# Ac50002 Lab 1 javascript

The purpose of this lab is to get familiarised with javascript. We will need to us a few bits of syntax you haven’t encountered yet, but it’s nothing too complicated. Login to a lab machine and locate the text editor called notepad++. You can’t use word or even wordpad (and notepad isn’t that good either) because they are just not designed for programming.

You’ll need to download some sample code . Login into myDundee using a browser and find the course ac50002. Go to lecture notes and look for “code for lab 1”. Click on it and it should download. Depending on the browser you are using it may open itself. You’ll need to find the code and copy the directory to your u: drive.

Go to the u: drive, open the directory handoutcode and look at the directories you have. You’ll see one .html file a css directory and a scripts directory. As you can imagine the css directory contains css files and the scripts directory contains javascript files.

If you double click on the .html (“Innerhtml.html”) it should open in a browser.

Use Notepad++ to open Innerhtml.html and scripts /InnerHTML.js

**Examine the code and work out what you think is happening ?**

## Task 1:

Try and alter this code so that it produces 10 lines, with each line numbered like this:  
  
“This is a new paragraph, Paragraph 0  
This is a new paragraph, Paragraph 1  
This is a new paragraph, Paragraph 2  
This is a new paragraph, Paragraph 3  
This is a new paragraph, Paragraph 4  
This is a new paragraph, Paragraph 5  
This is a new paragraph, Paragraph 6  
This is a new paragraph, Paragraph 7  
This is a new paragraph, Paragraph 8  
This is a new paragraph, Paragraph 9”

Hint: to create a new line in html you can use the break tag “<br>” at the end of a line.

## Part 2

Open the Innerhtml.html file in notepad++ remove the section:

<p id="Par1">

This is Paragraph 1</p>

And replace it with

<div id="bar">

</div>

save it as a new file name (say bars.html) in the same directory as the innerhtml.html file.

Double click it and it should open in a browser window. Did you see anything ?

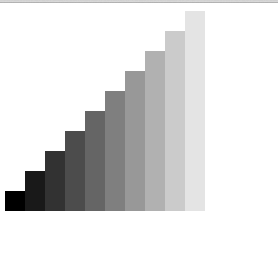
What’s happened here is we have removed the paragraph and replaced it with a <div> tag. This is an empty section in a html file which can contain other material. However we are going to do something a little clever, we are going to use a style sheet to change it’s appearance. We need to add a style sheet to make it appear. Open the file css/bars.css in an editor and have a look at it. What do you think it is doing ? Have a look on-line for any terms that is not obvious.

## Task 2:

Use a similar technique to part one to draw multiple bars. You will simply be changing the paragraph to divs in your code for part 1.

## Part 3

If you look again at the css code you will see that it sets a number of attributes for the div box, colour, height , width etc. If we can change the javascript code to change these attributes programmatically , we can produce a graph like this:



## Task 3:

This can be done by changing the height of the div areas and the background colour. If I tell you these can be set using the following code:

var colour=~~(i\*254/10);

var scolour="rgb("+colour+","+colour+","+colour+")";

bar.style.height=height+"px";

bar.style.backgroundColor=scolour;

can you work out how to draw this graph using just javascript ?