

Lab Exercise 03– Add Styles to a Web Page.

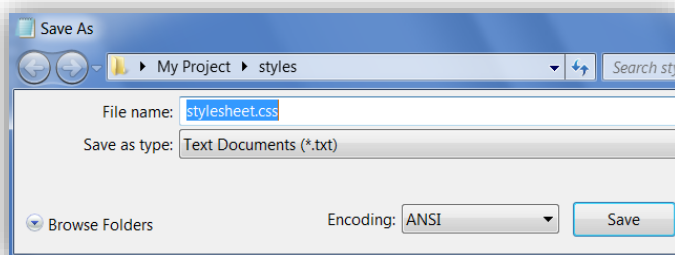
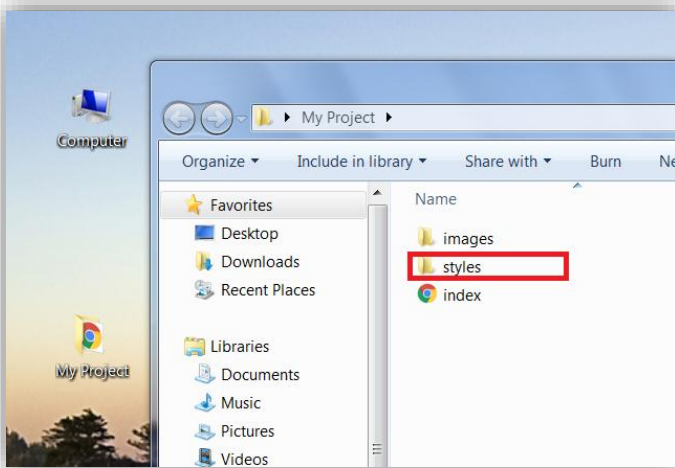
Objectives

By the end of this lab session, you will be able to:

- Design your web page using styles.

Introduction

- CSS means **cascading style sheets**.
- CSS is a language that describes the style of an HTML document.
- CSS describes **how** HTML elements should be **displayed**.
- CSS saves a lot of work.
- It can control the layout of multiple web pages all at once.
- External style sheets are stored in CSS files.



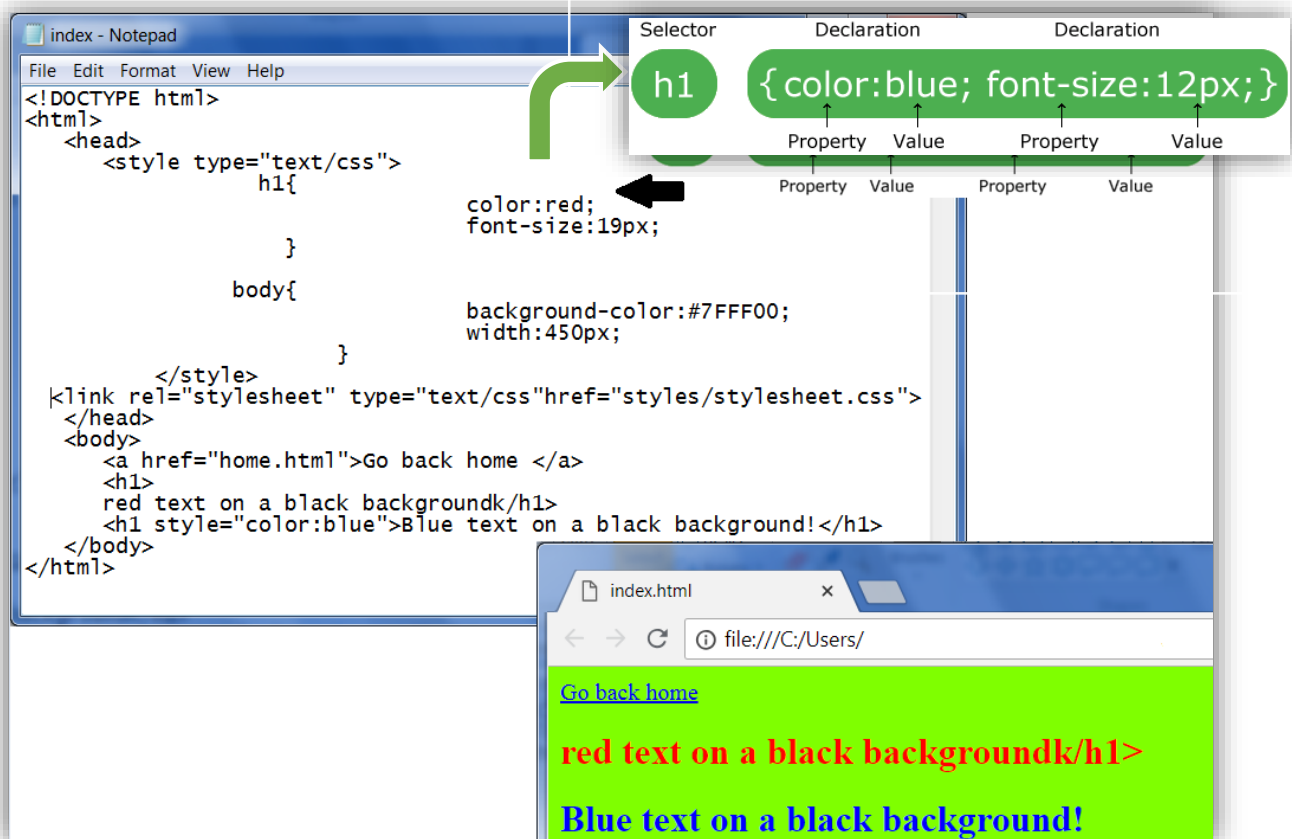
Exercise 01:

1. Create a folder, name it as **My Project**.
2. Inside that folder create 2 two folders to store images and style sheets and create **index.html**
3. Inside styles folder, Create a file and name it as **stylesheet.css**
4. Open stylesheet.css and type below code.

```
1 h1 {color:red;  
2   font-size:25px;  
3 }  
4 /*h1 {color:red;  
5   font-size:25px;  
6 */  
7 body {background-color:#7FFF00;  
8   width:650px;  
9 }
```

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5. Type below code in the **index.html** that you have created.



The screenshot shows a Notepad window with the following HTML code:

```

<!DOCTYPE html>
<html>
  <head>
    <style type="text/css">
      h1{
        color:red;
        font-size:19px;
      }
    </style>
    <link rel="stylesheet" type="text/css" href="styles/stylesheet.css">
  </head>
  <body>
    <a href="home.html">Go back home </a>
    <h1>
      red text on a black backgroundk/h1>
    </h1>
    <h1 style="color:blue">Blue text on a black background!</h1>
  </body>
</html>

```

The browser window shows the rendered output:

- Go back home
- red text on a black backgroundk/h1>
- Blue text on a black background!

A diagram illustrates the CSS declaration structure:

Selector	Declaration	Declaration
h1	{ color:blue; font-size:12px; }	
	Property Value	Property Value

Cascading Order

What style will be used when there is **more than one style specified for an HTML element?**

Generally speaking we can say that all the styles will "cascade" into a new "**virtual**" style sheet by the **following rules**, where **number four has the highest priority**:

So, an **inline style** (inside an HTML element) has the **highest priority**, which means that it will override a style declared inside the <head> tag, in an external style sheet, or in a browser (a default value).

1. Browser default (ex : a href link is underlined and blue)
2. External style sheet (<link rel="stylesheet" href="stylesheet.css">)

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An **external style sheet** is ideal when the style is **applied to many pages**. With an external style sheet, you can change the look of an entire Web site by changing one file.

3. Internal styles

An internal style sheet can be used if one single document has a unique style. Internal styles are defined in the **<head> section** of an HTML page, by using the **<style> tag**

4. Inline style

An **inline style** can be used if a unique style is to be applied to **one single occurrence** of an element. To use inline styles, use the **style** attribute in the relevant tag. The style attribute can contain any CSS property.

So, an **inline style** (inside an HTML element) has the **highest priority**, which means that it will override a style declared inside the **<head> tag**, in an external style sheet, or in a browser (a default value).

HTML **<div>** Tag

The **<div>** tag defines a division or a section in an HTML document.

The **<div>** element is very often used together with CSS, to layout a web page.

You can form your own selectors in the form of **class** and **id** selectors. The benefit of that is you can have the same HTML element, but present it differently depending on its class or ID.

In the CSS, a class selector is a name preceded by a **full stop** (".") and an ID selector is a name preceded by a **hash character** ("#").



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Exercise 02:

The screenshot shows a Notepad window titled 'home - Notepad' with the following HTML code:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      .left{
        background-color :yellow;
        float:left;
      }
      #right{
        background-color :red;
        float:left;
      }
      .title{
        color:Green;
      }
      p.title{
        color:Tomato;
      }
    </style>
  </head>
  <body>
    <h1 class="title">red text on a black background!</h1>
    <h1 style="color:blue">Blue text on a black backaround!</h1>
    <div style="background-color :yellow;float:left;width:50%">
      <p>this is the left side of the div</p>
    </div>
    <div style="background-color :red;float:left;width:50%">
      <p >this is the right side of the div</p>
    </div>
    <br>
    <p class="title">Lets see with the classes</p>
    <div class="left">
      <p>this is the left side of the div</p>
    </div>
    <div id="right">
      <p>this is the right side of the div</p>
    </div>
  </body>
</html>
```

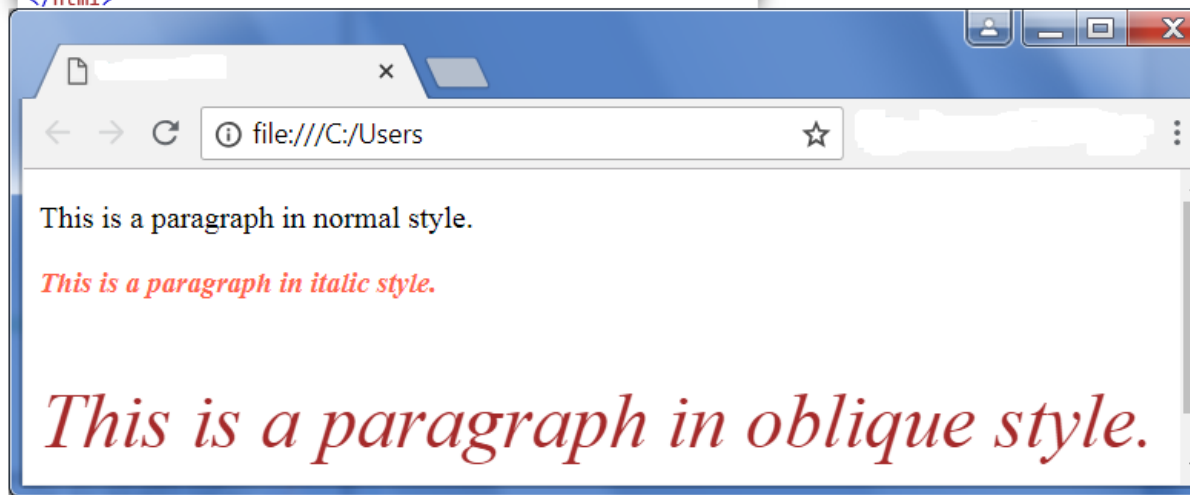
The preview on the right shows the rendered output:

- A green heading: **red text on a black background!**
- A blue heading: **Blue text on a black backaround!**
- Two side-by-side boxes: a yellow box on the left containing 'this is the left side of the div' and a red box on the right containing 'this is the right side of the div'.
- A red heading: **Lets see with the classes**
- Two side-by-side boxes: a yellow box on the left containing 'this is the left side of the div' and a red box on the right containing 'this is the right side of the div'.

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Exercise 03:

```
<!DOCTYPE html>
<html>
<head>
<style>
p.normal {
    font-style: normal;
}
p.italic {
    font-style: italic;
    font-size: 15px;
    color: Tomato;
    font-weight: bold;
}
p#oblique {
    font-style: oblique;
    color: brown;
    font-size: 2.5em; /* 40px/16=2.5em */
    /*1em is 16px*/
}
</style>
</head>
<body>
<p class="normal">This is a paragraph in normal style.</p>
<p class="italic">This is a paragraph in italic style.</p>
<p id="oblique">This is a paragraph in oblique style.</p>
</body>
</html>
```

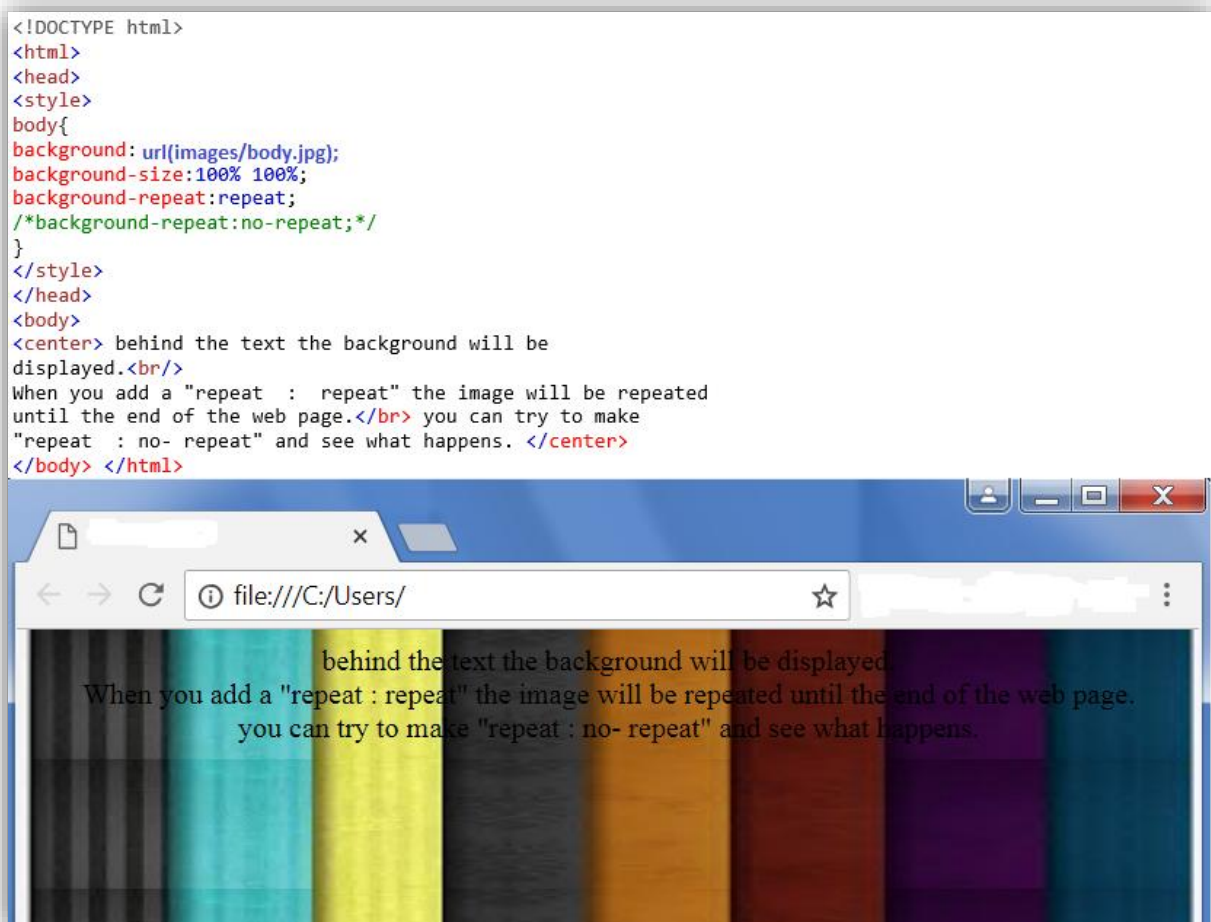
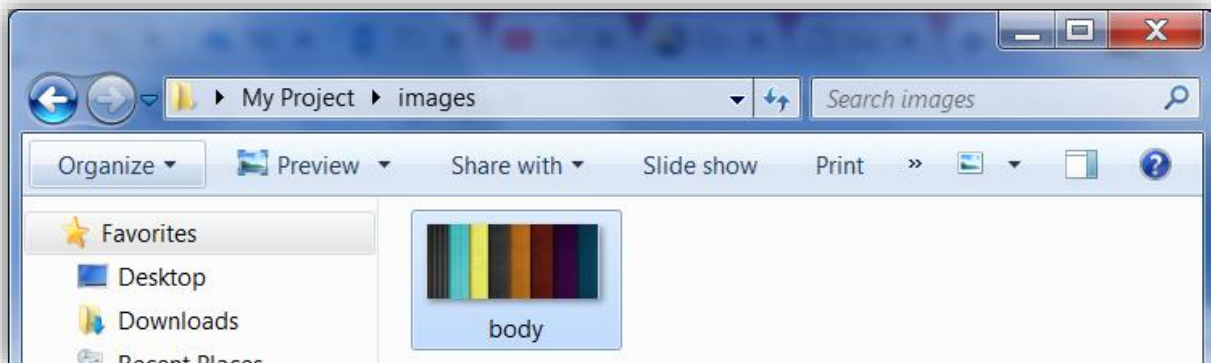




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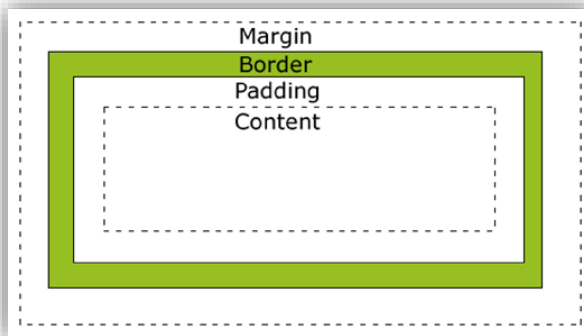
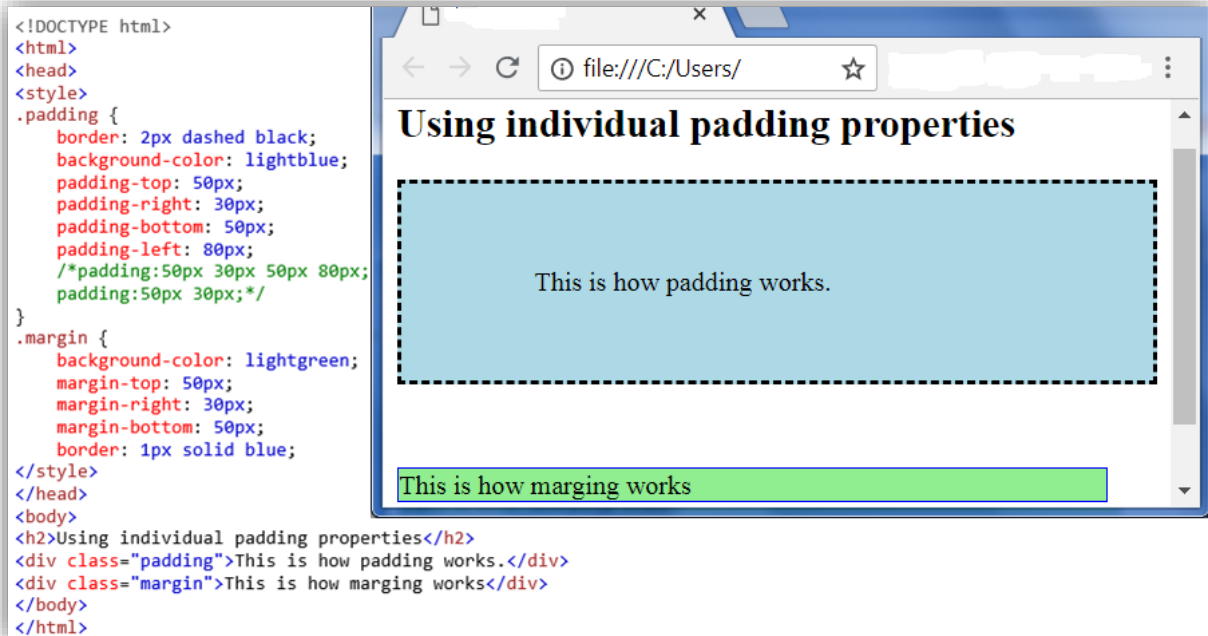
Exercise 04:

Download an image and save in to the **images** folder with a name **body**.



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Exercise 05:



- **Margin** - Clears an area around the border. The margin does not have a background color, it is completely transparent
- margin-top
- margin-right
- margin-bottom
- margin-left

All the margin properties can have the following values:

- **auto** - the browser calculates the margin
- **length** - specifies a margin in px, pt, cm, etc.
- **%** - specifies a margin in % of the width of the containing element
- **inherit** - specifies that the margin should be inherited from the parent element
- **Border** - A border that goes around the padding and content. The border is inherited from the color property of the box



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Border Styles:

- dotted - Defines a dotted border
- dashed - Defines a dashed border
- solid - Defines a solid border
- double - Defines a double border
- groove - Defines a 3D grooved border. The effect depends on the border-color value
- ridge - Defines a 3D ridged border. The effect depends on the border-color value
- inset - Defines a 3D inset border. The effect depends on the border-color value
- outset - Defines a 3D outset border. The effect depends on the border-color value
- none - Defines no border
- hidden - Defines a hidden border

The border-style property can have from one to four values (for the top border, right border, bottom border, and the left border).

- **Padding** - Clears an area around the content. The padding is affected by the background color of the box
 - padding-top
 - padding-right
 - padding-bottom
 - padding-left

All the padding properties can have the following values:

- *length* - specifies a padding in px, pt, cm, etc.
- % - specifies a padding in % of the width of the containing element
- inherit - specifies that the padding should be inherited from the parent element