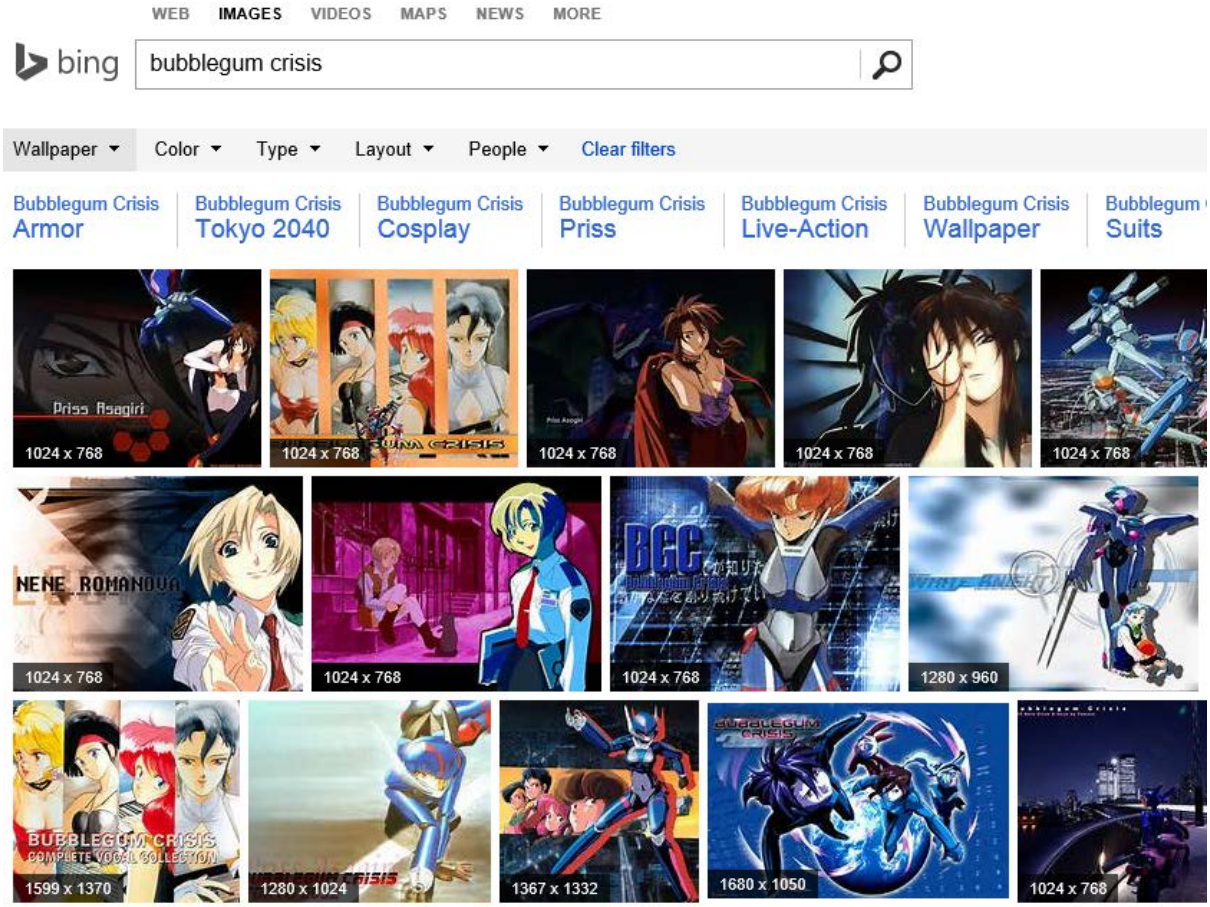
Tutorial 2

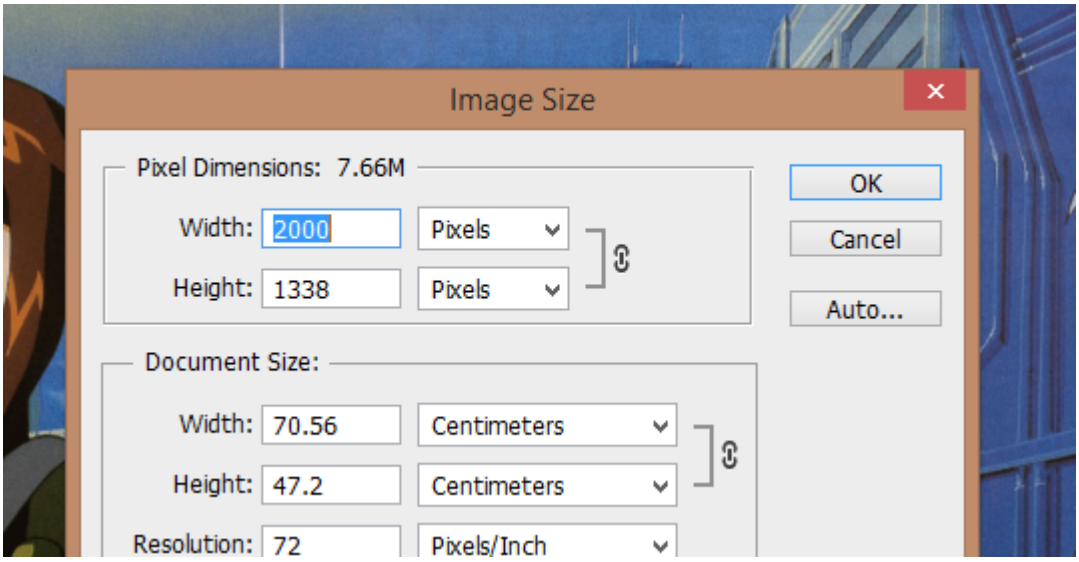
Activities

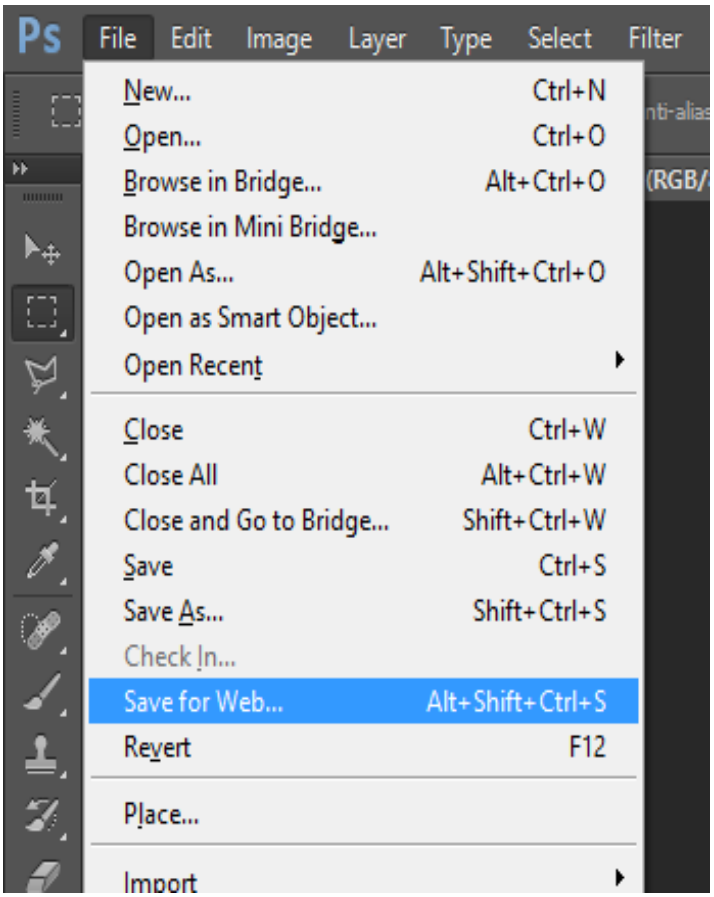
- Code
  - Editor: Notepad++
  - Focus : Image manipulation, webpage skeleton, div layout, embedded stylesheet introduction

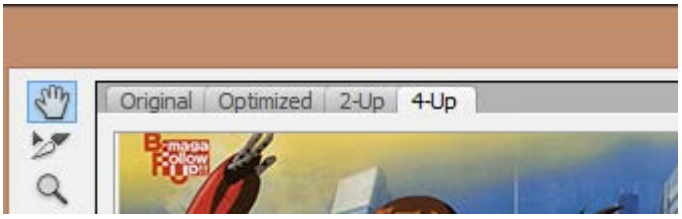
- To start with we need some images to work with. Jump onto Bing or google, grab about 6 images, grab images over 1200px wide.



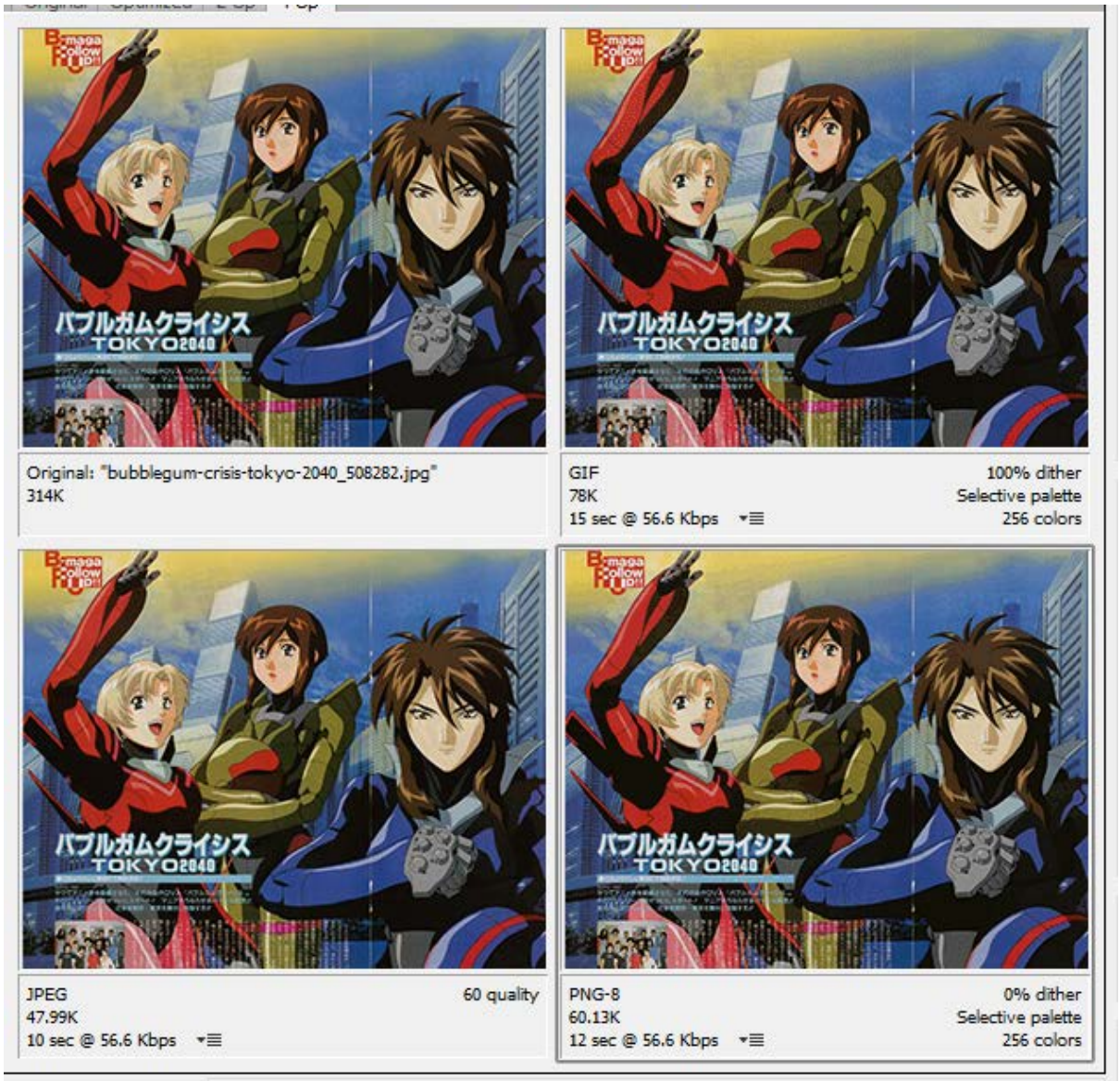
- Save these images to your desktop.
- Load up Photoshop and open the first image
- Image manipulation normally takes place after you have already determined sizes and dimensions for the website you are building; on average you will not need images wider than 400px. This is dependent on your design.
- Modify the image to 400px

- 

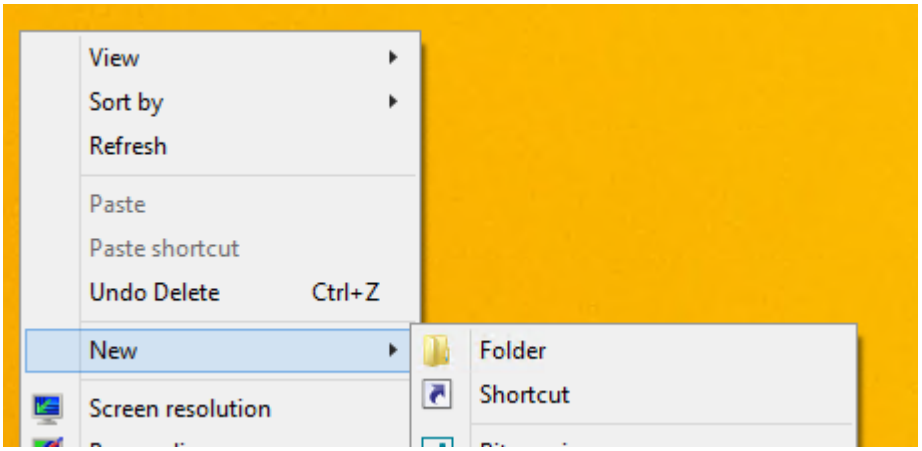
- After the size has been done, then go file Save for Web
- 

- From here, change the top tab to 4up
- 

- This displays the image 4 times and then allows you to select the optimal image for the web, by type and gradation of the image. Ie, select the best picture before artifacts appear in the image.



- As you can see in the above picture. The jpeg offers the best size at 60 quality (listed as high in the drop down) and the best estimated speed for downloading over a modem.
- Repeat the above for all of your images.
- On the desktop, create a folder called tutorial 2

- 

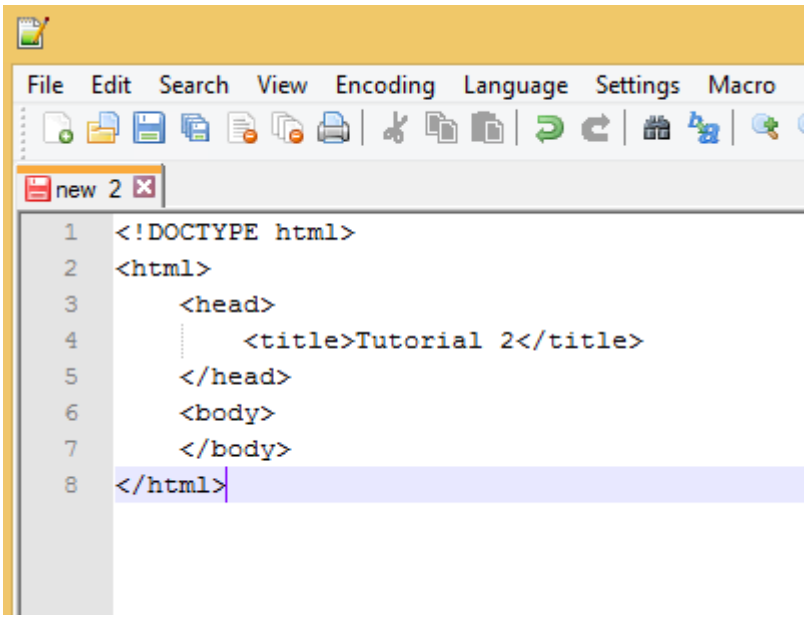
- Copy the images into that folder.

- Open up Notepad++

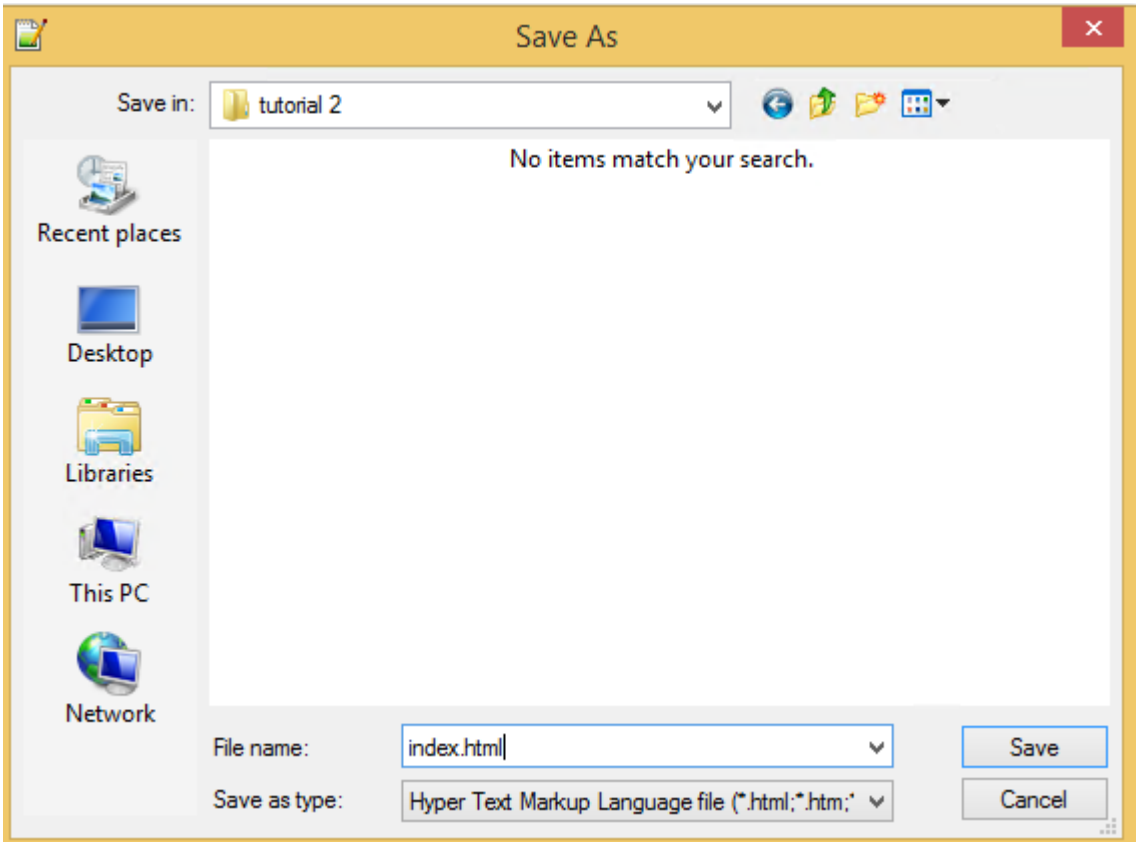
- 

- Once notepad++ is open, create a new file; Click on file and then New (or Ctrl + N)

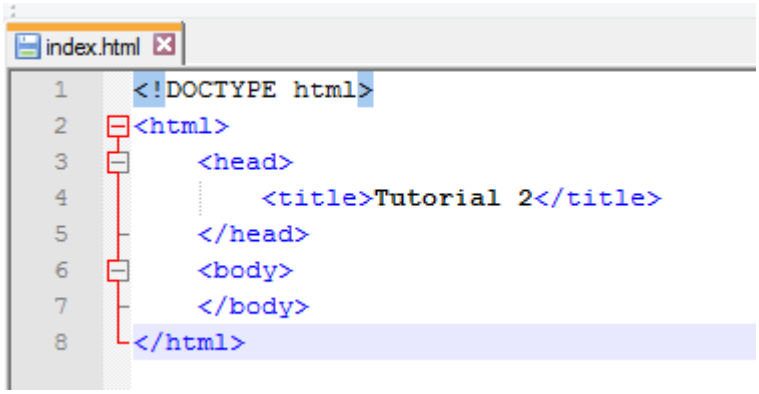
- Inside this blank document put in the bare bones skeleton for a web page

- 

- Once you have typed everything in, you want to save the file as index.html in the tutorial 2 folder.



- From here, you should see the following changes to your code



- As notepad++ is a smarter editor than notepad, it has the ability to colour code the language you are typing in. In this manner, the colour coding will assist in distinguishing between code and content.

- Time to load up an image, type the following, but use your image name

- index.html

```
<!DOCTYPE html>
<html>
    <head>
        <title>Tutorial 2</title>
    </head>
    <body>
        <img src="bc1.jpg" alt="Bubblegum Crisis">
    </body>
</html>
```

- Save the page and reload it in a browser.
- You should have a simple webpage with the image you have selected to view.
- Of note, the alt code is critical when dealing with images, they will load without it, but it is designed to appear if the image is broken.
- Code in the remainder images

- index.html

```
<!DOCTYPE html>
<html>
    <head>
        <title>Tutorial 2</title>
    </head>
    <body>
        <img src="bc1.jpg" alt="Bubblegum Crisis 1">
        <img src="bc2.jpg" alt="Bubblegum Crisis 2">
        <img src="bc3.jpg" alt="Bubblegum Crisis 3">
        <img src="bc4.jpg" alt="Bubblegum Crisis 4">
        <img src="bc5.jpg" alt="Bubblegum Crisis 5">
        <img src="bc6.jpg" alt="Bubblegum Crisis 6">
    </body>
</html>
```

- Save and reload the browser
- Now, let's modify the size of the images using code,

```
<img src="bc1.jpg" alt="Bubblegum Crisis 1" style="width:200px;">
<img src="bc2.jpg" alt="Bubblegum Crisis 2" style="width:200px;">
<img src="bc3.jpg" alt="Bubblegum Crisis 3" style="width:200px;">
<img src="bc4.jpg" alt="Bubblegum Crisis 4" style="width:200px;">
<img src="bc5.jpg" alt="Bubblegum Crisis 5" style="width:200px;">
<img src="bc6.jpg" alt="Bubblegum Crisis 6" style="width:200px;">
```

- Not only can we modify the width, but we can modify the height as well

```
<body>
    <img src="bc1.jpg" alt="Bubblegum Crisis 1" style="width:200px; height:300px;">
    <img src="bc2.jpg" alt="Bubblegum Crisis 2" style="width:200px; height:300px;">
    <img src="bc3.jpg" alt="Bubblegum Crisis 3" style="width:200px; height:300px;">
    <img src="bc4.jpg" alt="Bubblegum Crisis 4" style="width:200px; height:300px;">
    <img src="bc5.jpg" alt="Bubblegum Crisis 5" style="width:200px; height:300px;">
    <img src="bc6.jpg" alt="Bubblegum Crisis 6" style="width:200px; height:300px;">
</body>
```

- Now, as you can see, some images are not scaled at all when you do this, so if it advisable, that if you do code the image size change, you modify only one attribute, be it either height or width. In this manner, the browser will scale the image for you.

- Now, it is possible to make sizing a bit easier than setting it for each image individually, after all, if you are asked to modify a gallery of 300 pictures, far easier to make one point of change than 300. So, so start off with, modify the images like so

```
<body>
    <img src="bc1.jpg" alt="Bubblegum Crisis 1" class="imgSize">
    <img src="bc2.jpg" alt="Bubblegum Crisis 2" class="imgSize">
    <img src="bc3.jpg" alt="Bubblegum Crisis 3" class="imgSize">
    <img src="bc4.jpg" alt="Bubblegum Crisis 4" class="imgSize">
    <img src="bc5.jpg" alt="Bubblegum Crisis 5" class="imgSize">
    <img src="bc6.jpg" alt="Bubblegum Crisis 6" class="imgSize">
</body>
```

- So with that change, we are telling the browser that there is a style class called imgSize that contains all of the information we want to have applied to this image. Styles created in this manner are stored in the head section of a web page or in an external stylesheet. For this tutorial, we will put the styles in the head section.

- So, first we create the style code

```
<head>
    <title>Tutorial 2</title>
    <style type="text/css">
    </style>
</head>
```

- This piece of code informs the browser that we are creating a section that can hold styles for the page, so if you come across a line of code that isn't part of the normal language (like our imgSize identifier) come and check here for it.

- Now let's write the code for imgSize

```
<head>
    <title>Tutorial 2</title>
    <style type="text/css">
        .imgSize { width:200px;}
    </style>
```

- Save and reload the page

- Like text, you can apply paddings and/or margins to images, so apply a padding to the left of each image of about 50px

```
<style type="text/css">
    .imgSize { width:200px; padding-left:50px;}
</style>
```

- Time to add some text to this page, grab a paragraph of text from lorem ipsum and put it in the page.

```
<body>
<p>
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur su
adipiscing fermentum. Cras ut nisl fermentum nulla ullamcorper dapibu
non feugiat et, lacinia vel nisi. Sed in justo semper, sagittis lacus
porttitor dolor tellus, nec volutpat metus suscipit id. Cras sed nisi
non ligula. In hac habitasse platea dictumst. Aenean diam nulla, orna
facilisis mi. Mauris porttitor nisi non est convallis pretium. Quisq
ornare. Fusce et varius sem. Mauris tempus id mi et ultrices. Etiam
iaculis.
</p>
    <img src="bc1.jpg" alt="Bubblegum Crisis 1" class="imgSize">
    <img src="bc2.jpg" alt="Bubblegum Crisis 2" class="imgSize">
```

- Now float image 1 to the left and image 2 to the right, but drag the image code above the paragraph code.

```
<body>
<img src="bc1.jpg" alt="Bubblegum Crisis 1" class="imgSize" style="float:left;">
<img src="bc2.jpg" alt="Bubblegum Crisis 2" class="imgSize" style="float:right;">
<p>
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur suscipit libero ac mauris
adipiscing fermentum. Cras ut nisl fermentum nulla ullamcorper dapibus. Etiam diam mauris, placerat
non feugiat et, lacinia vel nisi. Sed in justo semper, sagittis lacus sed, dapibus dolor. Nullam
porttitor dolor tellus, nec volutpat metus suscipit id. Cras sed nisi nec nisi suscipit bibendum id
```

- Notice how the text is flush with the image on the left, doesn't make it very readable; as such apply a margin to the right hand side of the image. And then on the p tag, align the text to be justified.

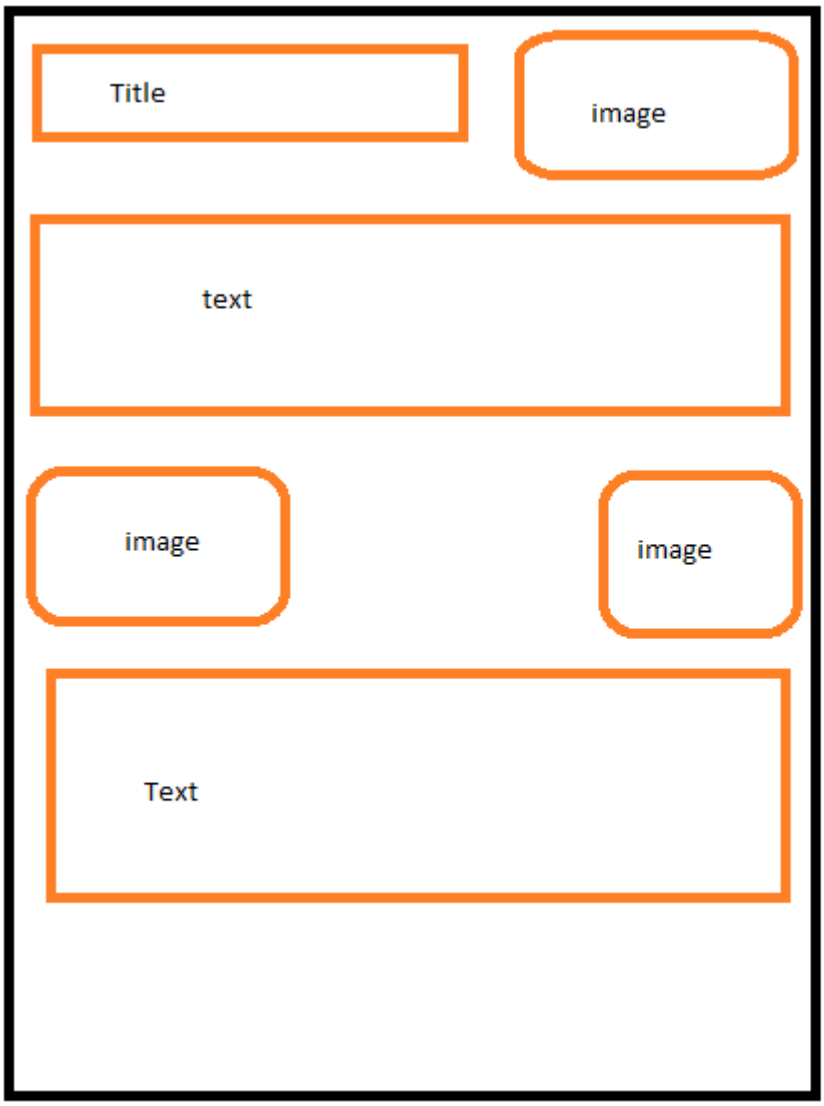
```
    <style type="text/css">
        .imgSize { width:200px; padding-left:50px; margin-right:20px;}
        p {text-align:justify;}
    </style>
</head>
<body>
<img src="bc1.jpg" alt="Bubblegum Crisis 1" class="imgSize" style="float:left;">
<img src="bc2.jpg" alt="Bubblegum Crisis 2" class="imgSize" style="float:right;">
<p>
```

- Resize the browser to view how the code changes with the screen size differences.
- Close down Notepad++ and then delete index.html
- Re-open Notepad++ and create a new index.html file that looks like the following

index.html

```
<!DOCTYPE html>
<html>
    <head>
        <title>Tutorial 2</title>
        <style type="text/css">
        </style>
    </head>
    <body>
    </body>
</html>
```

- This is the base skeleton of every single webpage.
- We are now going to make a single web page which has a defined size with text and images. The base layout will look like:

- 

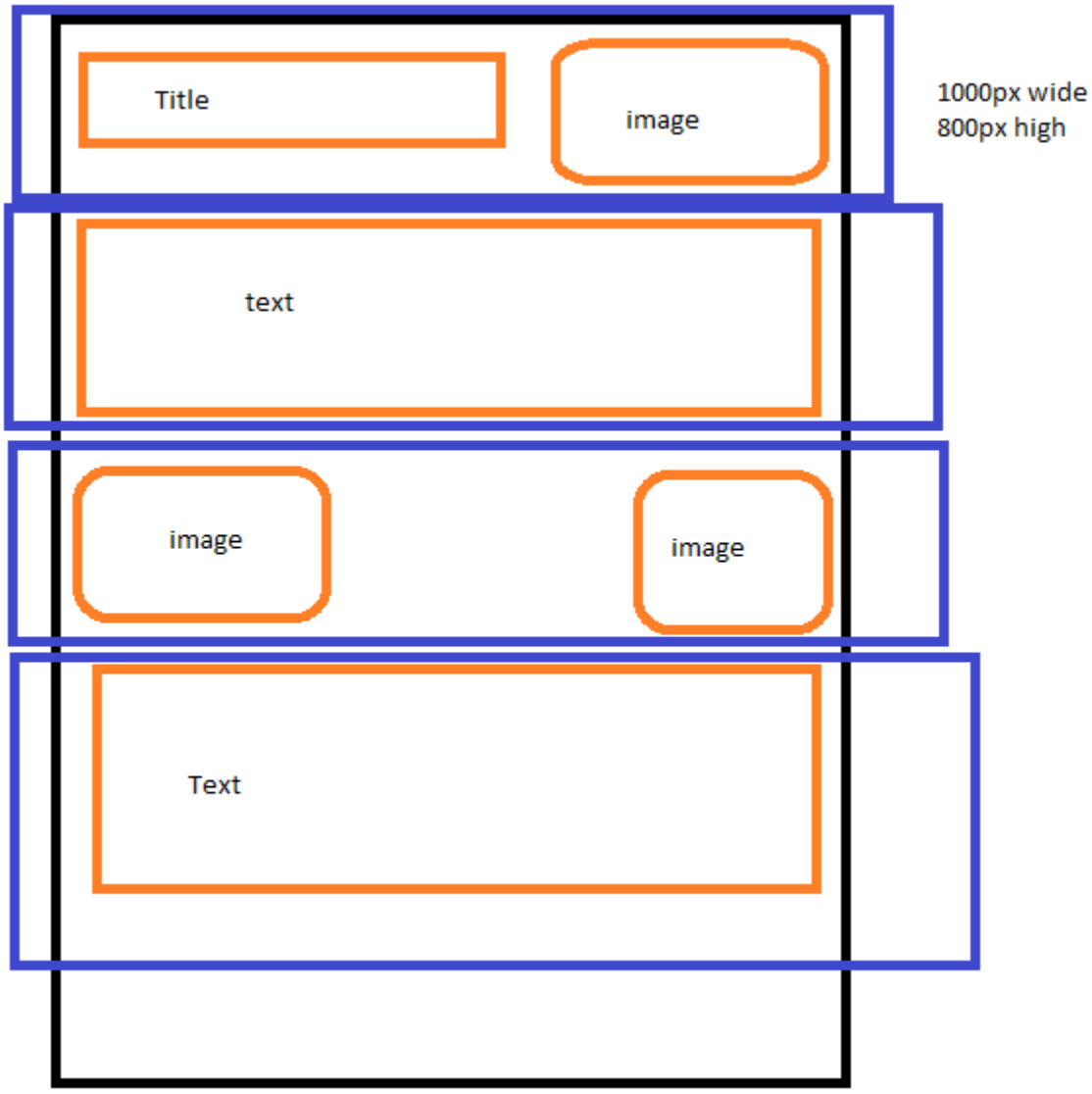
1000px wide
800px high

- To build this we break it into boxes, each of these boxes are div tags. We work from largest box to smallest, so the first div box, we will call dPage, and this is the black box, the code will look like

index.html

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <title>Tutorial 2</title>
5          <style type="text/css">
6          </style>
7      </head>
8      <body>
9          <div id="dPage">
10         </div><!-- End of dPage -->
11     </body>
12 </html>
```

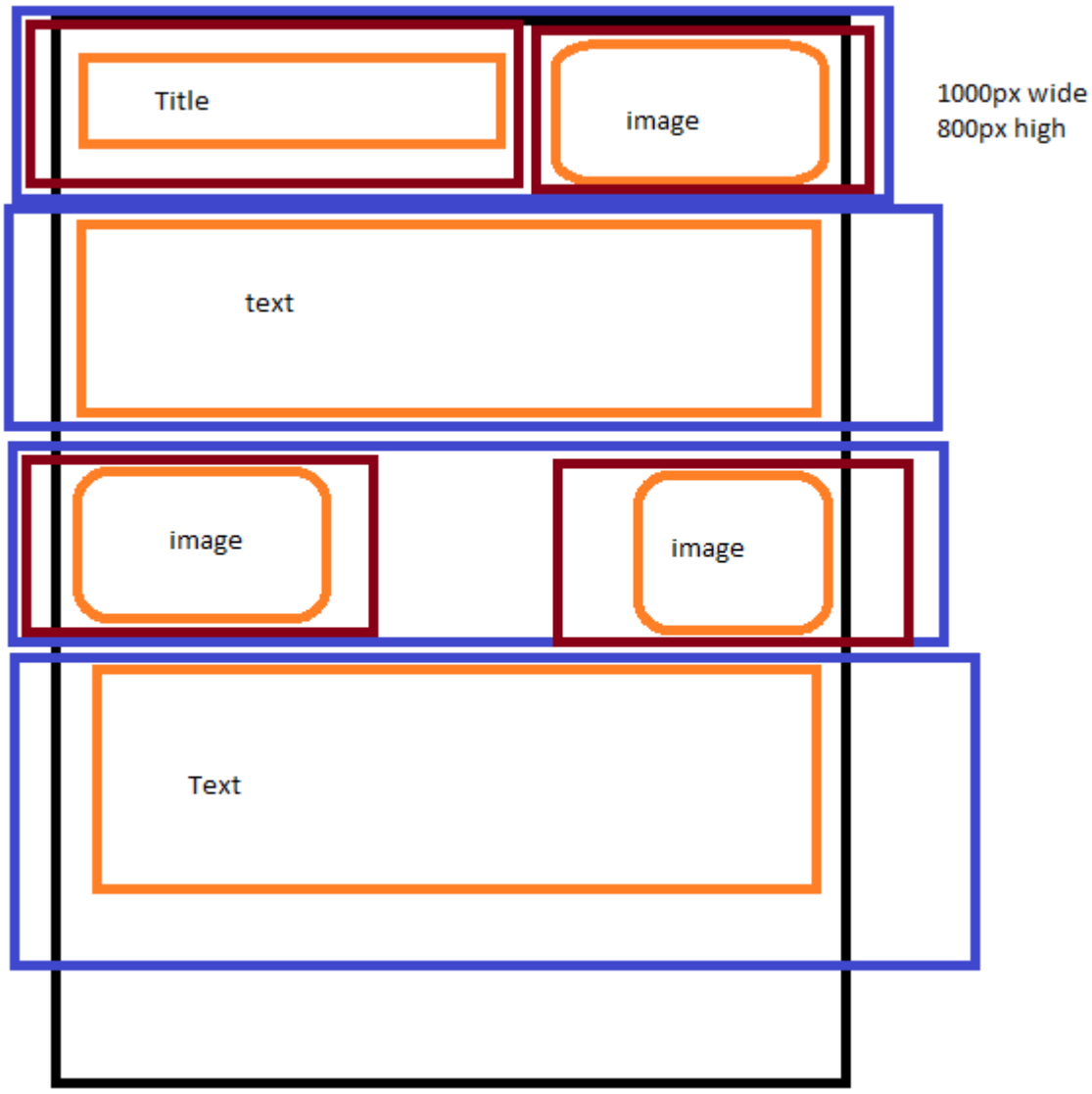
- Notice that the code is commented <!-- --> this is to allow you to keep track of all of the div endings you have. Now we break up the page into more boxes like so



- So we now have 4 blue div boxes to create. It looks like this:

```
<body>
    <div id="dPage">
        <div id="dHeader"></div><!-- end of dHeader -->
        <div id="dTextBox1"></div><!-- end of dTextBox1 -->
        <div id="dContent"></div><!-- end of dContent -->
        <div id="dTextBox2"></div><!-- end of dTextBox2 -->
    </div><!-- End of dPage -->
</body>
```

- Now, if you save and reload the page, you won't see anything as we haven't written any styles for it yet. We can still break the page down a little bit more, so it should end up like this



- So, we now have to code for the brown boxes, like so

```
    <div id="dPage">
        <div id="dHeader">
            <div id="dTitle"></div><!-- end of dTitle -->
            <div id="dLogo"></div><!-- end of dLogo -->
        </div><!-- end of dHeader -->
        <div id="dTextBox1"></div><!-- end of dTextBox1 -->
        <div id="dContent">
            <div id="dImgLeft"></div><!-- end of dImgLeft -->
            <div id="dImgRight"></div><!-- end of dImgRight -->
        </div><!-- end of dContent -->
        <div id="dTextBox2"></div><!-- end of dTextBox2 -->
    </div><!-- End of dPage -->
</body>
```

- This is the skeleton for our webpage. Each box of content is encapsulated in it's own div tag, of which we can now apply styles to.

- Save and reload the page after each style change. As with creating the div boxes, we work from biggest to smallest styles. First up is dPage

```
<style type="text/css">
    #dPage {width:1000px; height:800px; background-color:lime; margin:0 auto;}
</style>
```

- This is the main box that we store everything in, we make it lime as it will be rare for you to actually have a client that uses lime as their primary colour. The object now, is to colour in the other div boxes to hide the lime.

- Now dHeader

```
<style type="text/css">
    #dPage {width:1000px; height:800px; background-color:lime; margin:0 auto;}
    #dHeader {width:1000px; height:200px; background-color:silver;}
</style>
```

- dTextBox1

```
<style type="text/css">
    #dPage {width:1000px; height:800px; background-color:lime; margin:0 auto;}
    #dHeader {width:1000px; height:200px; background-color:silver;}
    #dTextBox1 {width:1000px; height:200px; background-color:teal;}
</style>
```

- dContent

```
<style type="text/css">
    #dPage {width:1000px; height:800px; background-color:lime; margin:0 auto;}
    #dHeader {width:1000px; height:200px; background-color:silver;}
    #dTextBox1 {width:1000px; height:200px; background-color:teal;}
    #dContent{width:1000px; height:200px; background-color:black;}
</style>
```

- dTextBox2

```
<style type="text/css">
    #dPage {width:1000px; height:800px; background-color:lime; margin:0 auto;}
    #dHeader {width:1000px; height:200px; background-color:silver;}
    #dTextBox1 {width:1000px; height:200px; background-color:teal;}
    #dContent{width:1000px; height:200px; background-color:black;}
    #dTextBox2 {width:1000px; height:200px; background-color:teal;}
</style>
```

- So, when you look at the page, you should have 4 rows, now we apply the columns to the divs dHeader and dContent

- dHeader

```
<style type="text/css">
    #dPage {width:1000px; height:800px; background-color:lime; margin:0 auto;}
    #dHeader {width:1000px; height:200px; background-color:silver;}
    #dTextBox1 {width:1000px; height:200px; background-color:teal;}
    #dContent{width:1000px; height:200px; background-color:black;}
    #dTextBox2 {width:1000px; height:200px; background-color:teal;}
    #dTitle{width:500px; height:200px; background-color:white; float:left;}
    #dLogo {width:500px; height:200px; background-color:orange; float:right;}
</style>
```

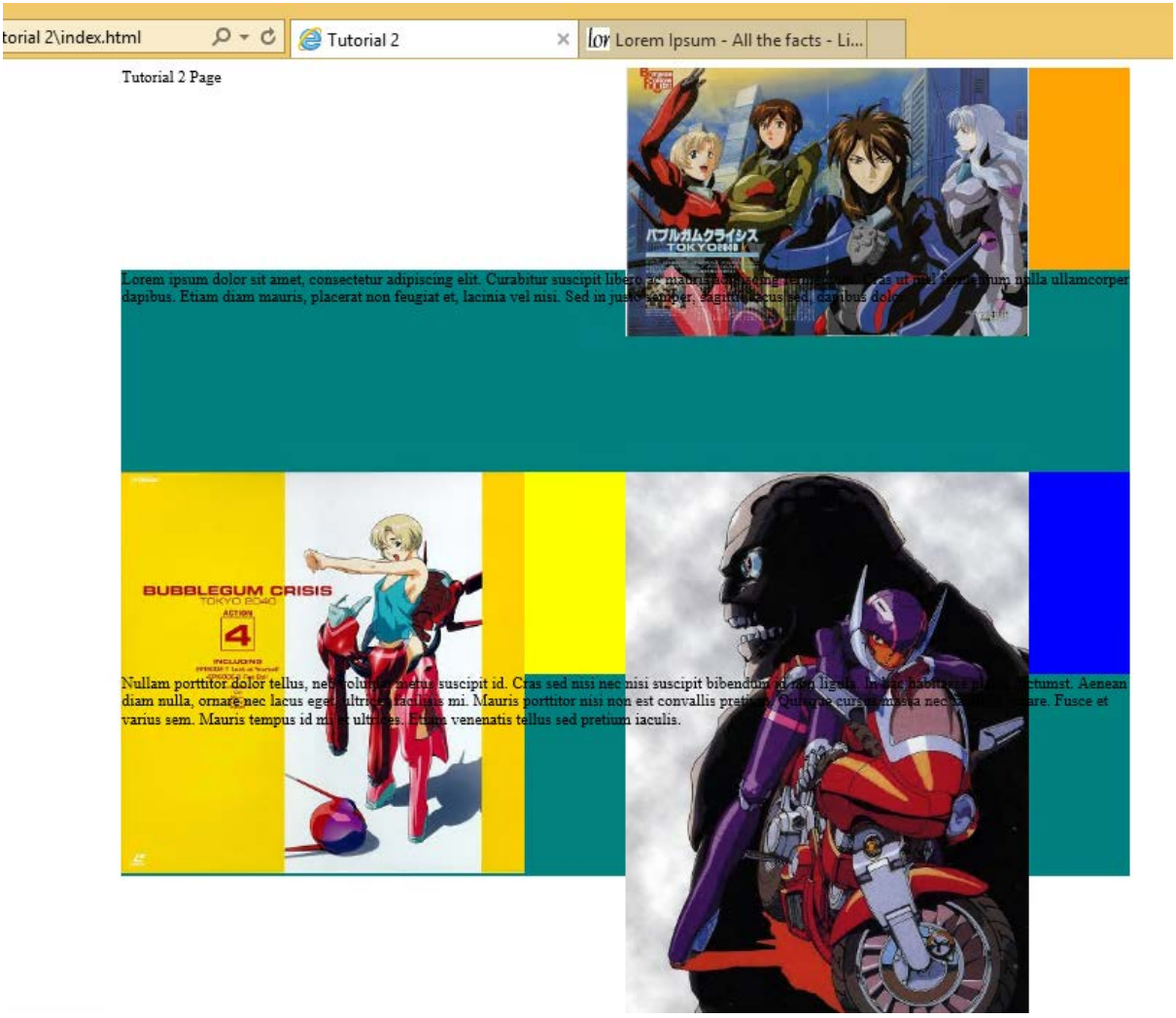
- dContent

```
<style type="text/css">
    #dPage {width:1000px; height:800px; background-color:lime; margin:0 auto;}
    #dHeader {width:1000px; height:200px; background-color:silver;}
    #dTextBox1 {width:1000px; height:200px; background-color:teal;}
    #dContent{width:1000px; height:200px; background-color:black;}
    #dTextBox2 {width:1000px; height:200px; background-color:teal;}
    #dTitle{width:500px; height:200px; background-color:white; float:left;}
    #dLogo {width:500px; height:200px; background-color:orange; float:right;}
    #dImgLeft{width:500px; height:200px; background-color:yellow; float:left;}
    #dImgRight{width:500px; height:200px; background-color:blue; float:right;}
</style>
```

- So, with our amazing colour scheme in play, we can test to see that the layout is what we are after. Now we put in the content. The content goes into the body section, like so

```
<body>
    <div id="dPage">
        <div id="dHeader">
            <div id="dTitle">Tutorial 2 Page</div><!-- end of dTitle -->
            <div id="dLogo"><img src="bc1.jpg" alt="Bubblegum Crisis"></div><!-- end of dLogo -->
        </div><!-- end of dHeader -->
        <div id="dTextBox1">Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur
        suscipit libero ac mauris adipiscing fermentum. Cras ut nisl fermentum nulla ullamcorper
        dapibus. Etiam diam mauris, placerat non feugiat et, lacinia vel nisi. Sed in justo sempe
        sagittis lacus sed, dapibus dolor. </div><!-- end of dTextBox1 -->
        <div id="dContent">
            <div id="dImgLeft"><img src="bc2.jpg" alt="Bubblegum Crisis"></div><!-- end of dImgLe
            -->
            <div id="dImgRight"><img src="bc3.jpg" alt="Bubblegum Crisis"></div><!-- end of
            dImgRight -->
        </div><!-- end of dContent -->
        <div id="dTextBox2">Nullam porttitor dolor tellus, nec volutpat metus suscipit id. Cras s
        nisi nec nisi suscipit bibendum id non ligula. In hac habitasse platea dictumst. Aenean d
        nulla, ornare nec lacus eget, ultrices facilisis mi. Mauris porttitor nisi non est conval
        pretium. Quisque cursus massa nec facilisis ornare. Fusce et varius sem. Mauris tempus id
        et ultrices. Etiam venenatis tellus sed pretium iaculis. </div><!-- end of dTextBox2 -->
    </div><!-- End of dPage -->
</body>
```

- Produces:



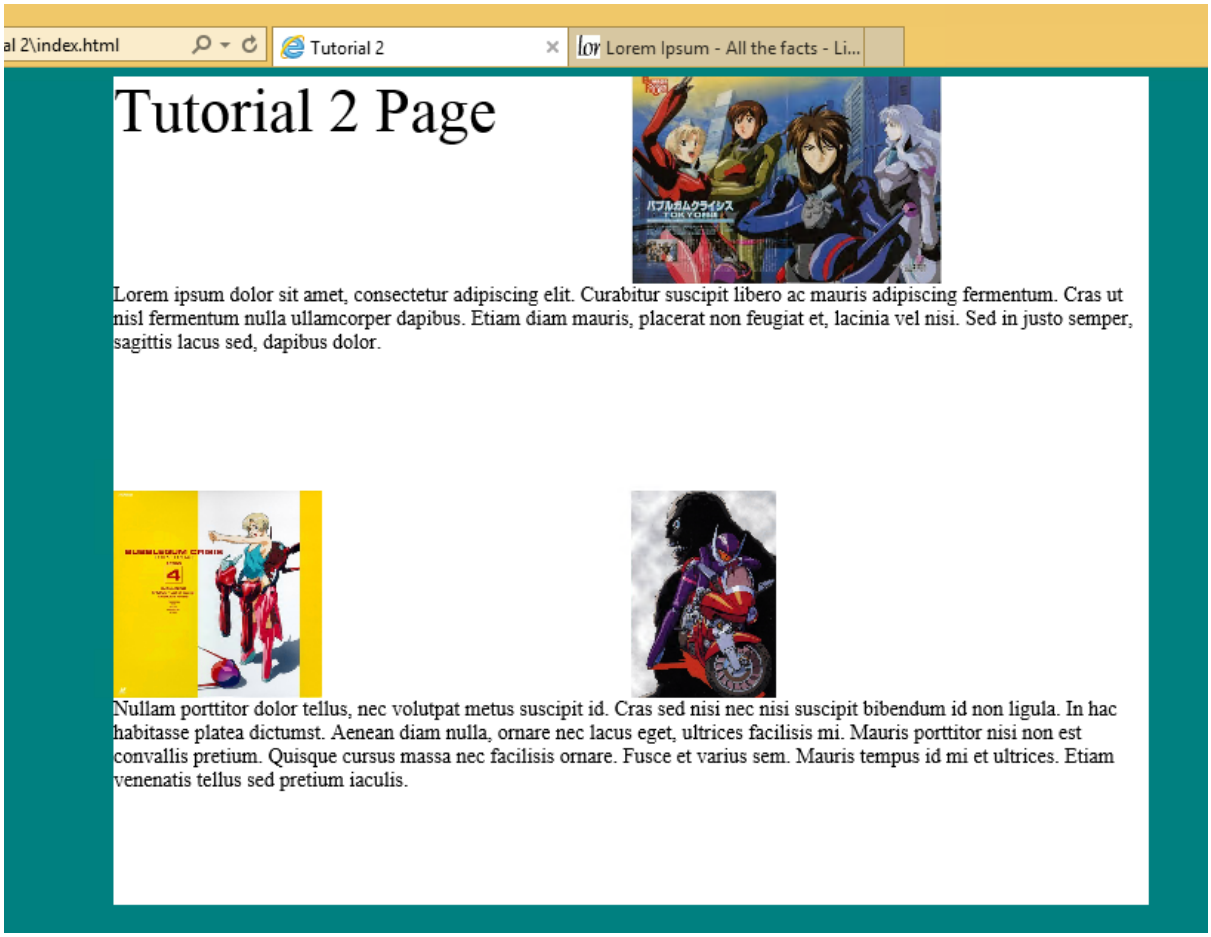
- With the content in, we now go back to the styles and start making everything fit and look cleaner. So, we need to increase the title font size, shrink images, tidy up the background colour and increase the base font information. Like so:

```
<style type="text/css">
    body {font-size:20px; background-color:teal;}
    #dPage {width:1000px; height:800px; margin:0 auto; background-color:white;}
    #dHeader {width:1000px; height:200px;}
    #dTextBox1 {width:1000px; height:200px;}
    #dContent{width:1000px; height:200px;}
    #dTextBox2 {width:1000px; height:200px;}
    #dTitle{width:500px; height:200px; float:left; font-size:60px;}
    #dLogo {width:500px; height:200px; float:right;}
    #dImgLeft{width:500px; height:200px; float:left;}
    #dImgRight{width:500px; height:200px; float:right;}
    .imgSize { height:200px;}
</style>
```

- That's modifying the styles, but there was also a few changes to the body, it goes as follows:

```
<body>
    <div id="dPage">
        <div id="dHeader">
            <div id="dTitle">Tutorial 2 Page</div><!-- end of dTitle -->
            <div id="dLogo"><img src="bc1.jpg" alt="Bubblegum Crisis" class="imgSize"></div><!-- end
            of dLogo -->
        </div><!-- end of dHeader -->
        <div id="dTextBox1">Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur
        suscipit libero ac mauris adipiscing fermentum. Cras ut nisl fermentum nulla ullamcorper
        dapibus. Etiam diam mauris, placerat non feugiat et, lacinia vel nisi. Sed in justo semper,
        sagittis lacus sed, dapibus dolor. </div><!-- end of dTextBox1 -->
        <div id="dContent">
            <div id="dImgLeft"><img src="bc2.jpg" alt="Bubblegum Crisis" class="imgSize"></div><!--
            end of dImgLeft -->
            <div id="dImgRight"><img src="bc3.jpg" alt="Bubblegum Crisis" class="imgSize"></div><!--
            end of dImgRight -->
        </div><!-- end of dContent -->
        <div id="dTextBox2">Nullam porttitor dolor tellus, nec volutpat metus suscipit id. Cras sed
        nisi nec nisi suscipit bibendum id non ligula. In hac habitasse platea dictumst. Aenean diam
        nulla, ornare nec lacus eget, ultrices facilisis mi. Mauris porttitor nisi non est convallis
        pretium. Quisque cursus massa nec facilisis ornare. Fusce et varius sem. Mauris tempus id mi
        et ultrices. Etiam venenatis tellus sed pretium iaculis. </div><!-- end of dTextBox2 -->
    </div><!-- End of dPage -->
</body>
```

- Together, both sets of changes create the following



- There is still a lot that could be done to the page, but that is a good starting place to work with.

- Modify and play with the design, add spacing for text.