deep - <https://www.w3.org/TR/2011/WD-html5-20110525/content-models.html>



ARTICLES VS SECTIONS

- They can be used interchangeably without visual difference
- However, there is semantic (meaning) difference
- To whom – browsers and developers
- <article> tag - This tag contains independent content that doesn't require any other context.
- <section> tag - This tag is used to split a page into sections like Introduction, Contact Information, Details, etc and each of these sections can be in a different <section> tag.



NAV ELEMENT

- Simply put – a place to put navigation elements of a page
- Ok to have more than 1
- See `simple_nav.html`



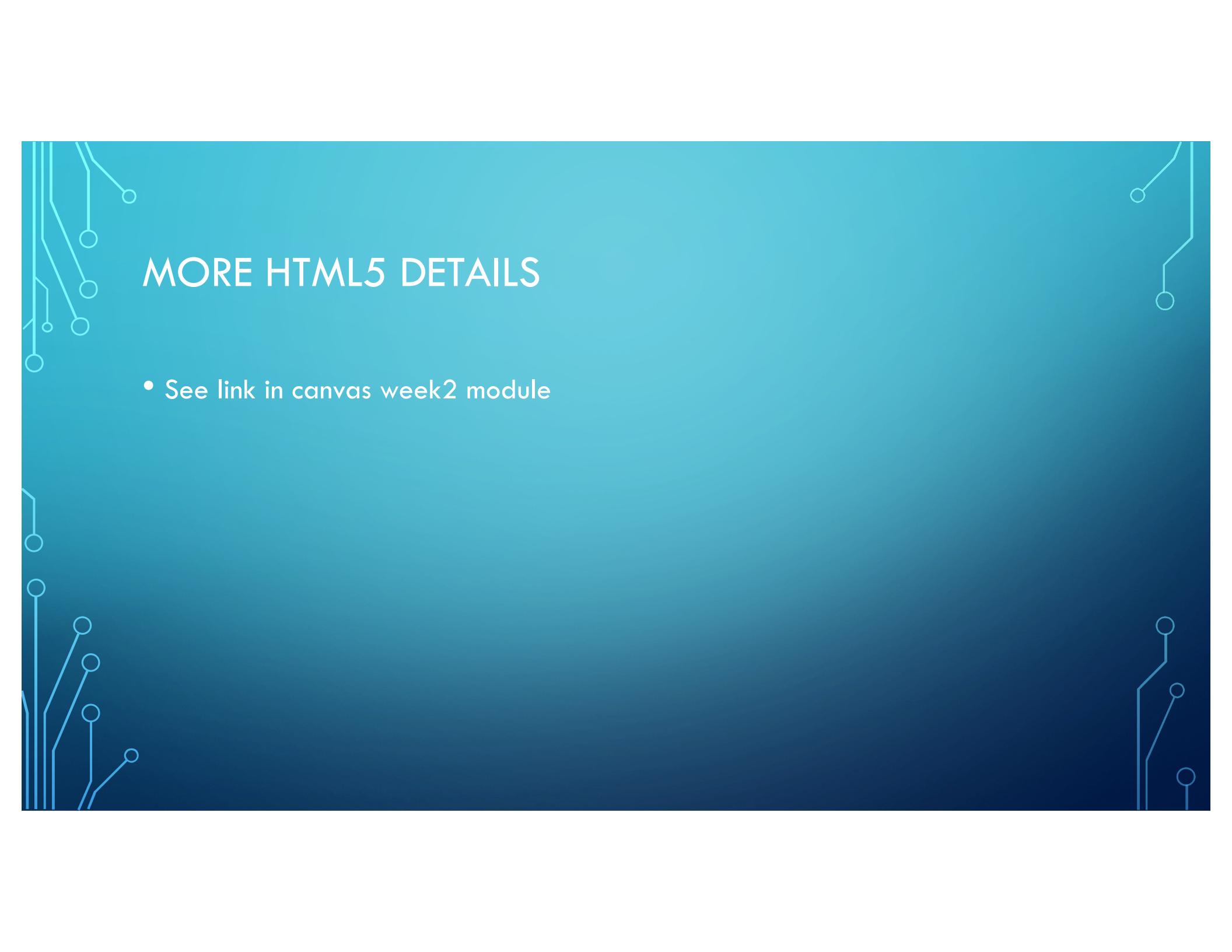
ASIDE ELEMENT

- Let's watch a demo - <https://www.youtube.com/watch?v=mjHS7fyA9-s>
- For more videos like this -
<https://www.youtube.com/watch?v=dyRKWxZTVAl&list=PLJhTWoCm8l6B5nywJ6dXWuoXLHMq345uZ&index=1>
- See example pullquote.html from chapter source code



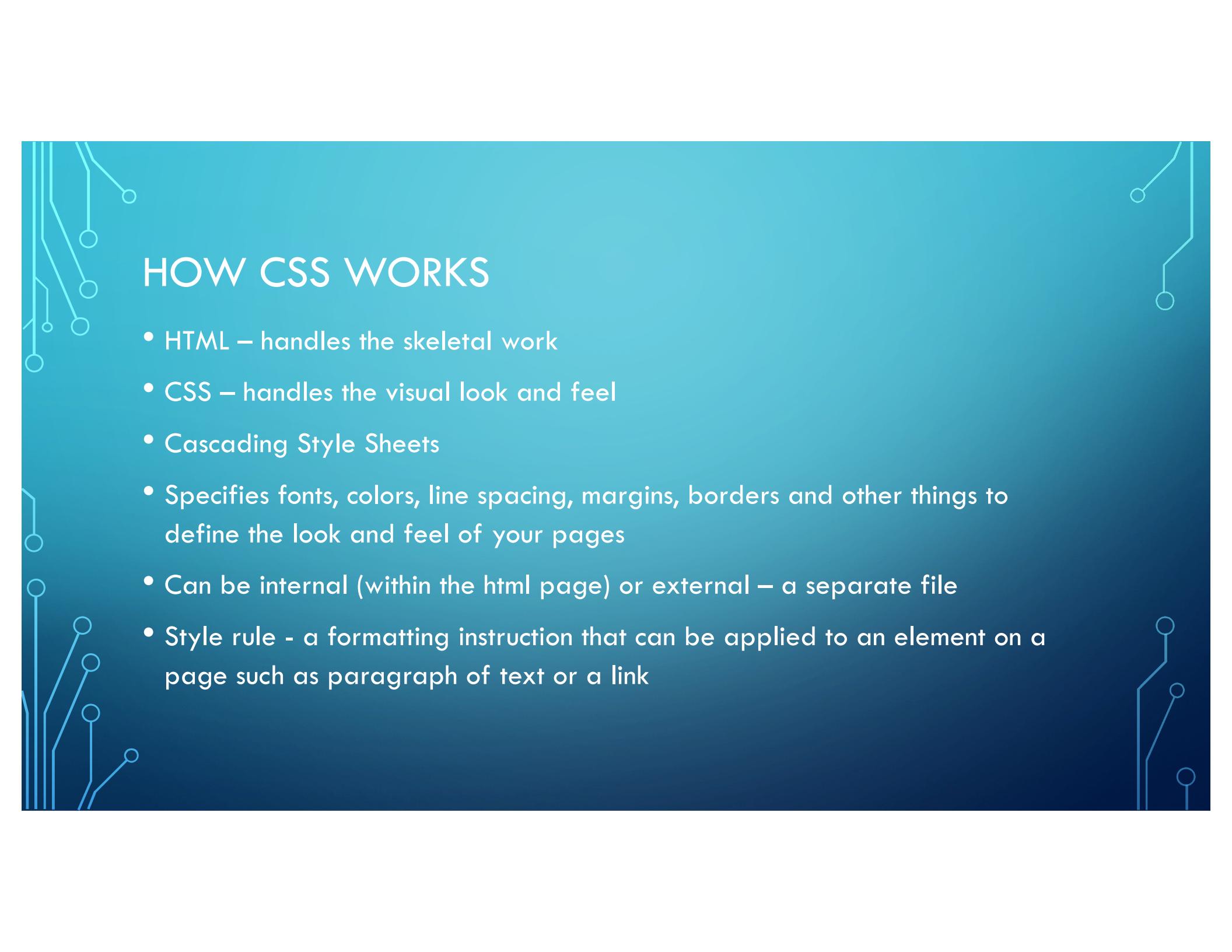
FOOTER ELEMENT

- Most common use – copyright information
- Often includes <address> element



MORE HTML5 DETAILS

- See link in canvas week2 module



HOW CSS WORKS

- HTML – handles the skeletal work
- CSS – handles the visual look and feel
- Cascading Style Sheets
- Specifies fonts, colors, line spacing, margins, borders and other things to define the look and feel of your pages
- Can be internal (within the html page) or external – a separate file
- Style rule - a formatting instruction that can be applied to an element on a page such as paragraph of text or a link

LEARNING CSS

- <https://www.youtube.com/watch?v=Wz2kIMXDqF4>
- <http://www.littlewebhut.com/>
- <https://www.w3schools.com/default.asp>

CHANGE THE COLOR OF ALL <P> ELEMENTS TO "RED"

- <!DOCTYPE html>
- <html>
- <head>
- <**style**>
- p {
- color: red;
- }
- </style>
- </head>
- <body>
- <h1>This is a Heading</h1>
- <p>This is a paragraph.</p>
- <p>This is another paragraph.</p>
- </body>
- </html>

CHANGE THE COLOR OF THE ELEMENT WITH ID="PARA1", TO "RED"

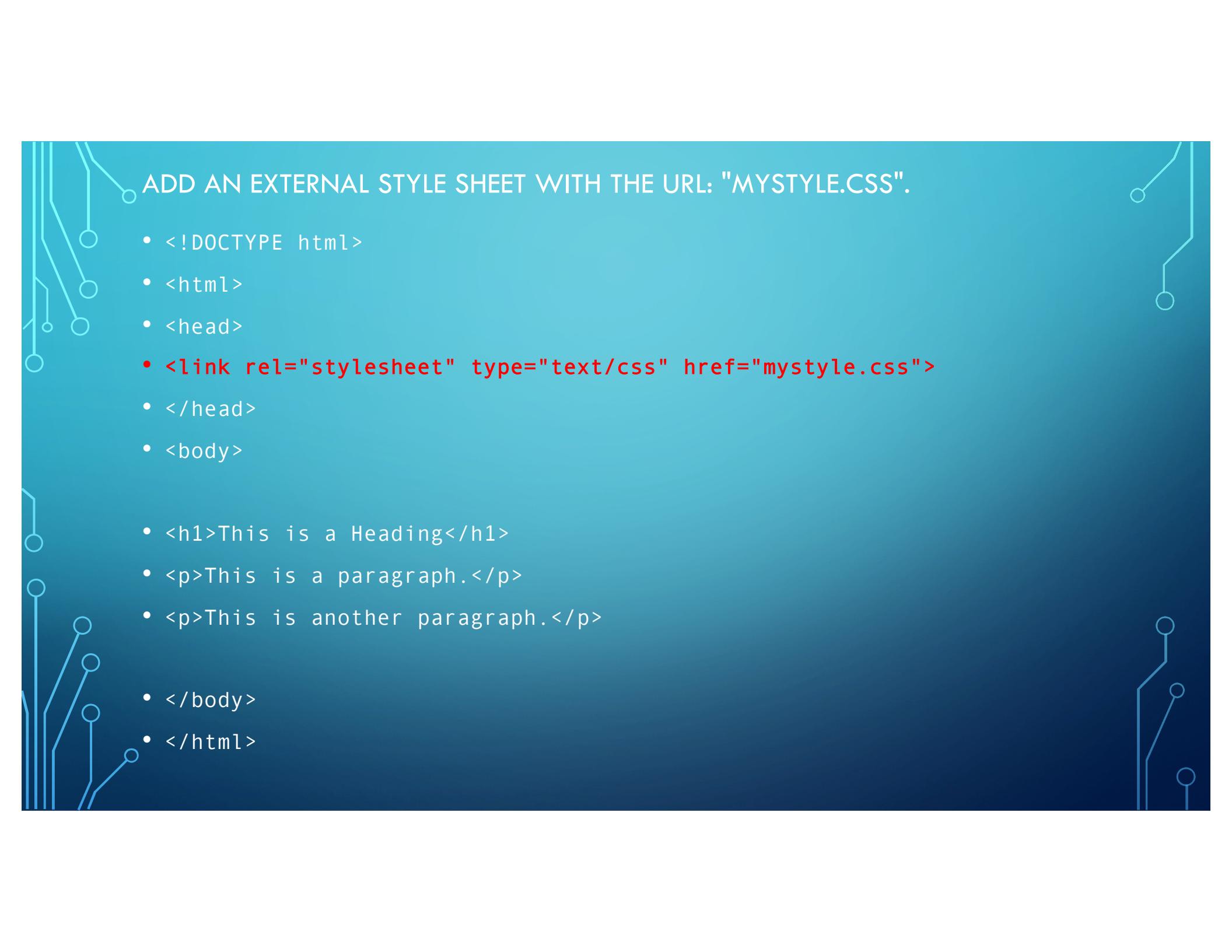
- <!DOCTYPE html>
- <html>
- <head>
- <**style**>
- #para1 {
- color: red;
- }
- </style>
- </head>
- <body>
- <h1>This is a Heading</h1>
- <p id="para1">This is a paragraph.</p>
- <p>This is another paragraph.</p>
- </body>
- </html>

CHANGE THE COLOR OF ALL ELEMENTS WITH THE CLASS "COLORTEXT", TO "RED"

- <!DOCTYPE html>
- <html>
- <head>
- <**style**>
- .colortext {
- color: red;
- }
- </**style**>
- </head>
- <body>
- <h1>This is a Heading</h1>
- <p>This is a paragraph.</p>
- <p class="colortext">This is another paragraph.</p>
- <p class="colortext">This is also a paragraph.</p>
- </body>
- </html>

CHANGE THE COLOR OF ALL <P> AND <H1> ELEMENTS, TO "RED".
GROUP THE SELECTORS TO MINIMIZE CODE.

- <!DOCTYPE html>
- <html>
- <head>
- <**style**>
- h1, p {
- color: red;
- }
- </style>
- </head>
- <body>
- <h1>This is a heading</h1>
- <h2>This is a smaller heading</h2>
- <p>This is a paragraph.</p>
- <p>This is another paragraph.</p>
- </body>
- </html>

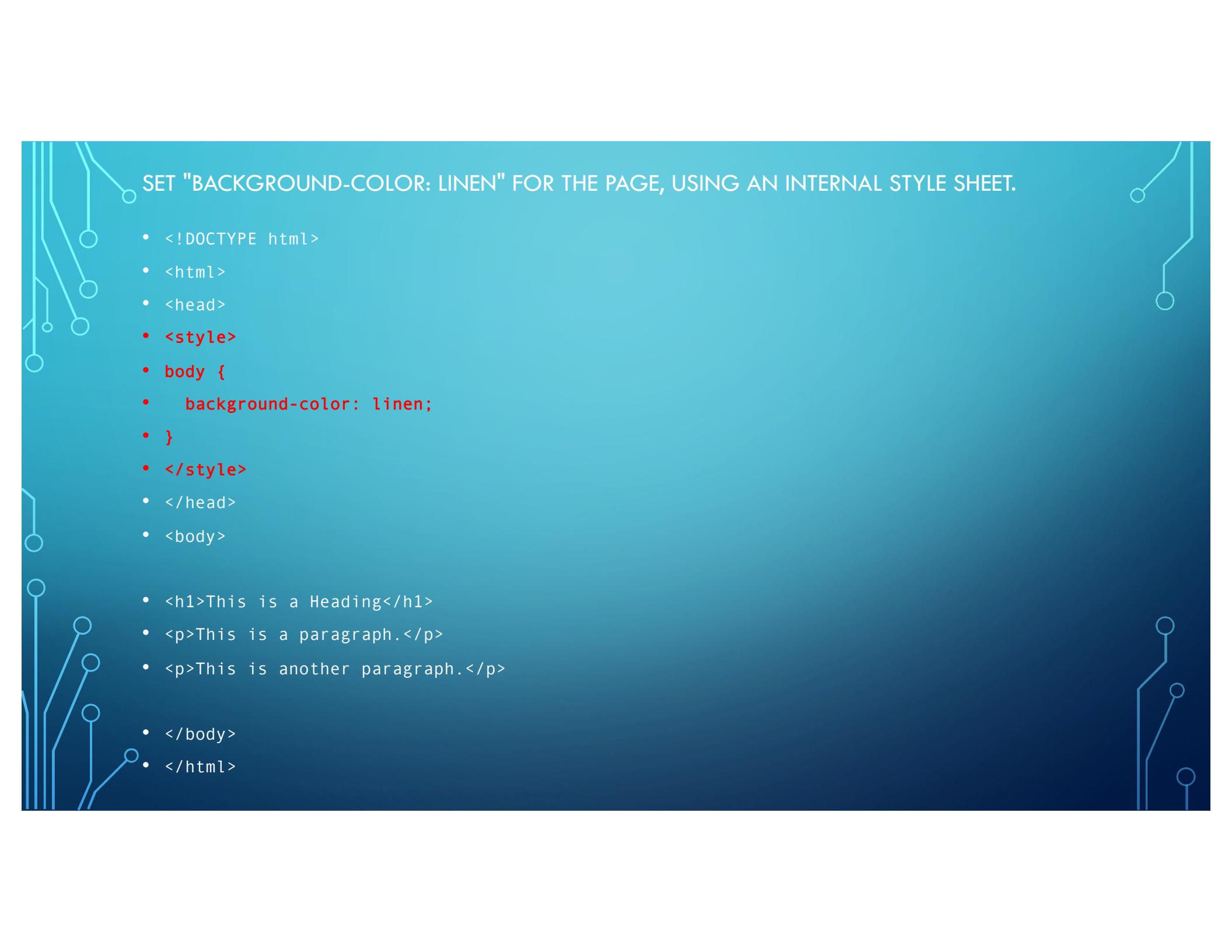


ADD AN EXTERNAL STYLE SHEET WITH THE URL: "MYSTYLE.CSS".

- <!DOCTYPE html>
- <html>
- <head>
- **<link rel="stylesheet" type="text/css" href="mystyle.css">**
- </head>
- <body>

- <h1>This is a Heading</h1>
- <p>This is a paragraph.</p>
- <p>This is another paragraph.</p>

- </body>
- </html>

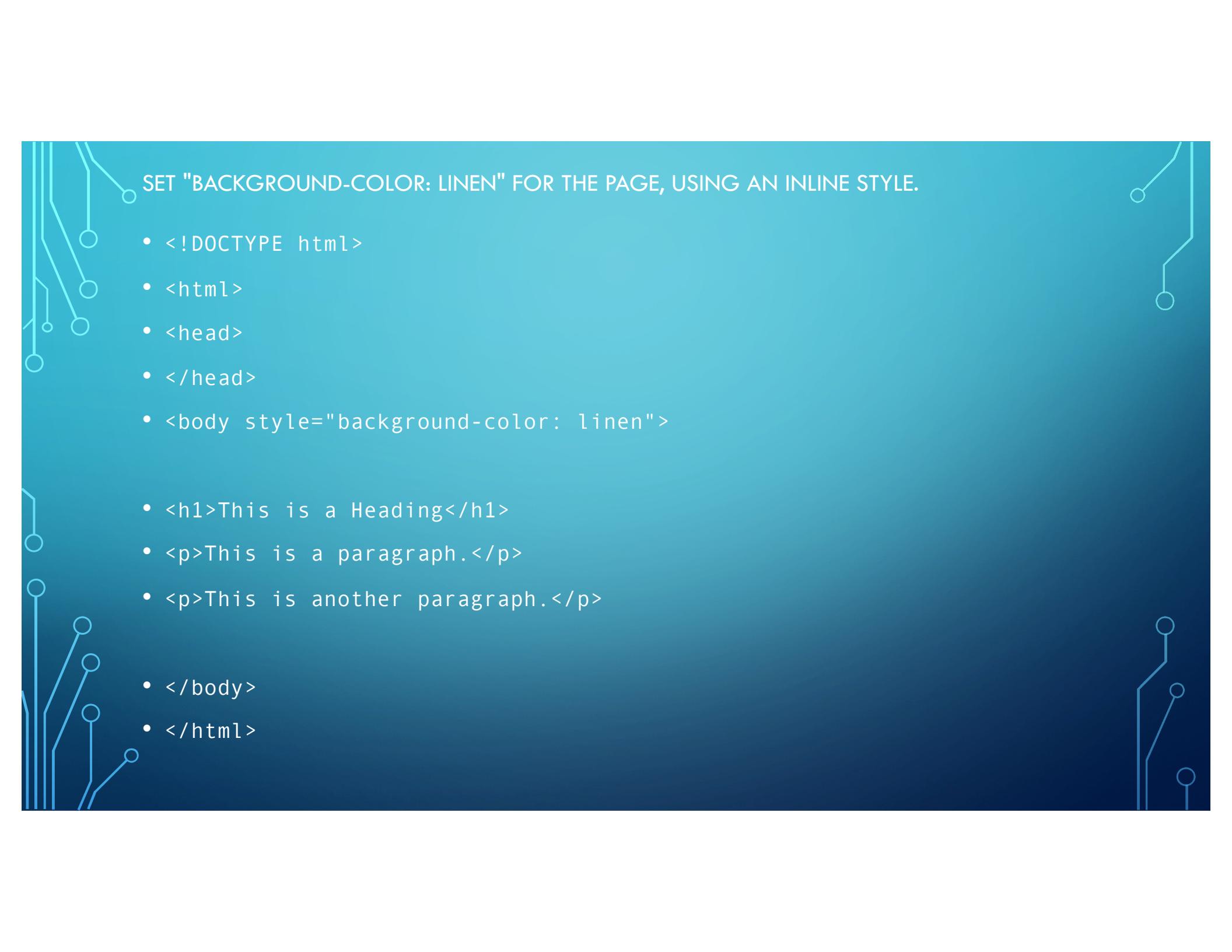


SET "BACKGROUND-COLOR: LINEN" FOR THE PAGE, USING AN INTERNAL STYLE SHEET.

- <!DOCTYPE html>
- <html>
- <head>
- <style>
- body {
- background-color: linen;
- }
- </style>
- </head>
- <body>

- <h1>This is a Heading</h1>
- <p>This is a paragraph.</p>
- <p>This is another paragraph.</p>

- </body>
- </html>

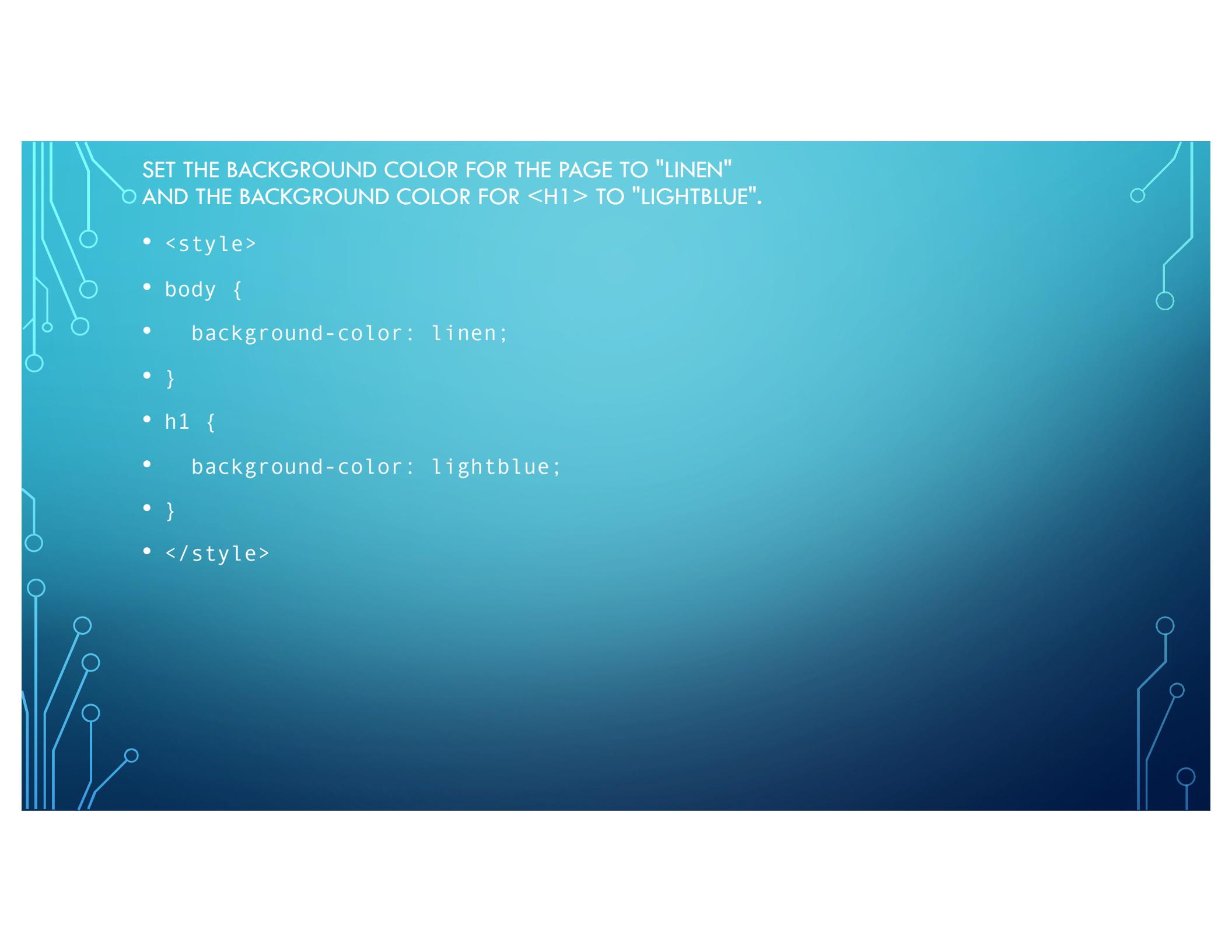


SET "BACKGROUND-COLOR: LINEN" FOR THE PAGE, USING AN INLINE STYLE.

- <!DOCTYPE html>
- <html>
- <head>
- </head>
- <body style="background-color: linen">

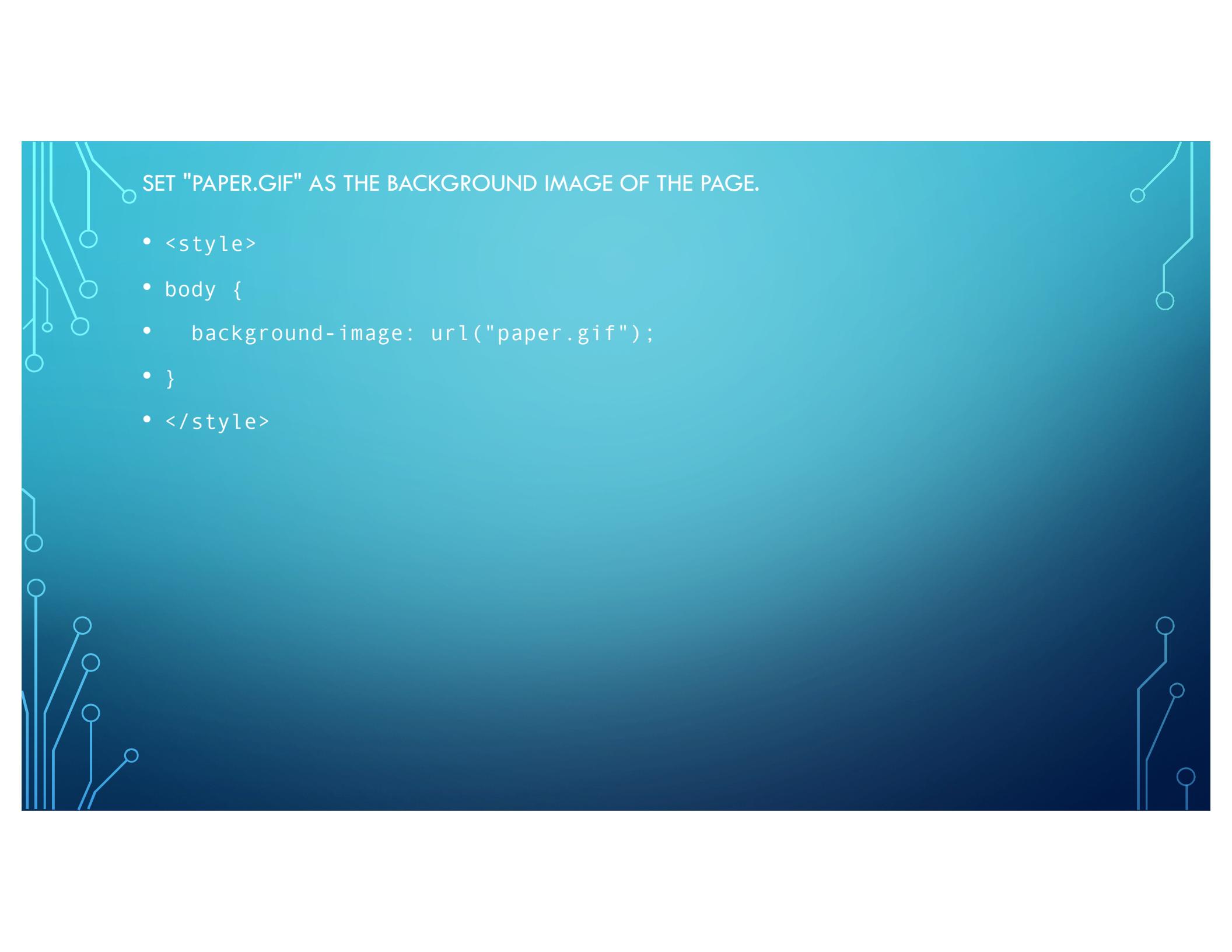
- <h1>This is a Heading</h1>
- <p>This is a paragraph.</p>
- <p>This is another paragraph.</p>

- </body>
- </html>



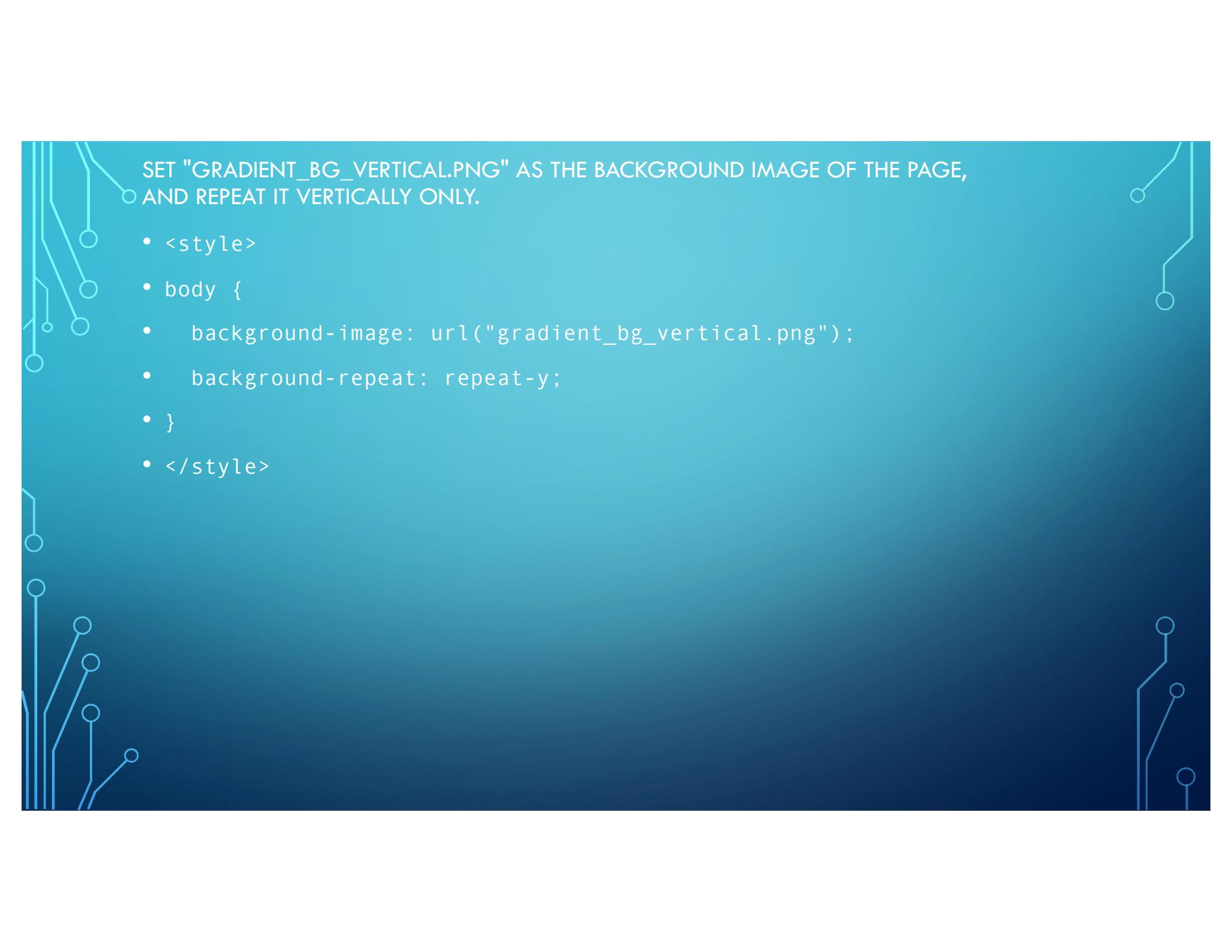
SET THE BACKGROUND COLOR FOR THE PAGE TO "LINEN"
AND THE BACKGROUND COLOR FOR <H1> TO "LIGHTBLUE".

- <style>
- body {
- background-color: linen;
- }
- h1 {
- background-color: lightblue;
- }
- </style>



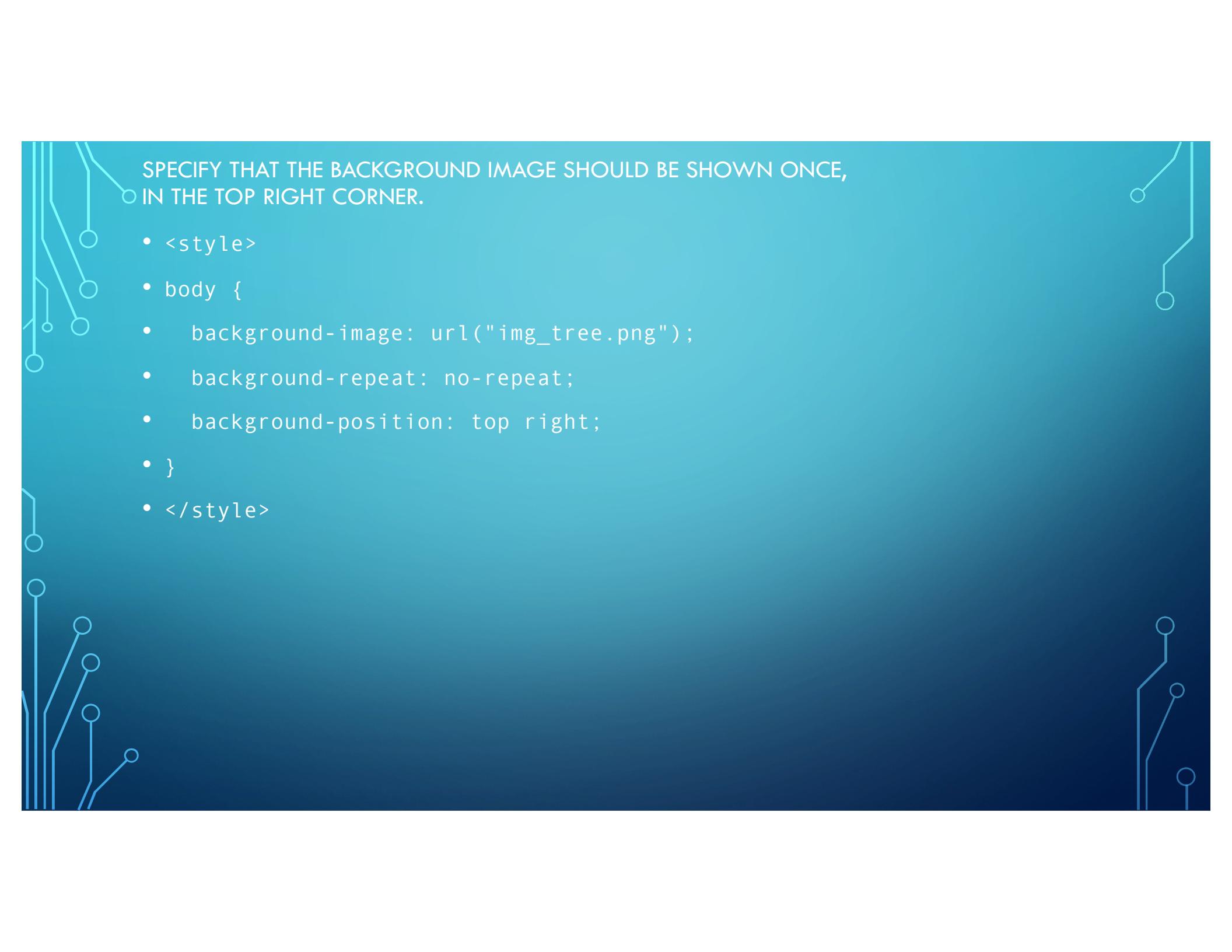
SET "PAPER.GIF" AS THE BACKGROUND IMAGE OF THE PAGE.

- <style>
- body {
- background-image: url("paper.gif");
- }
- </style>



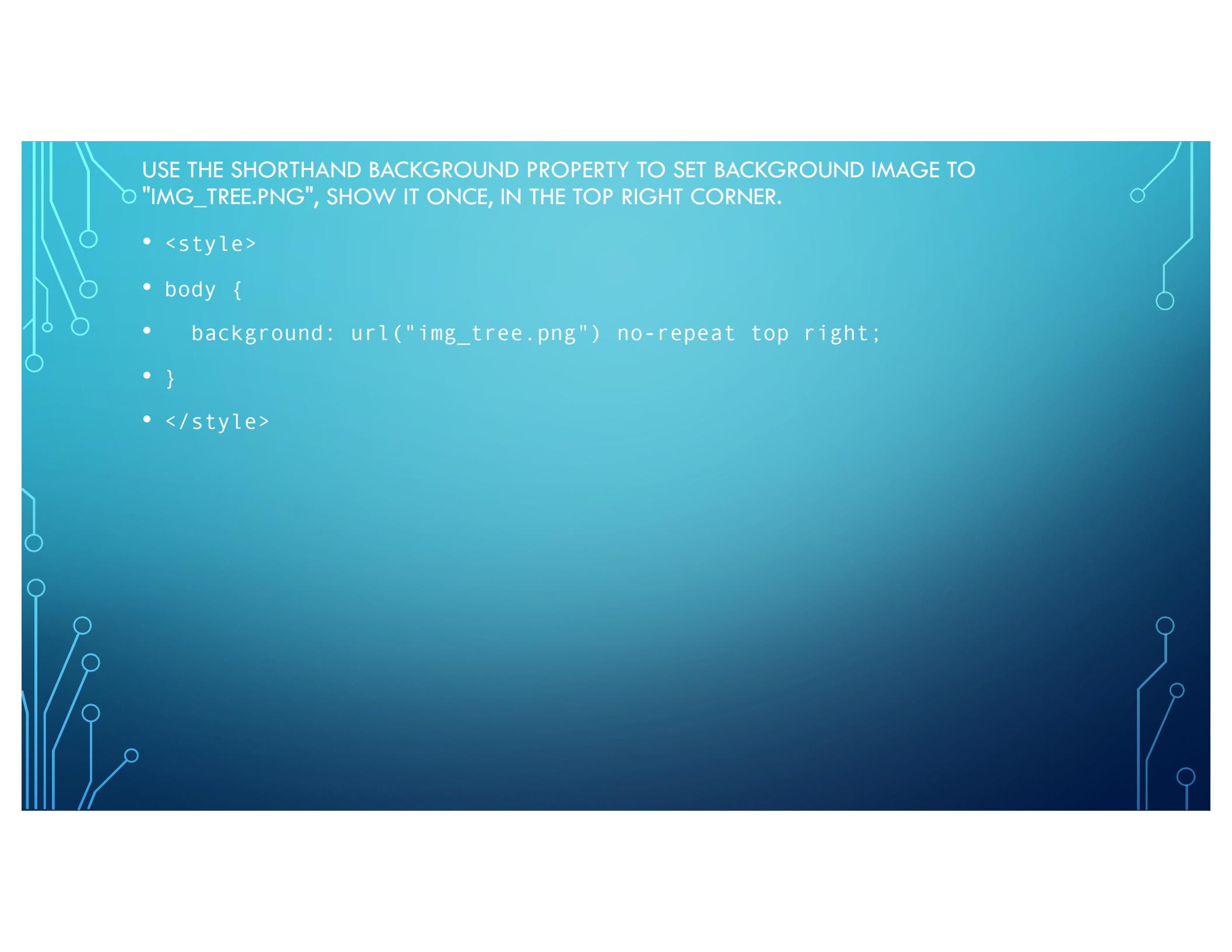
SET "GRADIENT_BG_VERTICAL.PNG" AS THE BACKGROUND IMAGE OF THE PAGE,
AND REPEAT IT VERTICALLY ONLY.

- <style>
- body {
- background-image: url("gradient_bg_vertical.png");
- background-repeat: repeat-y;
- }
- </style>



SPECIFY THAT THE BACKGROUND IMAGE SHOULD BE SHOWN ONCE,
IN THE TOP RIGHT CORNER.

- <style>
- body {
- background-image: url("img_tree.png");
- background-repeat: no-repeat;
- background-position: top right;
- }
- </style>



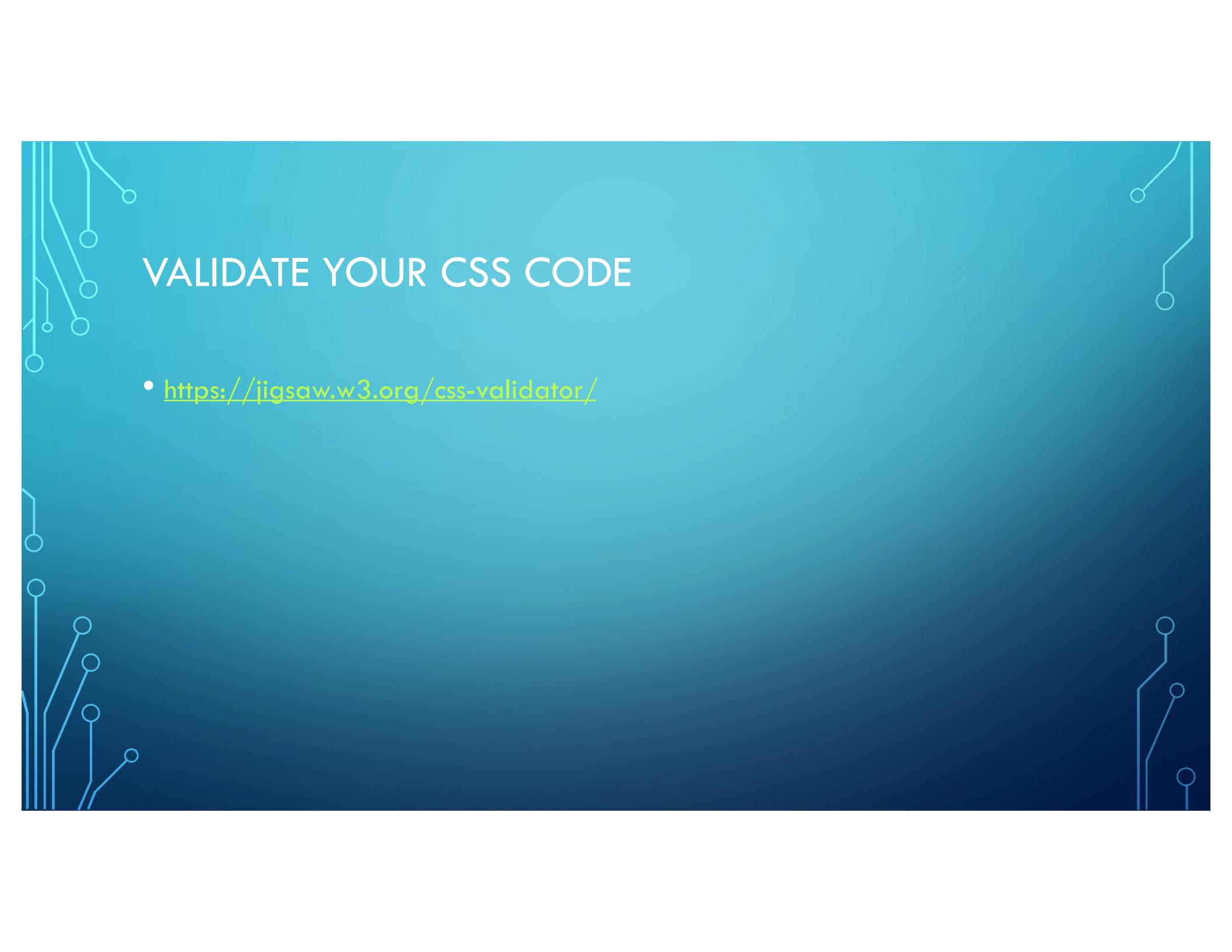
USE THE SHORTHAND BACKGROUND PROPERTY TO SET BACKGROUND IMAGE TO "IMG_TREE.PNG", SHOW IT ONCE, IN THE TOP RIGHT CORNER.

- <style>
- body {
- background: url("img_tree.png") no-repeat top right;
- }
- </style>



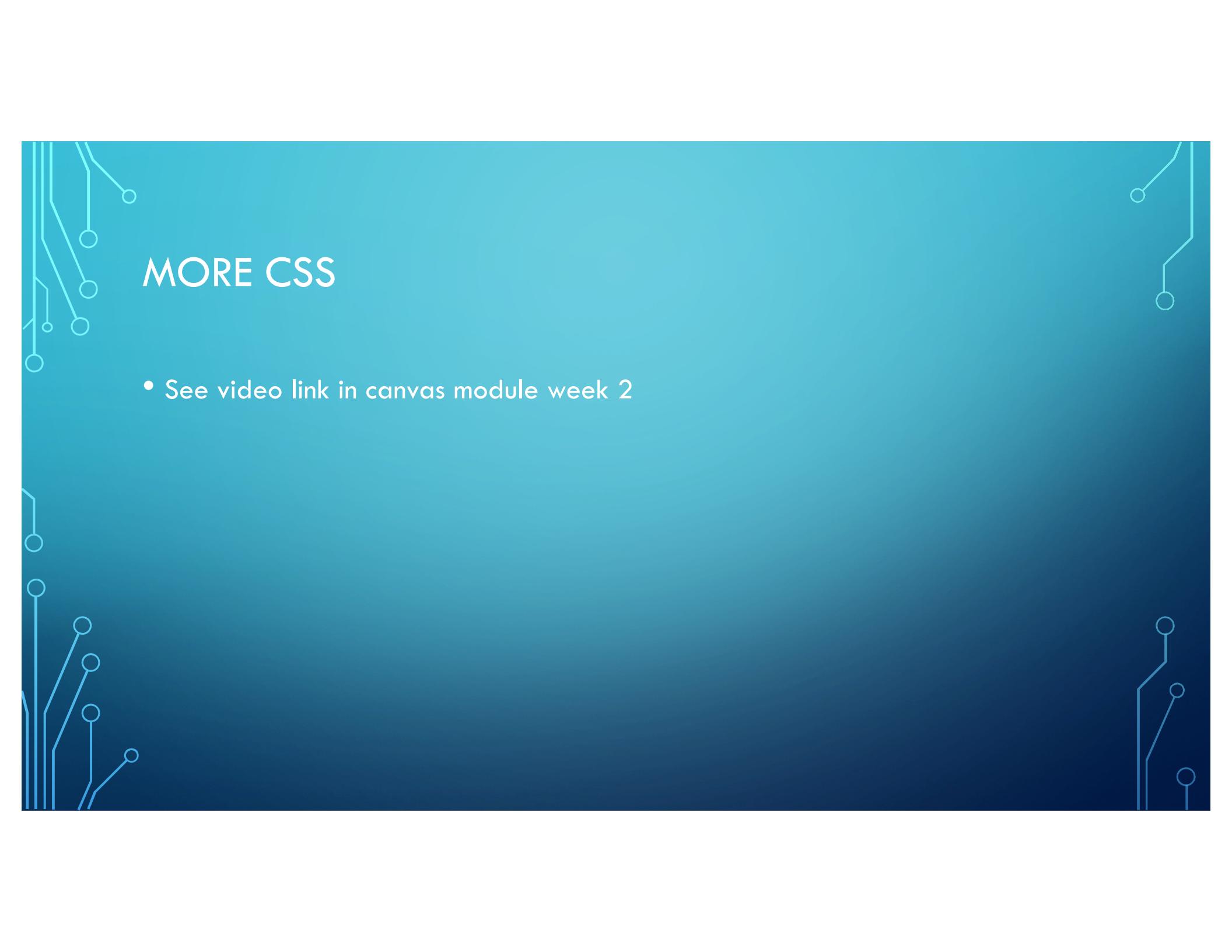
W3SCHOOLS.COM

- Borders - https://www.w3schools.com/css/exercise.asp?filename=exercise_border1
- Margin - https://www.w3schools.com/css/exercise.asp?filename=exercise_margin1
- Padding - https://www.w3schools.com/css/exercise.asp?filename=exercise_padding1



VALIDATE YOUR CSS CODE

- <https://jigsaw.w3.org/css-validator/>



MORE CSS

- See video link in canvas module week 2