

CSS

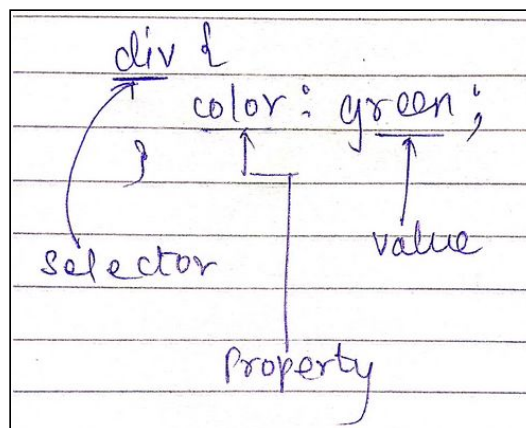
- Every element in HTML has a default display value which is either “Block” or “Inline”
- This is a CSS part.
- CSS stands for Cascading Style Sheet.
- Style Sheet -> Sheet of data of style.
- Meaning of “cascading” is discussed in multiple classes section.

How to write CSS code?

- In the below HTML code <div> element will be styled using CSS code.

```
<body>  
  <div>  
    Here I am div 1  
  </div>  
</body>
```

- CSS code: `div { color:"green"; }`
- The labeled diagram below explains the code.



- Selector selects the element to be styled, color is the CSS property to set the text color, and the value that we are giving is green.

Attributes:

- Every element can have an attribute.
- Attributes provide additional information about an element.
- It is always written in the start tag as: `<div class="myclass">I am div 1</div>`
- Some attributes do not have any value, e.g. `<div data-ns>I am div 1</div>`
- data-ns is a custom attribute.

Class Attribute:

- If we have multiple div elements in our HTML code, the content of all the div elements will be green.
- In order to set the style for a specific div element, class attribute can be used.
- Example 1:

HTML code

```
<body>
  <div> Here I am div 1 </div>
  <div> Here I am div 2 </div>
</body>
```

CSS code

```
div {
  color:green;
}
```

Result

```
Here I am div 1
Here I am div 2
```

- The above example shows the effect without class attribute and the below example shows the effect with class attribute.
- Example 2:

HTML Code:

```
<body>
  <div class="myclass"> Here I am div 1 </div>
  <div> Here I am div 2 </div>
</body>
```

CSS Code:

```
div {
  color:green;
}
.myclass{
  color:red;
}
```

Result

```
Here I am div 1
Here I am div 2
```

- Example 2 shows the use of class attribute. To select the element of class="myclass" use the dot or period before its name in CSS.

Multiple classes for same element:

- We can have multiple classes on single element. Below example 3 will illustrate this.
- To declare multiple classes for single element put other class names separated by space.
- Example 3:

HTML Code

```
<div class="myclass myclass3 myclass4">Here I am div 1</div>
<div>Here I am div 2</div>
<div class="myclass">Here I am div 3</div>
```

CSS Code

```
.myclass3 {
    background-color: yellow;
}
.myclass{
    color:red;
}
```

Result

```
Here I am div 1
Here I am div 2
Here I am div 3
```

- From example 3 we can note that 1st div has three classes. 2nd div has no class and 3rd div has 1 class. 1st and 2nd div has a common class=myclass.
- Common class is applying the red color to both the div(1st and 2nd) and but yellow background is applied to just 1st div.
- Styles applied to classes are combined if the element has multiple classes.
- If the property conflicts in two classes then css will apply the value of the property which is appearing later. In simple words if same property is written with different value in 2 classes then anything that come downwards will take an effect, this is the order.
- The order of classes written in element does not matter.
- The order of classes written in CSS matters when property conflict occurs. Downward class will take the effect.
- Meaning of cascading in CSS is whatever appears later will take effect.

Rules:

1. Don't define selector in CSS multiple times.
2. Whichever is defined later(appearing downwards) will override.

HTML

- tag
 - Example 4

HTML Code

```
<div class="myclass myclass3 myclass4">  
  Here I am <span class="GreenOne">div 1</span>  
</div>
```

CSS Code

```
.GreenOne{  
  background-color:green;  
}
```

Result

Here I am div 1


- It is a inline element.
- It is used to mark a certain piece of text and to style it.

Running HTML and CSS code Locally

- 1st step is create file e.g *filename.html*. For front-end VS code(Visual Studio code) editor is recommended and for back-end IntelliJ editor is recommended.
- 2nd step is to write HTML and CSS code in it.

```
<!DOCTYPE html>  
<html>  
  <head>  
    <style>  
      .GreenOne{  
        background-color:green;  
      }  
    </style>  
  </head>  
  <body>  
    <div class="myclass myclass3 myclass4">  
      Here I am <span class="GreenOne">div 1</span>  
    </div>  
  </body>  
</html>
```

- 3rd step is open this file using a browser. You must see the result as below

Here I am  div 1

- This is the first way of running the code locally. Second way will be discussed when we study javascript.

Defining Color Value using RGB value:

Name	Syntax
Red	<code>color:rgb(255,0,0)</code>
Green	<code>color:rgb(0,255,0)</code>
Blue	<code>color:rgb(0,0,255)</code>
Black	<code>color:rgb(0,0,0)</code>
White	<code>color:rgb(255,255,255)</code>

Note: For now use standard color name as color value, e.g. red, green, blue, violet, orange, yellow, etc.

 tag

- It is a singular tag = empty tag
- It has 2 important attributes.
 - src: It defines the address of the image.
 - alt: It defines the TEXT to be shown if image is not available to the address.
- You can search any image from google. Don't use the address that have "data:link" stuff in it, it won't work.

HTML code

```
<h1>Hello World!</h1>

```

Result



- If the address is wrong in src attribute or the image is not present at the address then the result will be as below.



- height and width attribute in tag are the older way and it is not recommended because units are not defined in them. Its better to use CSS for setting the height and width of the image as below.

HTML Code

```
<h1>Hello World!</h1>

```

CSS Code

```
.x{
  height:200px;
  width:200px;
}
```

Loading Image from your own computer

- First store the image in the same folder where your .html file is present. Then write the exact name of the image in src attribute, for example `src="image.jpg"`, thats it!
- Use `<style>` tag in head to write CSS code while running locally. If running own newton school playground no need to declare `<style>` tag.

<a> tag

- It is called as anchor tag.
- Clicking a text opens a new webpage, this is called a link or hyperlink.
- We specify the address of webpage using href attribute.
- When you click on Visit Newton School, the newton school webpage opens.

HTML Code

```
<a href=https://www.newtonschool.co/>Visit Newton School</a>
```

- Now to open the webpage in the new tab target attribute is used.

HTML Code

```
<a href="https://www.newtonschool.co/"  
  target="_blank">  
  Visit Newton School  
</a>
```

- The above code will open the webpage in new window.

Comments in HTML and CSS

- `<!--` This is a comment in HTML `-->`
- `/*` This is a comment in CSS `*/`

List

- Ordered list: `` tag
- List item: `` tag

HTML Code

```
<ol>  
  <li>Red</li>  
  <li>Green</li>  
  <li>Blue</li>  
</ol>
```

Result

```
1. Red  
2. Green  
3. Blue
```


- Unordered list: tag

HTML Code

```
<ul>
  <li>Red</li>
  <li>Green</li>
  <li>Blue</li>
</ul>
```

Result

- Red
- Green
- Blue

- Nested list

HTML Code

```
<ul>
  <li>red</li>
  <li>yellow
    <ul>
      <li>Mango</li>
      <li>Banana</li>
    </ul>
  </li>
  <li>brown</li>
</ul>
```

Result

- red
- yellow
 - Mango
 - Banana
- brown

- is a block level element.
- To change the bullet style of unordered list the CSS property used is [list-style-type](#) with values as below.
 - “square”
 - “circle”
 - “disc”
 - “none”

CSS property display

- If you keep the value of CSS property display to none, the element will not be displayed.

data-ns-test

- It is a custom attribute of newton school. It will only work with newton school website.

Assignment:

- Image as link In-class assignment. (hint-> combine <a> tag and tag)