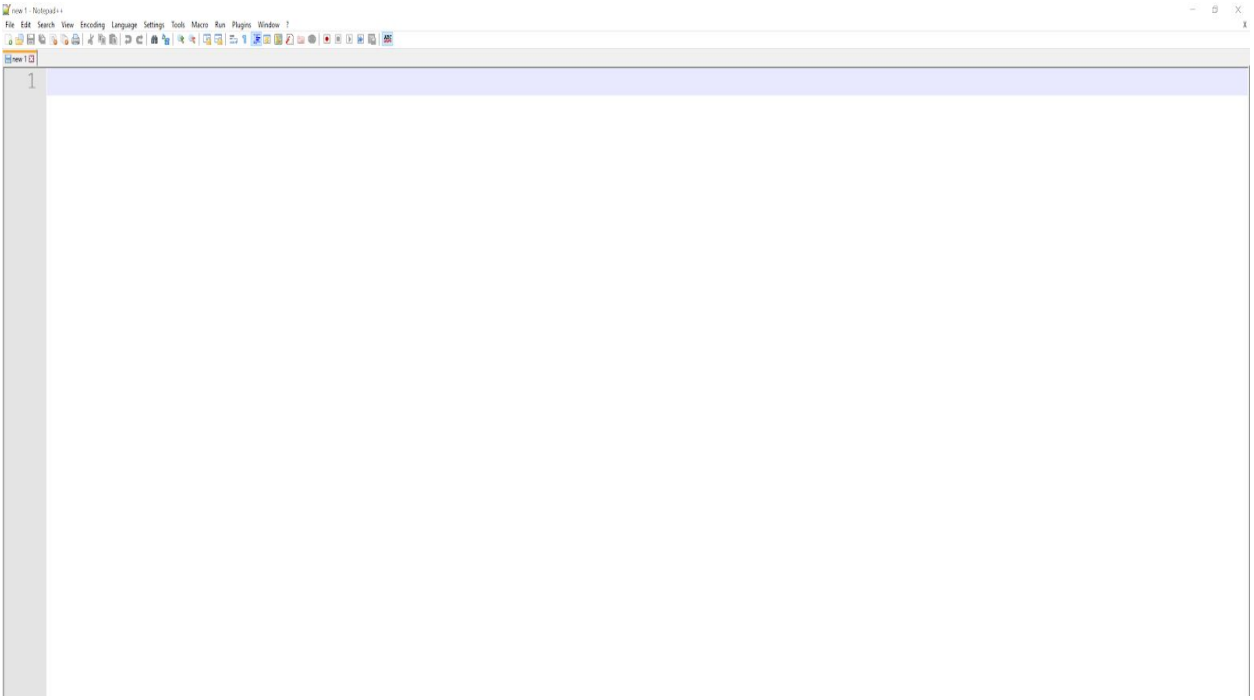
Lesson 1

Getting into HTML

Before we can start coding a cool new website we need to set up your text-editor. A text editor allows you to write code that can be run so you can see the results of your hard work! First double click on the Notepad++ symbol on your desktop.

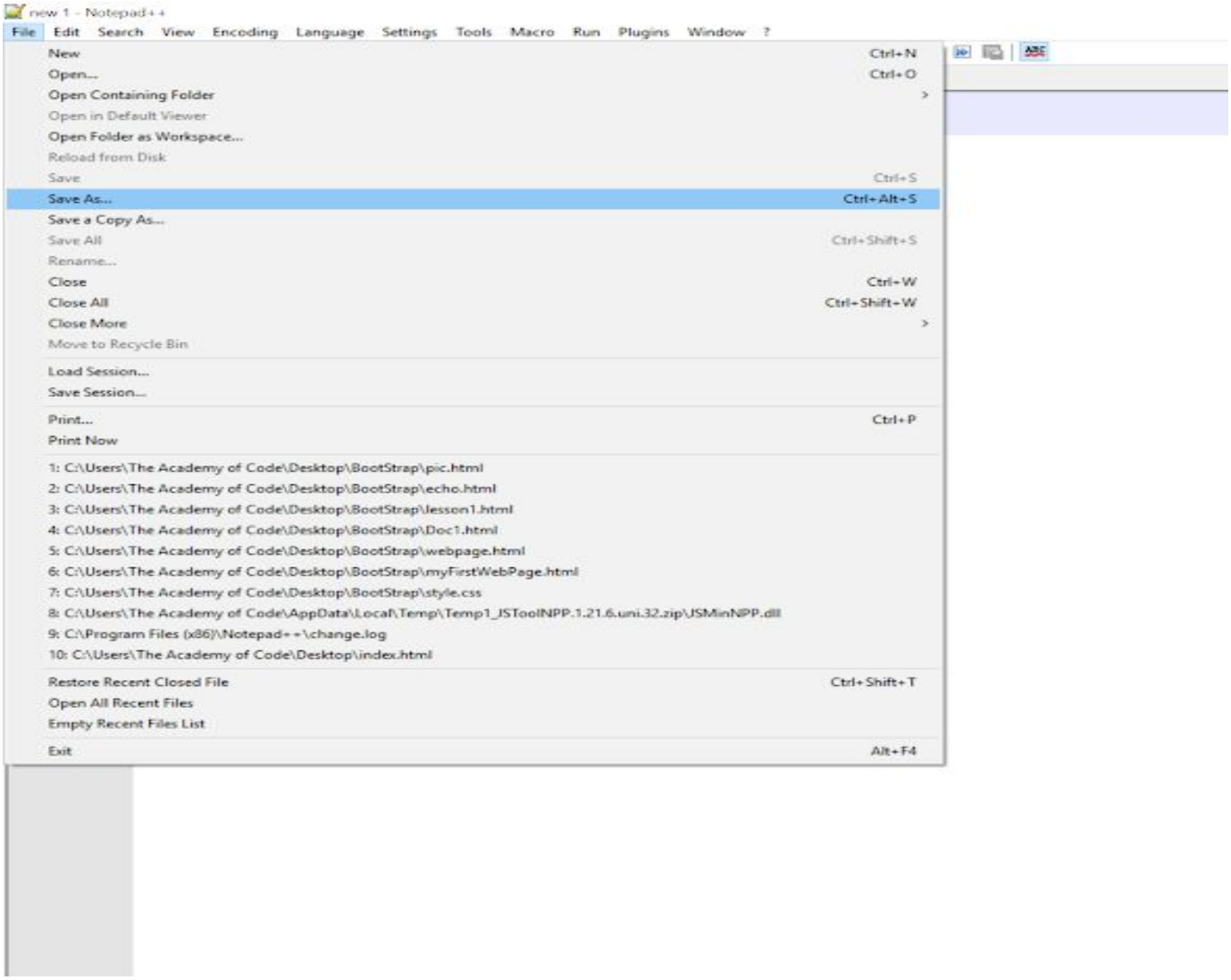
N.B. If you can't find Notepad++ ask the teacher in class!

Once you've clicked on Notepad++ this screen will appear.



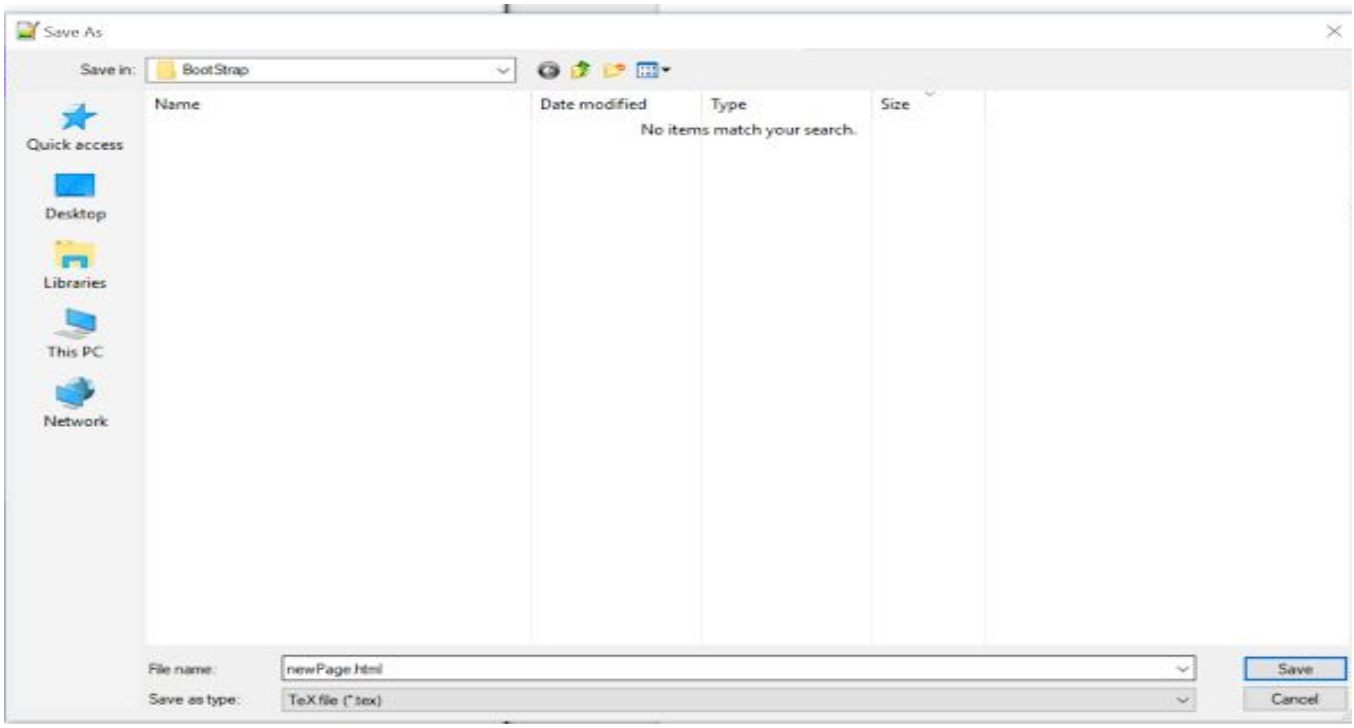
The next thing we need to do is to save our file as a HTML file. HTML stands for Hyper Text Markup Language and is one of the main parts of web design. It is used to tell the computer what order to put everything in. Later in this course we will be using CSS (Cascading Style Sheets) which is used to design the page.

To save a file we click on file in the top left corner and select Save As…



Make sure to save the file with the .html extension. This lets Notepad++ know it is a HTML file. If you don’t say what type of file it is it won’t work when you try to show it to the screen.

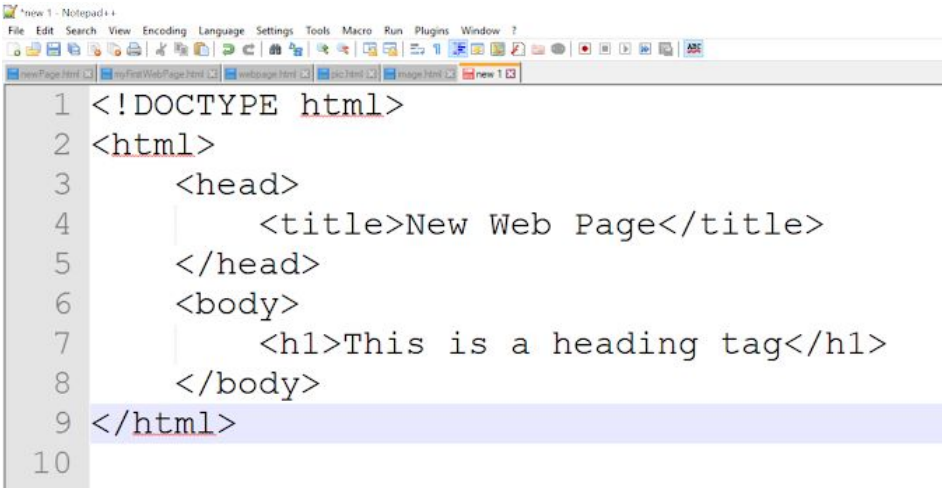
N.B. Make sure you save the file to your Academy of Code USB stick.



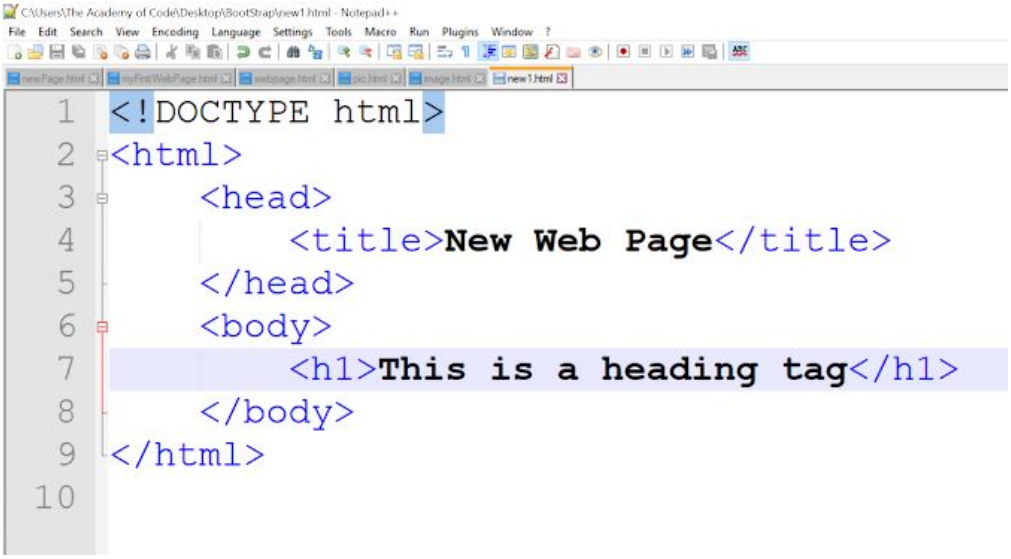
Before we save a file vs After we save a file

There's one big way to know how a HTML file has been saved properly! Let's look at this now.

Before we save:



After we save:

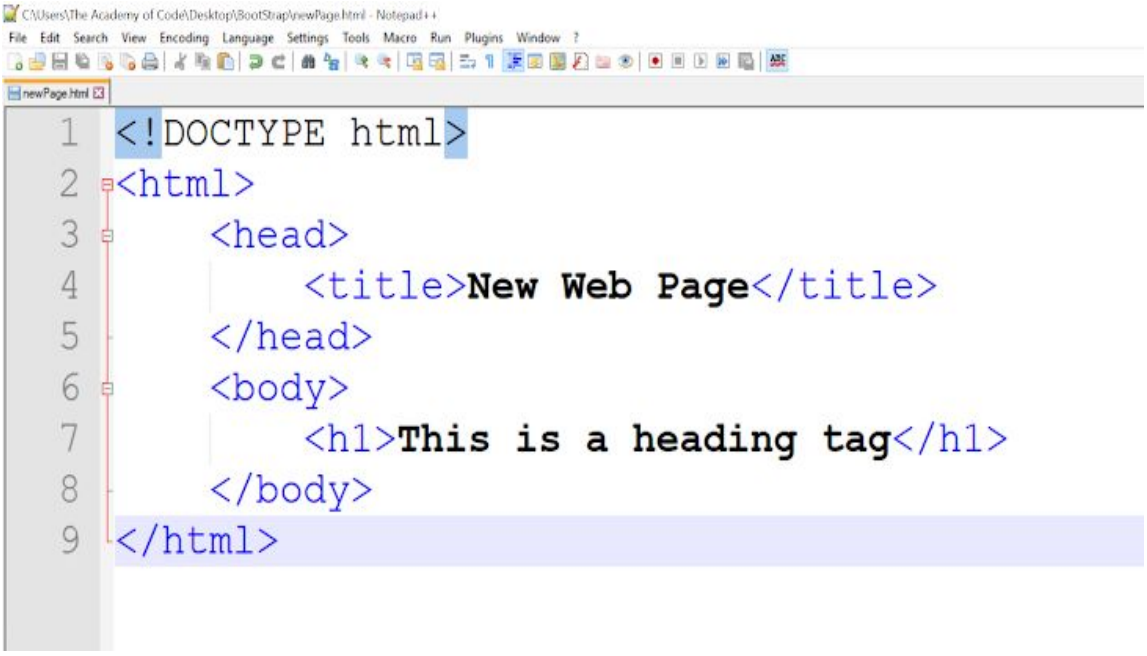


All the HTML tags have turned from black to blue. When this happens the computer knows that the file is a HTML file and can understand what to do with it.

The next step is to set up the basic HTML code of the document. This can be found below and can be copied into Notepad++ for now. Don't worry too much about this code or what it does. We'll talk about it more in the future.

```
<!DOCTYPE html>
<html>
	<head>
		<title>New Web Page</title>
	</head>
	<body>
		<h1>This is a heading tag</h1>
	</body>
</html>
```

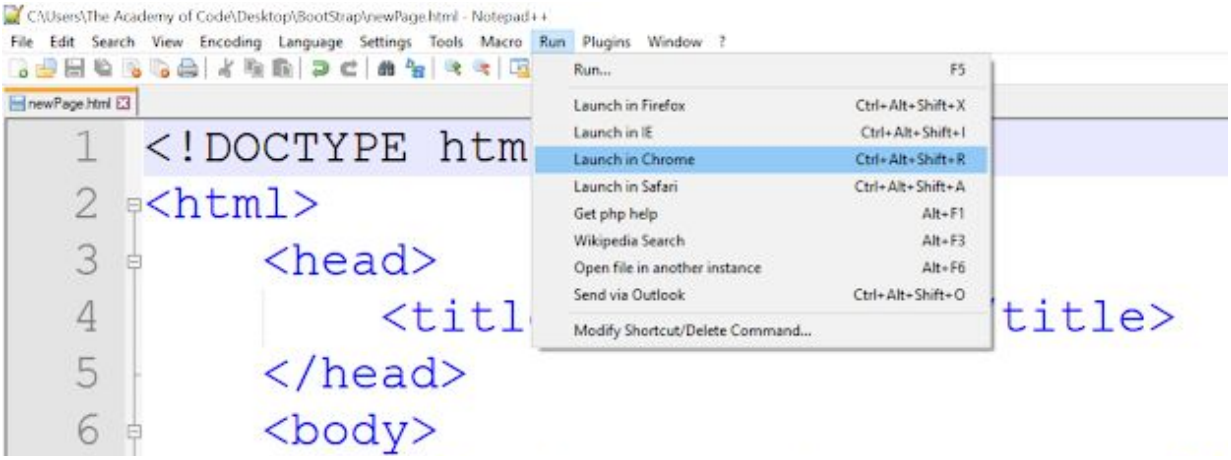
The copied text should look like this in Notepad++.



We now have to run the file to see what it will look like on a web browser. A web browser is a tool that lets you navigate different pages on the internet.

To run a file click on the Run button at the top of the Screen and select either Internet Explorer or Google Chrome.

N.B. You can use the other web browsers as well but they sometimes don't work.



Congratulations you've created and run your first web page!

Lesson 2

Creating your First Webpage

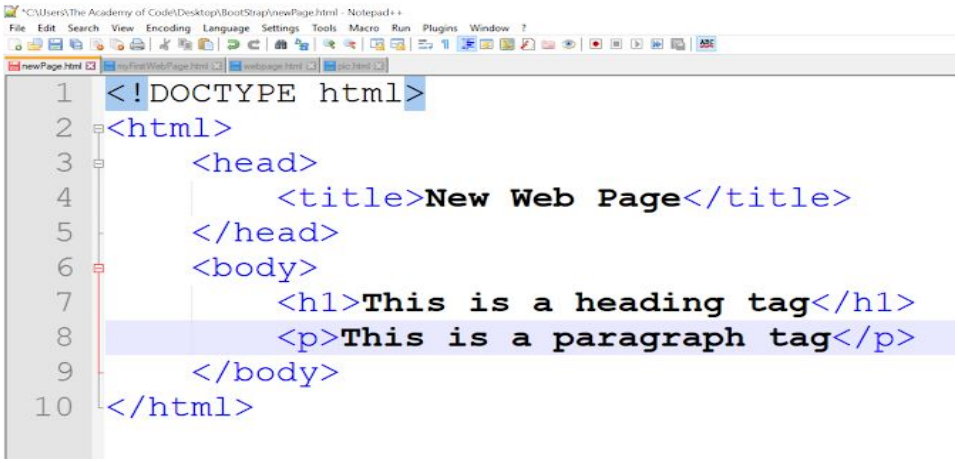
HTML uses what are called **tags** to build a webpage. Different tags mean different things. The tag stands for paragraph and is generally used for normal sized text. The <h1> tag is used for large text like a title on the top of a page.

Most tags consist of an opening tag and a closing tag with the text of information being held in between these tags.

<h1>The text displayed is shown here, in between the tags.</h1>

For the next section we're going to go through a list of the most important html tags.

All the code we are going to write for this lesson will be inside the <body></body> tags like in the example below (don't worry about the <title></title> tag for now).



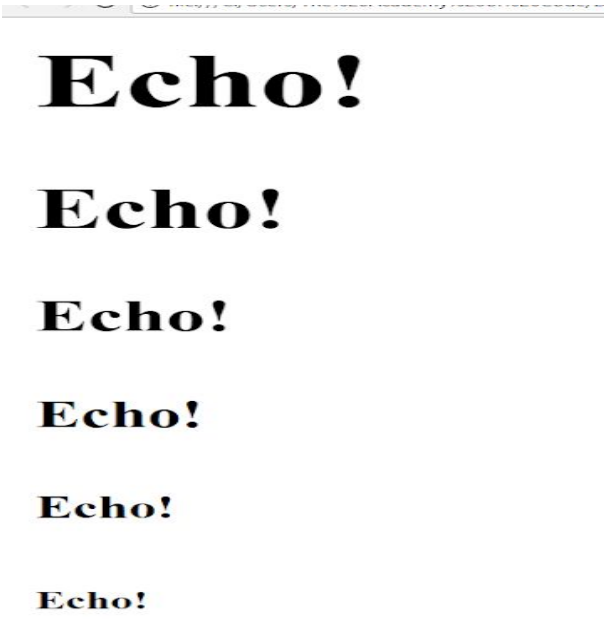
This is how your create a paragraph and heading tag in html.

Write this code down into Notepad++. Remember to save it using the right extension (.html)
If you need a refresher on how to save and run your code you can look at lesson 1.

Remember to put your code inside the body tag.
Click the run menu and then the Launch in Chrome button to see the display!
N.B. Remember to save your file before you run it in a web browser! You'll know it is saved right when the tags change colour from black to blue! If you need help ask the teacher.

Tasks:

- Change the text in the tags to you name. What has changed?
- Create a new tag below the first one.
- Create a new tag below <h1></h1> but this time call it <h2></h2>. What's the difference? What happens when you use a <h3></h3> tag?
- Can you make the web page below?



N.B. the heading tags vary from <h1></h1> all the way to <h6></h6> and are used to say what is the most important. A <h1></h1> tag would be used for the main heading on a page. A <h6></h6> may only be used for a smaller, less important section.

Extra Task:

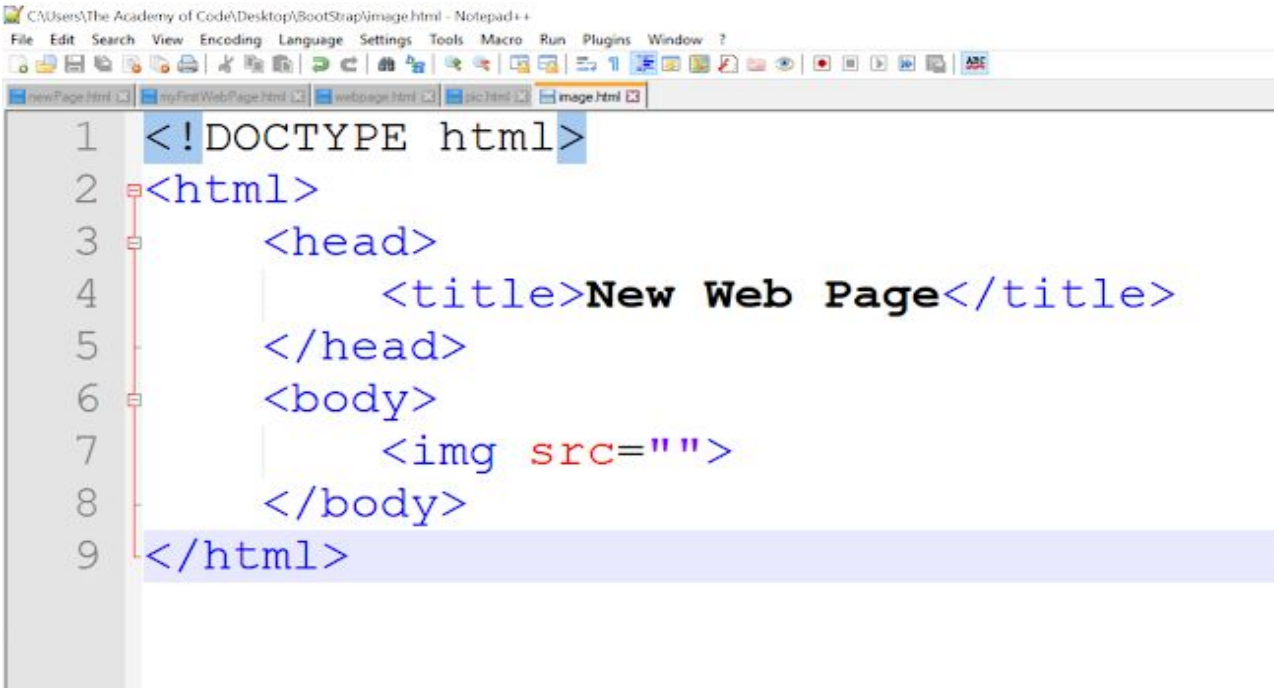
- Make a web page about one of your favorite things. This can be a band, a sports team, a youtuber or whatever else you want to talk about! Make sure to use all the tags we have talked about above.

Lesson 3

Images

Using lists and images is a really important part of learning web design. How many of your favourite sites use pictures and images to display content?

To display an image on a website we use the <img> tag.



The <img> tag is different from the other tags we've used before as it doesn't have a closing tag.

The src="" part of the image tag tells the computer where the image is. This way the computer can load the image onto the screen. Now let's get an image!

Try to call the image something simple like img or download.

Find an image you want to show on the screen (online or in the pictures folder). **Hint: when using google images: click on the image → view image → right click on image → save image as → save it in your program folder.**

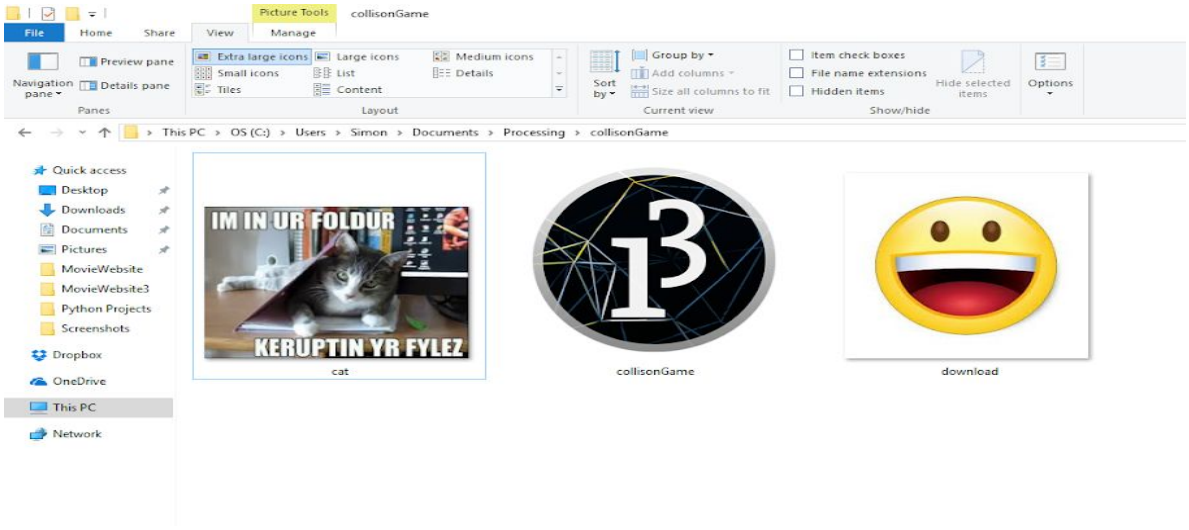
N.B. If you get stuck here ask a teacher for help!

```
<!DOCTYPE html>
<html>
    <head>
        <title>New Web Page</title>
    </head>
    <body>
        <img src="img.png">
    </body>
</html>
```

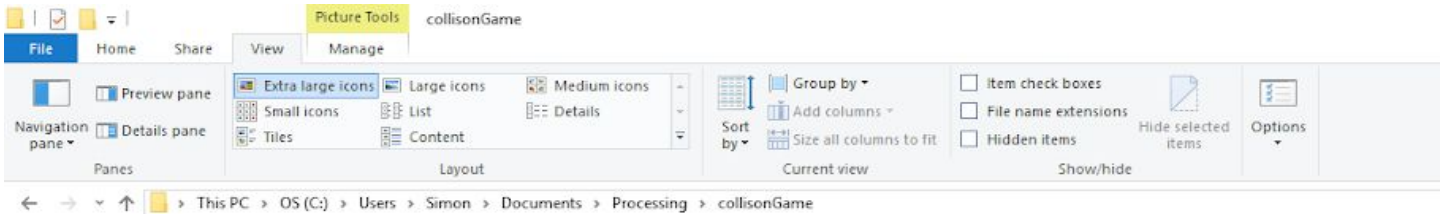
Now we need to put the name of our image (I called mine ‘img’) and the file extension (this one is a .png file) inside the src quotes e.g. src=”img.png”

We can find out what the name and file extension is using the “View” tab on the computer.

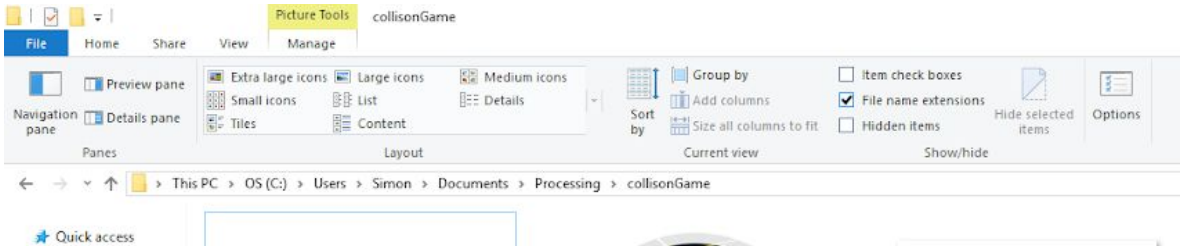
The first thing we do is to find out where the file is on the computer. Then we need to click the view tab.



The View tab below:



Next we need to click the checkbox that says “File Name Extensions”. If you can’t find this checkbox ask your teacher!



And this will show all the files with their file extensions!

Tasks:

- Add some images to the last web page you did about one of your favorite things.

Extra Tasks:
Find out what each of these HTML tags do. You can use the https://www.w3schools.com/ website to learn more or ask a teacher if you get stuck.

-
- <hr>
- <a href="">
-
-

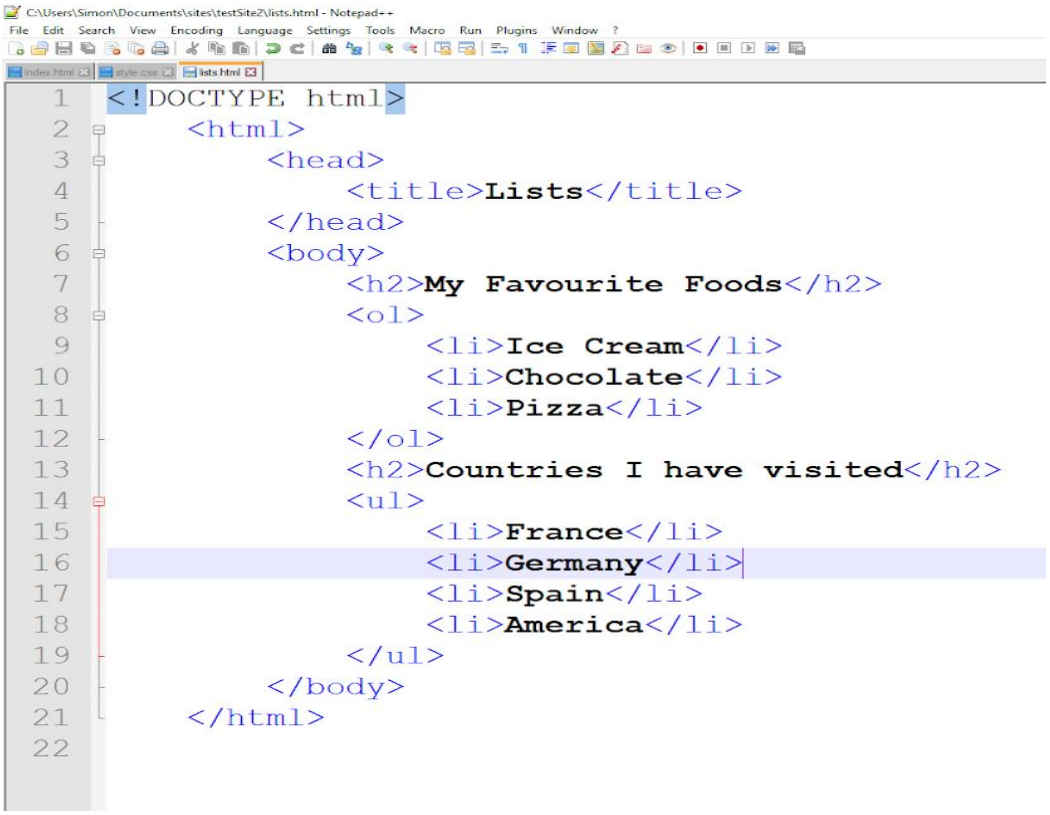
Lesson 4

Lists

Using lists in HTML is a really important part of web design! Lists can be used to to show people your favorite foods, the places you've visited or anything else you want!

Task:

- **What happens when you enter the code below? Can you see a difference between the two lists?**

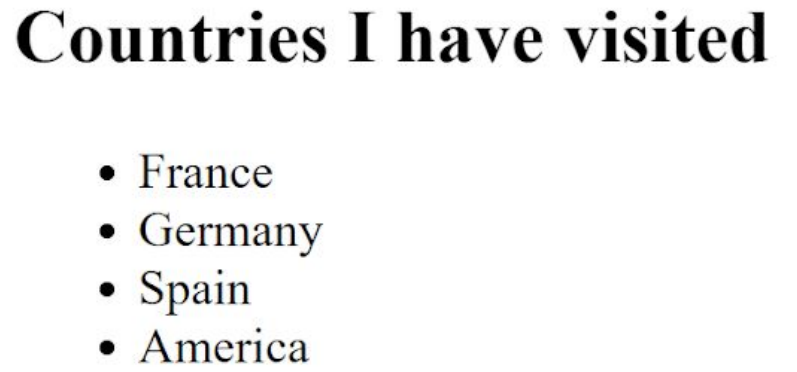


The code we used above shows two different types of lists:

An **Ordered** list and an **Unordered** list.

An **ordered list** shows all the list items with a number beside them. This number shows where in the list the item is. Like the list below!

An **unordered list** shows all the items with a bullet point beside them. Like the list below!



To make an **ordered list** we need to use the <ol> tag. stands for Ordered List! Inside the <ol> tag we use <li> tag to say what we are going to list. We can see this is the code below.

```
<ol>
    <li>Ice Cream</li>
    <li>Chocolate</li>
    <li>Pizza</li>
</ol>
```

To make an unordered list we use the <ul> tag. stands for unordered list! Inside the <ul> tags we use the <li> tags to list items! We can see this below.

```
<ul>
    <li>France</li>
    <li>Germany</li>
    <li>Spain</li>
    <li>America</li>
</ul>
```

N.B The only difference between the two lists is the name of the tag used! vs !

Task:

- **WARNING: You are going to be trapped in a snowstorm! Thing of a list of items you will need to survive! Write them down using HTML code!**
- **You have been given a free airline ticket to go ANYWHERE in the world. List the top five places you would visit!**

Lesson 5

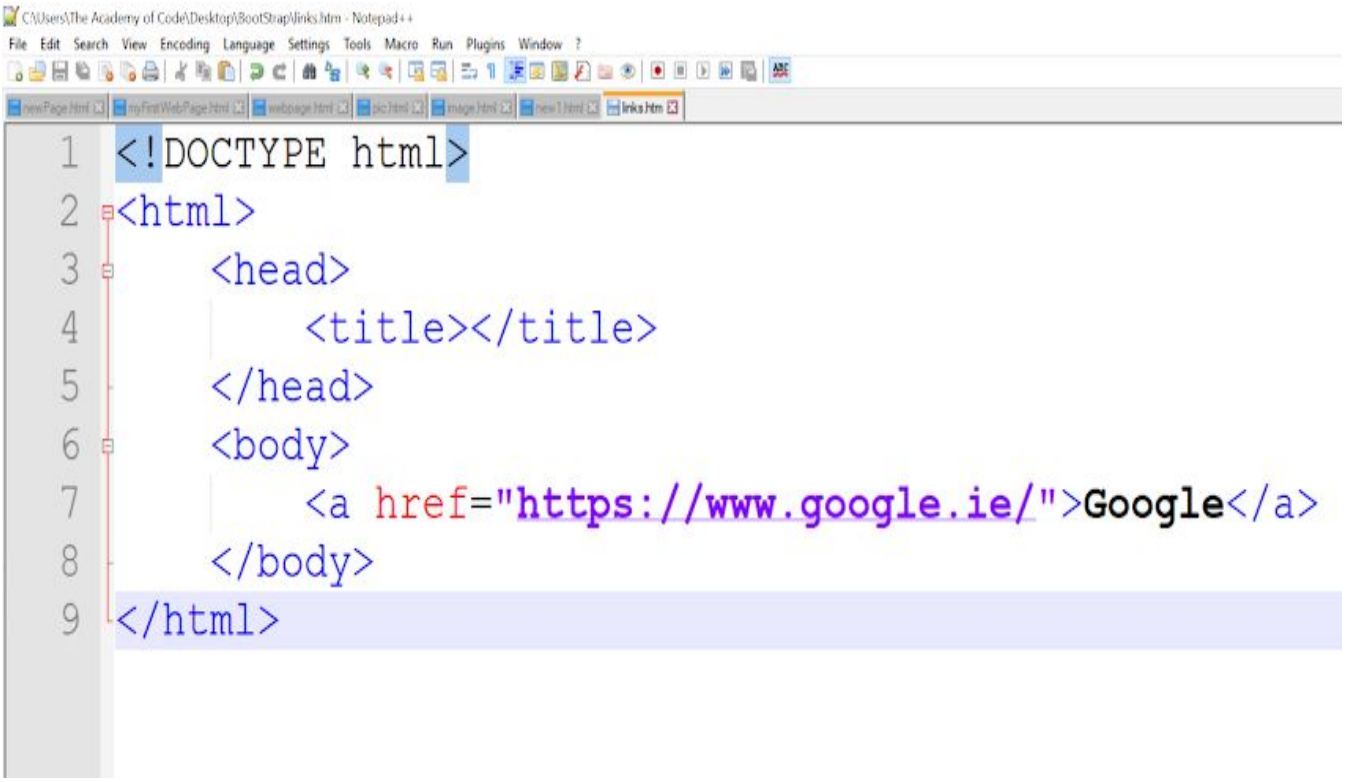
Hyperlinks

Hyperlinks are how we get around the internet! Hyperlinks take us to other pages on a web browser. Below is an example of a hyperlink:

https://www.google.ie/

If we click this button it will bring us to google!

HTML uses a special tag called the <a> tag. Below is how we use the <a> tag in HTML.



We need to remember to have an opening <a> tag and a closing tag. The letters in between the <a> tag (“Google”) will show the hyperlink on our web page!

Task:

- Can you create another link to your favorite website?

IMDb Project

Webpage

IMDb have hired you to create a simple web page for people who want to know more about them! Using your new html skills make a cool and interesting website for IMDb!

Things to include:

- A title and explanation of what IMDb is.
- A list of the top ten movies on IMDb!
- Lots of pictures of films and tv shows that are on IMDb
- Hyperlinks to some of your favorite movies on IMDb!

Extras:

- Once you have finished look at https://www.w3schools.com/ to see what other html you can add to your website!

N.B. It is important you complete this part before moving on! Show your teacher once you are finished!