

CSS

Cascading Style sheets

- The CSS1 specification was developed in 1996 by W3C.
- CSS2 was released in 1998 which added many properties and values to CSS1 and CSS3 since late 1990s.
- CSSs provide the means to control and change presentation of HTML documents.
- CSS is not technically HTML, but can be embedded in HTML documents
- Cascading style sheets were introduced to provide a uniform and consistent way to specify presentation details in XHTML documents
- Style sheets can be defined at three levels to specify the style of a document .Hence called Cascading style sheets.
- Style is specified for a tag by the values of its properties

# Levels of Style Sheets

There are three levels of style sheets, in order from lowest level to highest level, are **inline, document level, and external.**

- **Inline style sheets** are specified for a specific occurrence of a tag and apply only to the content of that tag.
  - It is imposing uniform style on the tags of at least one whole document.
- **Document-level style** specifications appear in the document head section and apply to the whole body of the document.
- **External style sheets** are not part of the documents to which they apply.
  - They are stored separately and are referenced in all documents that use them.
  - They are written as text files with MIME type text/css.

## Style Specification Formats: **Inline style sheet**

The format of a style specification depends on the level of the style sheet.

**Inline style sheet** appears as the value of the style attribute of the tag.

The general form of which is as follows:

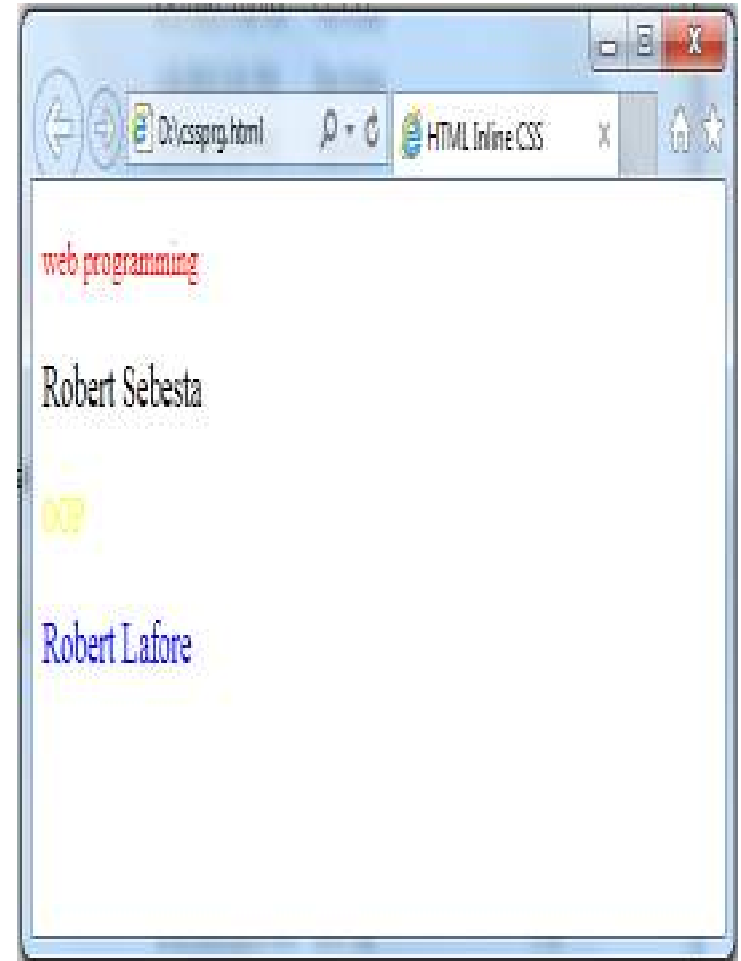
```
style = "property_1: value_1;  
property_2: value_2;  
...  
property_n: value_n;"
```

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Inline CSS</title>
</head>
<body>
<p style="color:red;">web
programming</p>

<p style="font-size:20px;">Robert
Sebesta</p>

<p style="color:Yellow;">OOP</p>

<p style="color:blue;font-
size:20px;">Robert Lafore</p>
</body>
</html>
```



## Style Specification Formats: Document level specification

Document style specifications appear as the content of a style element within a document. The general form is

```
<style type="text/css">  
Rule-list  
</style>
```

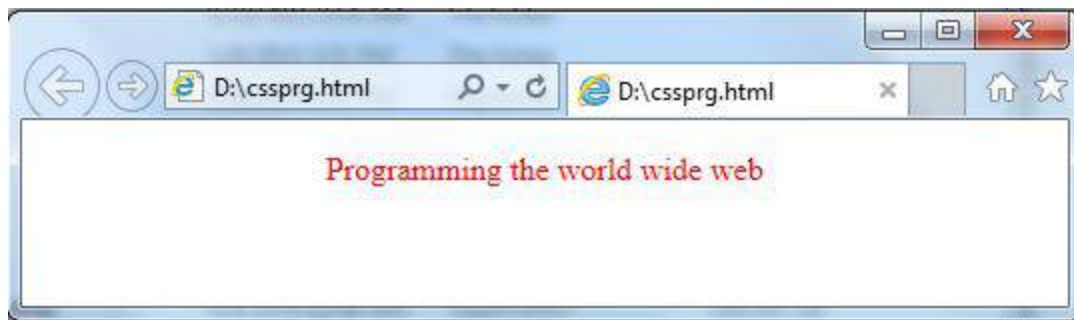
Each style in a rule list has two parts:

**selector**, which indicates the tag or tags affected by the rules.  
property/value pair has the form->**property: value**

```
Selector { property_1: value_1; property_2: value_2:...  
property_n: value_n;}
```

```
<!DOCTYPE html>
<html>
<head>
<style>
p {
    text-align: center;
    color: red;
}
</style>
</head>
<body>

<p>Programming the world wide web</p>
</body>
</html>
```



## Linking an External Style sheet

- A <link> tag is used to specify that the browser is to fetch and use an external style sheet file through **href**.
- The href attribute of <link> is used to specify the URL of the style sheet document

```
<link rel = "stylesheet" type = "text/css"  
href = "http://www.wherever.org/termpaper.css">  
</link>
```

- This link must appear in the head of the document.
- External style sheets can be validated, with the service

[http://jigsaw.w3.org/css-validator/ validator-upload.html](http://jigsaw.w3.org/css-validator/validator-upload.html)



## Sample.css

```
body {  
  background-color: cyan;  
}  
h1 {  
  color: blue;  
  text-align: center;  
}  
p {  
  color: green;  
  text-align: right;  
}
```

## Welcome.html

```
<!DOCTYPE html>  
<html lang = "en">  
  <head>  
    <title>externalStyle.html</title>  
    <link rel = "stylesheet" type = "text/css"  
      href = "D:\sample.css" />  
  </head>  
  <body>  
    <h1>Welcome</h1>  
    <p>  
      Faculty of Science and Technology-FST  
    </p>  
  </body>  
</html>
```



```

<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Our first document </title>
<style>
h2 {font-size: 32pt; font-weight: bold;font-family: 'Times New Roman';}
h3,h4 { font-size: 18pt; font-family: 'Courier New'; font-style:italic;
font-weight:bold}
h1,h2 {
    text-align: center;
    color: red;
}
h3,h4 {
    text-align: right;
    color: green;
}
h5,h6 {
    text-align: left;
    color: blue;
}
    </style>
</head>
<body>
<h1> Programming the world wide web</h1>
<h2> Robert W. Sebesta </h2>
<h3>XHTML</h3>
<h4>Cascading style sheets</h4>
<h5> Java Script</h5>
<h6> PHP</h6>
</body>
</html>

```



## **Selector can have variety of forms like:**

1. Simple selector form
2. Class selector
3. Generic selector
4. Id selector
5. Universal selector
6. Pseudo classes
7. Contextual selectors

## Simple selector form

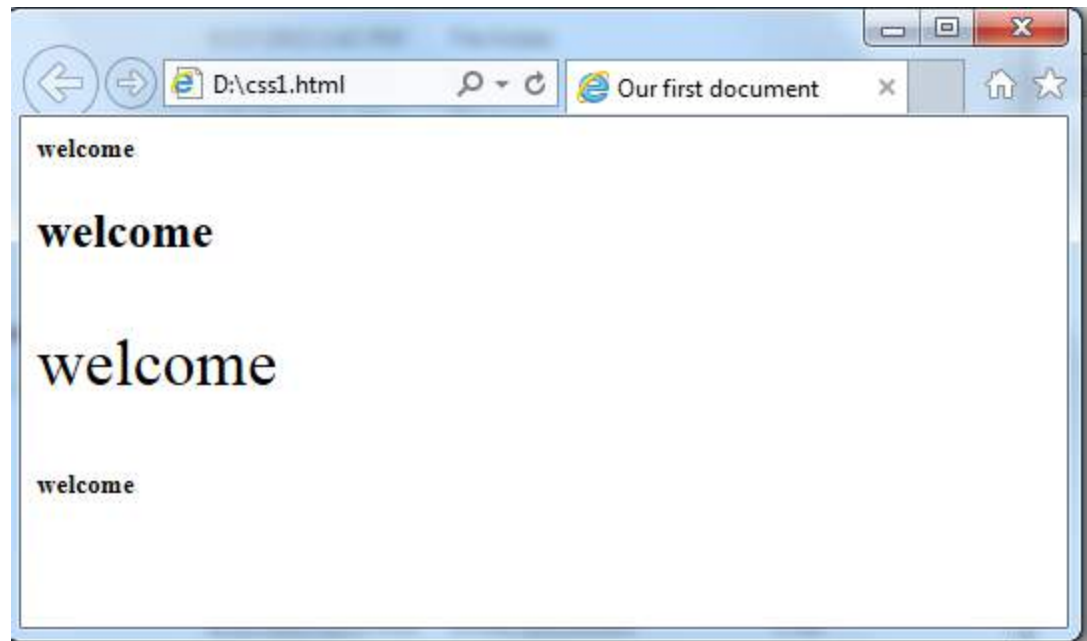
- Simple selector form is a list of style rules.
- The selector is a tag name or a list of tag names, separated by commas.

Consider the following example:

The **property** is font-size and the **property value** is a number of points :

```
h1, h3 { font-size: 24pt ;}  
h2 { font-size: 20pt ;}
```

```
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Our first document </title>
<style>
h1, h3 { font-size: 10pt ;}
p { font-size: 25pt ;}
</style>
</head>
<body>
<h1>welcome</h1>
<h2>welcome</h2>
<p>welcome</p>
<h3>welcome</h3>
</body>
</html>
```



# Class Selectors

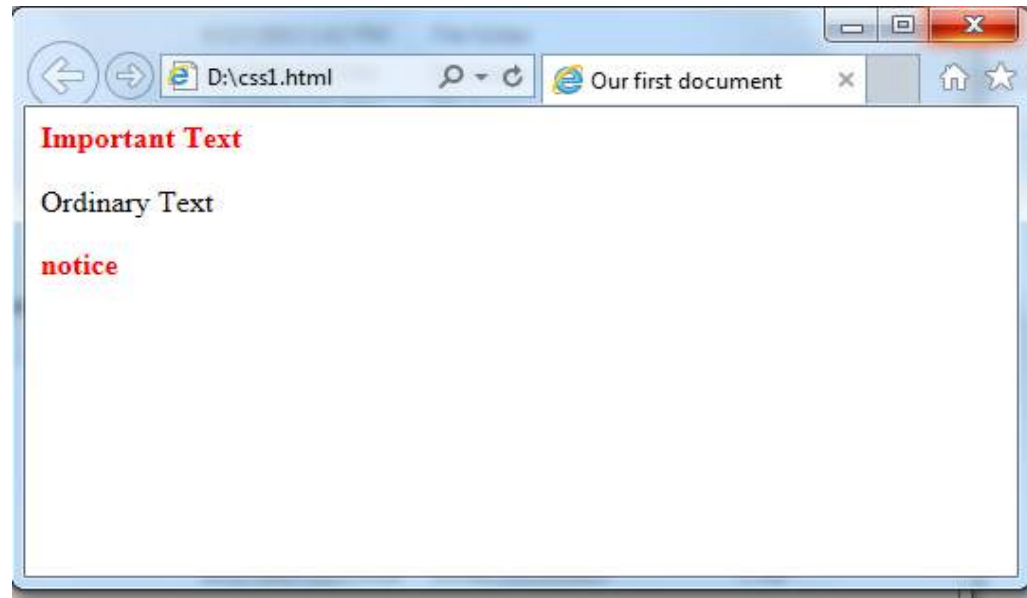
- Used to allow different occurrences of the same tag to use different style specifications.
- A style class has a name, which is attached to the tag's name with a period.
- The class you want on a particular occurrence of a tag is specified with the class attribute of the tag.

For example:

***p.normal {property-value list}***

***p.warning {property-value list}***

```
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Our first document </title>
<style>
p .important {
    font-weight:bold; color:red;
}
</style>
</head>
<body>
<p class="important">Important Text</p>
<p>Ordinary Text</p>
<p class="important">notice</p>
</body>
</html>
```



## Generic Selectors

- A generic class can be defined if you want a style to apply to more than one kind of tag.
- A generic class must be named, and the name must begin with a period without a tag name in its name.

For Example:

```
.sale{ ... }
```

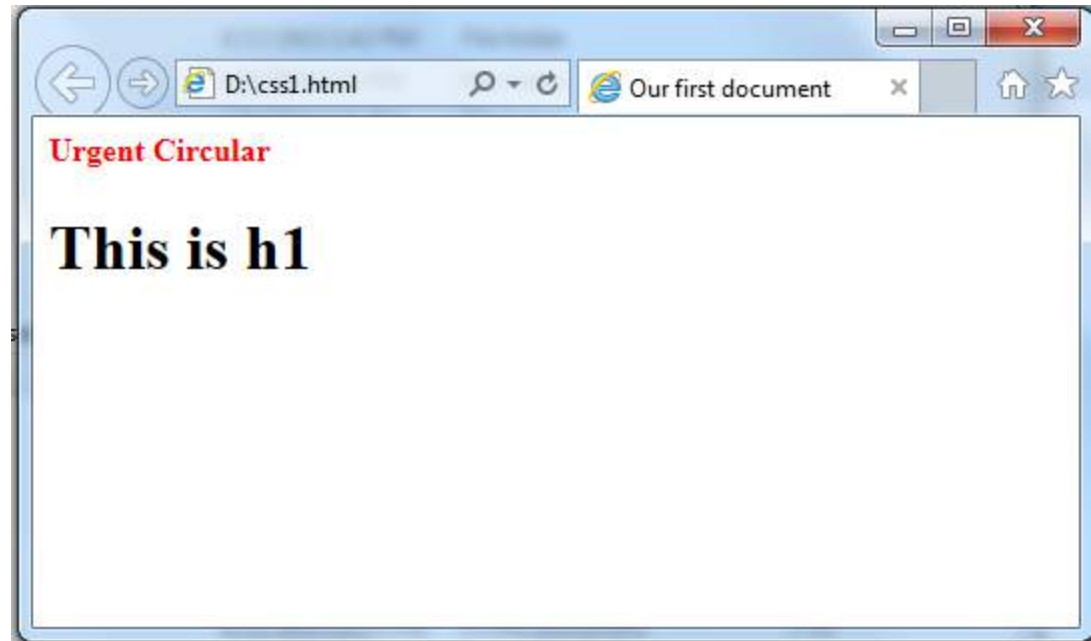
Use it as if it were a normal style class

*<h1 class = "sale"> This Tuesday is a holiday </h1>...*

*<p class = "sale"> ... </p>*



```
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Our first document </title>
<style>
.urgent {
  font-weight:bold; color:red;
}
</style>
</head>
<body>
<p class = "urgent"> Urgent Circular </p>
<h1> This is h1</h1>
</body>
</html>
```



## Id Selectors

An id selector allow the application of a style to one specific element.

The general form of an id selector is as follows :

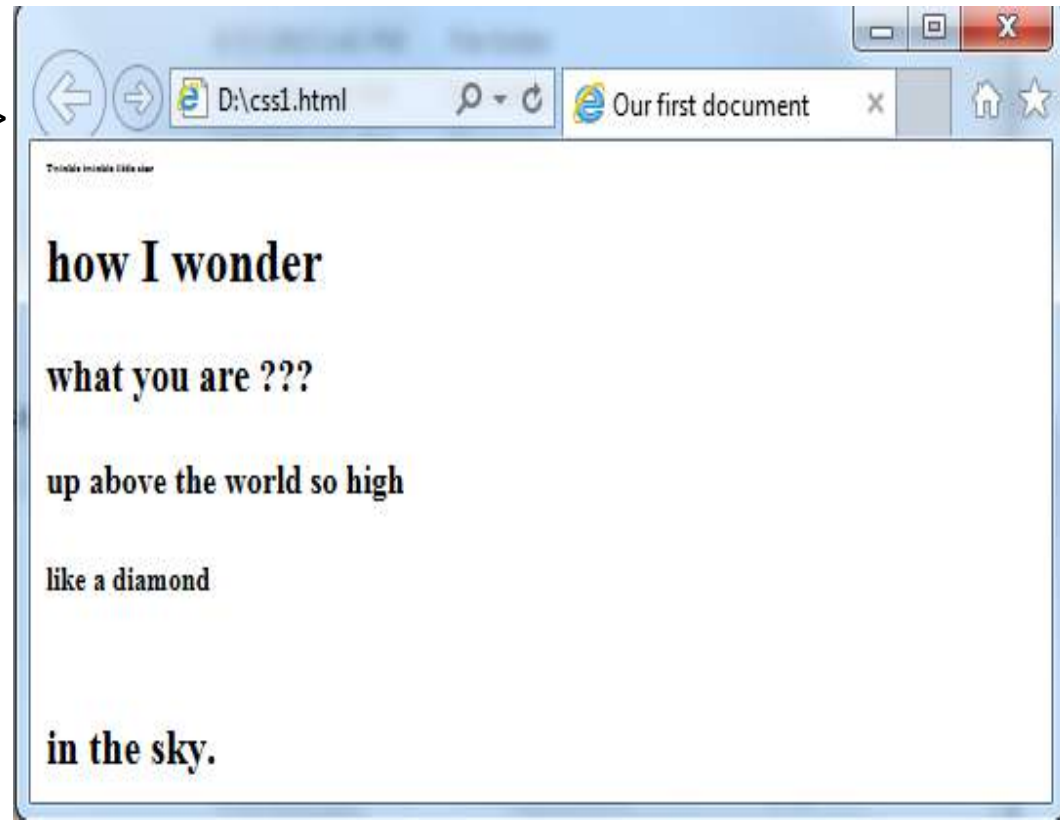
*#specific-id {property-value list}*

Example:

**#section14 {font-size: 20} specifies a font size of 20 points to the element**

**<h2 id ="section14"> Alice in wonderland</h2>**

```
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Our first document </title>
<style>
#fntsize1 {font-size: 20}
#fntsize2 {font-size: 5}
</style>
</head> <body>
<h1 id="fntsize2" > Twinkle twinkle little star</h1>
<h2> how I wonder </h2>
<h3>what you are ???</h3>
<h4>up above the world so high</h4>
<h5> like a diamond</h5>
<h6 id="fntsize1"> in the sky.</h6>
</body>
</html>
```



## Universal selector

The universal selector, denoted by an asterisk(\*), which applies style to all elements in the document.

For example:

*\*{property-value list}*

```
<html xmlns =  
"http://www.w3.org/1999/xhtml">  
<head>  
<title> Our first document </title>  
<style>  
*{color: red;}  
</style>  
</head> <body>  
<h1> Twinkle twinkle little star</h1>  
<h2> how I wonder </h2>  
<h3>what you are ???</h3>  
<h4>up above the world so high</h4>  
<h5> like a diamond</h5>  
<h6> in the sky.</h6>  
</body>  
</html>
```



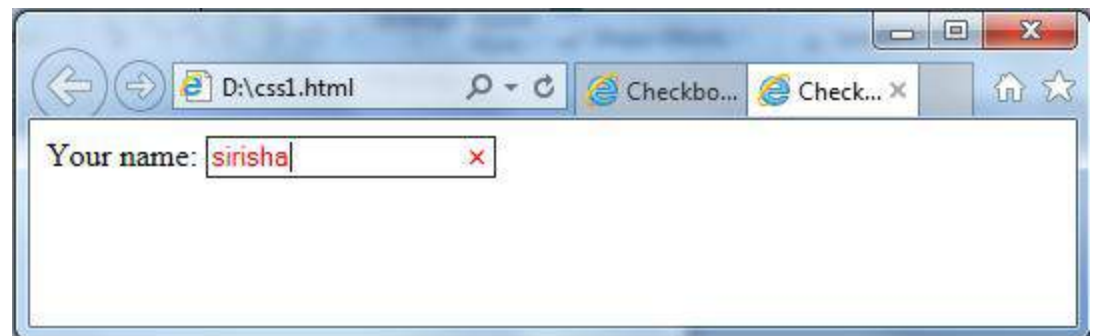
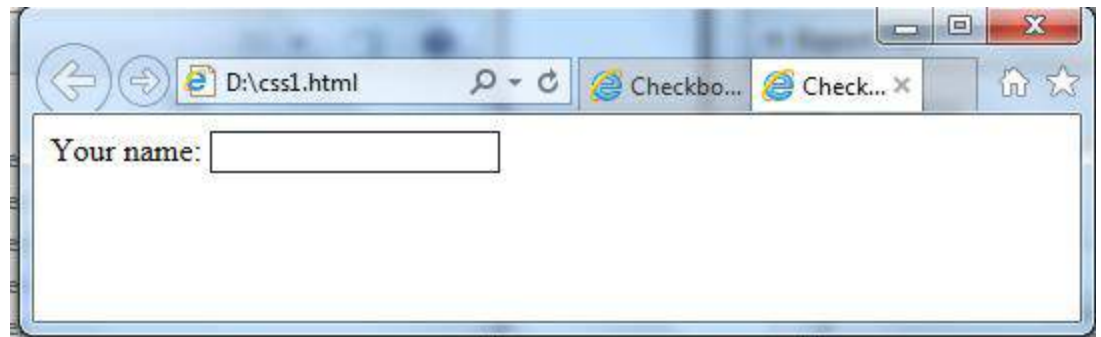
## Pseudo Classes

Pseudo classes are styles that apply when something happens, rather than because the target element simply exists.

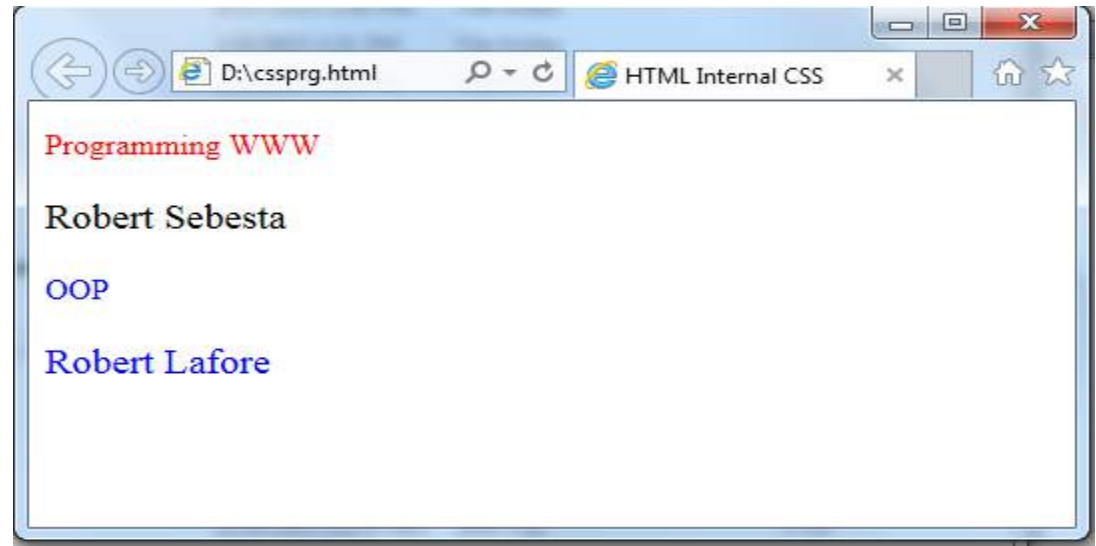
Names of pseudo classes begin with colons hover classes apply when the mouse cursor is over the element focus classes apply when an element has focus

i.e. the mouse cursor is over the element and the left mouse button is clicked.

```
<html xmlns =  
"http://www.w3.org/1999/xhtml">  
<head> <title> Checkboxes </title>  
<style type = "text/css">  
input:hover {color: green;}  
input:focus {color: red;}  
</style> </head> <body>  
<form action = ""> <p>  
Your name:  
<input type = "text" />  
</p> </form>  
</body>  
</html>
```



```
<!DOCTYPE html>
<html>
<head>
<title>HTML Internal CSS</title>
<style type="text/css">
.red{
    color: red;
}
.thick{
    font-size:20px;
}
.green{
    color:blue;
}
</style>
</head>
<body>
<p class="red">Programming WWW</p>
<p class="thick">Robert Sebesta</p>
<p class="green">OOP</p>
<p class="thick green">Robert Lafore</p>
</body>
</html>
```





## Property Values Forms

- CSS1 includes 60 different properties in 7 categories
- Fonts, Lists, Alignment of text, Margins, Colors, Backgrounds, Borders

**Keywords** for property values are used when there are only a few possible values and they are predefined

**Eg: small, large, medium**

Keyword values are not case sensitive, so Small, SmALL, and SMALL are all the same as small

The possible unit names are

- px for pixels(1 pixel is equal to one dot on the computer screen)
- in for inches,
- cm for centimeters,
- mm for millimeters,
- pt for points(1 point is equal to 1/72 of an inch)
- pc for picas (12 points),
- em for value of current font size in pixels,(1em is equal to 12pt)
- ex for height of the letter .
- No space is allowed between the number and the unit specification

## Font properties and Colors

### Font-family

- The font-family property is used to specify a list of font name.
- The browser will use the **first font in the list** that it supports.

For example:

***font-family: Arial, Helvetica, Courier***

### Generic fonts:

They can be specified as the font family value

**serif, sans-serif, cursive, fantasy, and monospace (defined in CSS).**

Browser has a specific font defined for each generic name.

- If a font name that has more than one word, it should be single-quoted

**Eg: font-family: 'Times New Roman'**

### Colors :

**Color name rgb(n1, n2, n3)**

**Hex form: #B0E0E6 , stands for powder blue color.**

## Font-size

- **Possible values:** a length of a number or a name, such as **smaller, xx-large, medium , large** etc.
- **Different browsers** can use different relative value for the font-size.

## Font-variant

- The default value of the font-variant property is normal, which specifies the usual character font.
- This property can be set to **small-caps** to specify small /capital characters.

## Font-style

- The font-style property is most commonly used to **specify style**  
Eg: **font-style: italic**

## Font-weights

- The font-weight property is used to specify the **degree of boldness**.  
Eg: **font-weight : bold**

```
<html xmlns = http://www.w3.org/1999/xhtml>
<head> <title> Font properties </title>
<style type = "text/css">
p.big {font-size: 14pt; font-style: italic;
font-family: 'Times New Roman';}
p.small {font-size: 10pt , font-family:
'Courier New';}
h2 {font-family: 'Times New Roman';
font-size: 24pt; font-weight: bold}
h3 {font-family: 'Courier New'; font-size: 18pt}
</style>
</head>
<body>
<p class = "big">
Programming the World wide web
</p>
<p class = "small">
Robert W.Sebesta
</p>
<h2> CSS</h2>
<h3>The Basics of Web programming </h3>
<h4> Book by Robert Sebesta
</body>
</html>
```



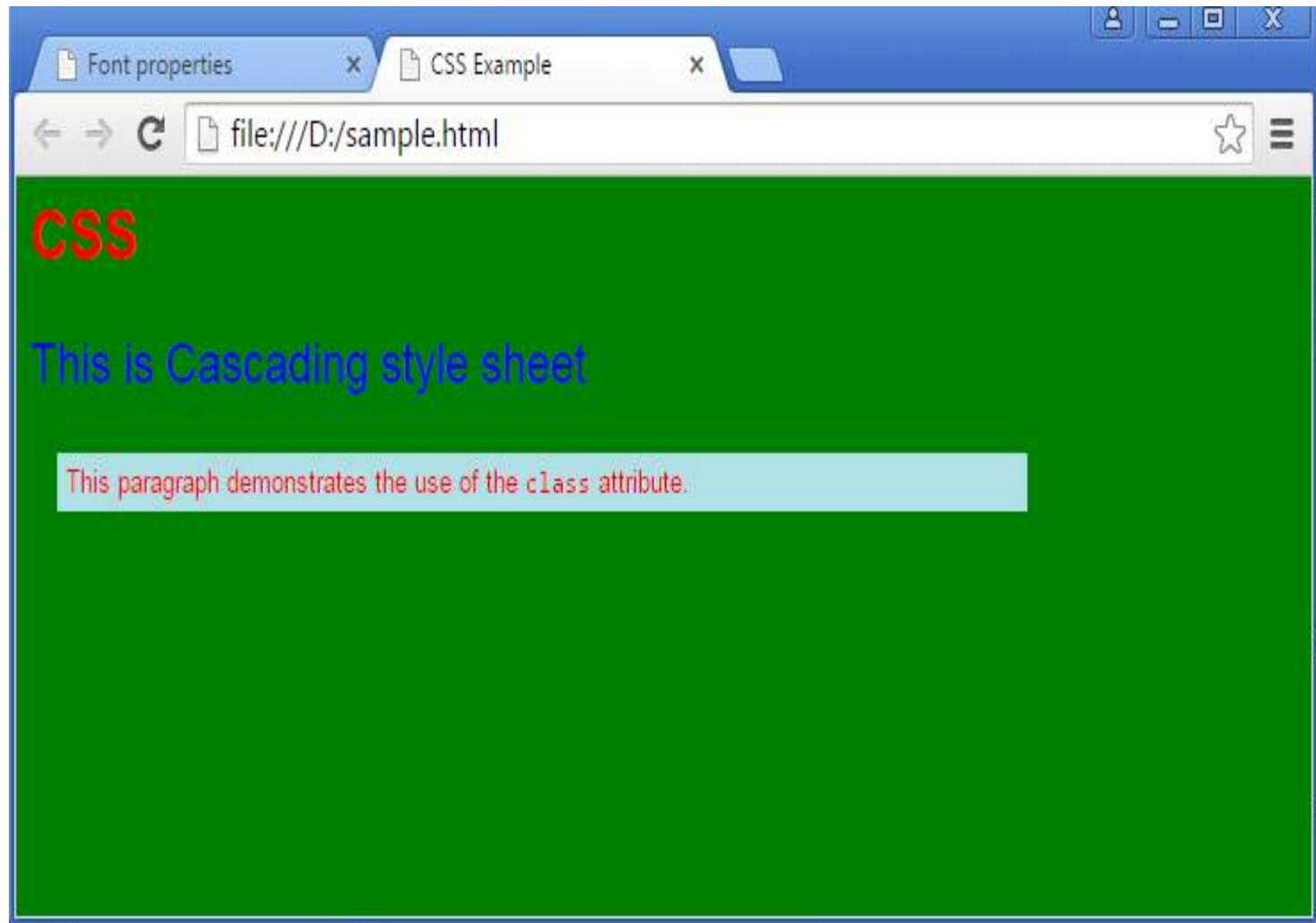
## Sample.html

```
<html
xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>CSS Example</title>
<link rel="stylesheet" type="text/css"
href="D:\a.css" />
</head>
<body>
<h1>CSS</h1>
<p>This is Cascading style sheet</p>
<p class="important">This paragraph
demonstrates the use of the
<code>class</code>
attribute.</p>
</body>
</html>
```

## a.css file

```
body {
font-family:arial, verdana,
sans-serif; background-color:green;
}
h1 {
color:red;
font-size:22pt;}
p {
color:blue;
font-size:18pt;}
p.important {
color:red;font-size:10pt;
background-color:#B0E0E6 ;
padding:5px;margin:15px;
width:40em;}
```

output



## Text Decoration

- The text-decoration property is used to **specify some special features of the text.**
- The available values are **line-through, overline, underline, and none, which is the default.**
- Many browsers underline links.

**Eg: line-through, overline, underline, none**

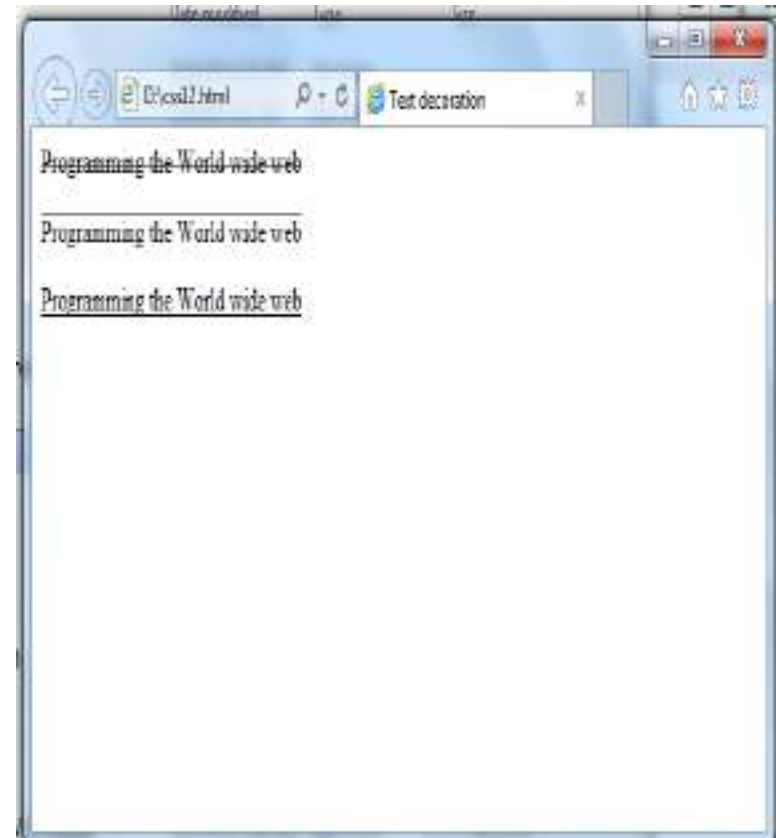
## Letter-spacing

**Value is any length property value controls amount of space between characters in text**

**Eg: 3px**



```
<html xmlns = "http://www.w3.org/1999/xhtml">
<head> <title> Text decoration </title>
<style type = "text/css">
p.through {text-decoration: line-through}
p.over {text-decoration: overline}
p.under {text-decoration: underline}
</style> </head>
<body>
<p class = "through">
Programming the World wide web </p>
<p class= "over">
Programming the World wide web </p>
<p class = "under">
Programming the World wide web </p>
</body></html>
```



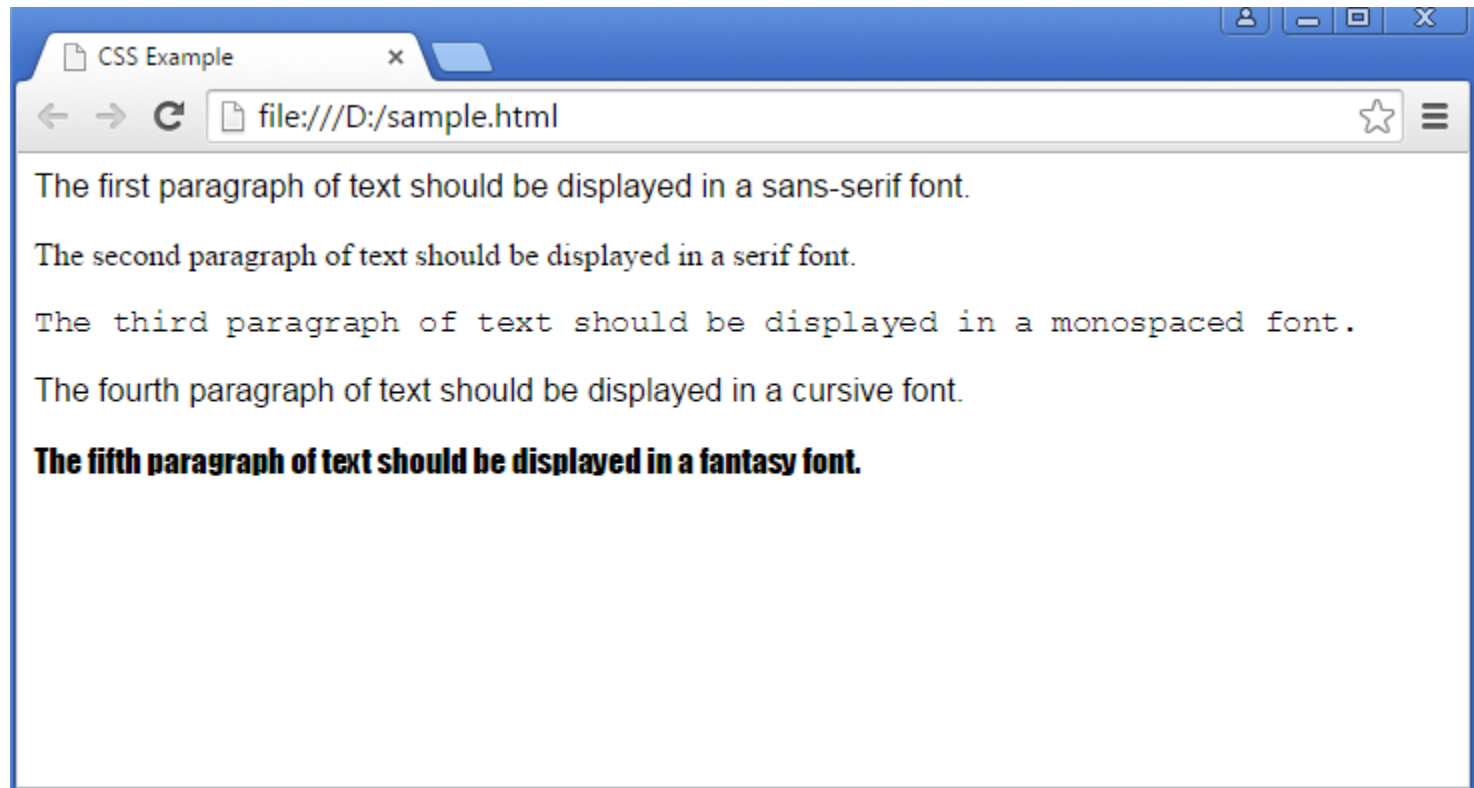
## a.css file

```
p.one {font-family:arial, verdana, sans-serif;}  
p.two {font-family:'times new roman', serif;}  
p.three {font-family:courier, 'courier new', monospace;}  
p.four {font-family:arial, cursive;}  
p.five {font-family:Cottonwood, Studz, fantasy;}
```

## Sample.html file

```
<html xmlns="http://www.w3.org/1999/xhtml">  
<head>  
<title>CSS Example</title>  
<link rel="stylesheet" type="text/css" href="D:\a.css" /> </head>  
<body>  
<p class="one">The first paragraph of text should be displayed in a sans-serif font.</p>  
<p class="two">The second paragraph of text should be displayed in a serif font.</p>  
<p class="three">The third paragraph of text should be displayed in a monospaced  
font.</p>  
<p class="four">The fourth paragraph of text should be displayed in a cursive font.</p> <p  
class="five">The fifth paragraph of text should be displayed in a fantasy font.</p>  
</body>  
</html>
```

output

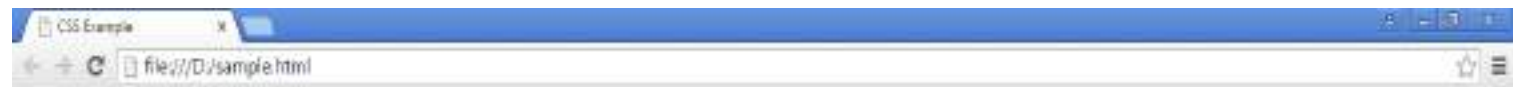


## Sample.html

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>CSS Example</title>
<link rel="stylesheet" type="text/css" href="d:\a.css"
/> </head>
<body>
<h1>Lengths</h1>
<p class="px">The length used here is 12 px</p> <p
class="pt">The length used here is 12
pt</p>
<p class="pc">The length used here is 2 pc</p> <p
class="in">The length used here is
0.5in</p>
<p class="cm">The length used here is 1cm</p> <p
class="mm">The length used here is
12mm</p>
<p class="em">The length used here is 1.5em</p>
<p class="ex">The length used here is
1.5ex</p>
</body> </html>
```

## a.css file

```
p {font-family:arial;
font-size:12pt;}
/* lengths */
p.px {font-size:12px;}
p.pt {font-size:12pt;}
p.pc {font-size:2pc;}
p.in {font-size:0.5in;}
p.cm {font-size:1cm;}
p.mm {font-size:12mm;}
p.em {font-size:1.5em;}
p.ex {font-size:1.5ex;}
```



## Lengths

The length used here is 12 px

The length used here is 12 pt

The length used here is 2 pc

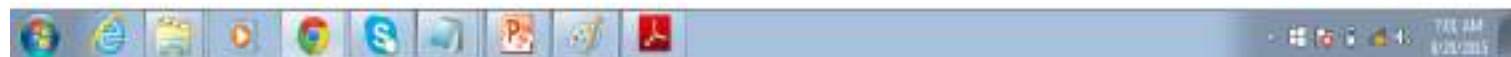
The length used here is 0.5in

The length used here is 1cm

The length used here is 12mm

The length used here is 1.5em

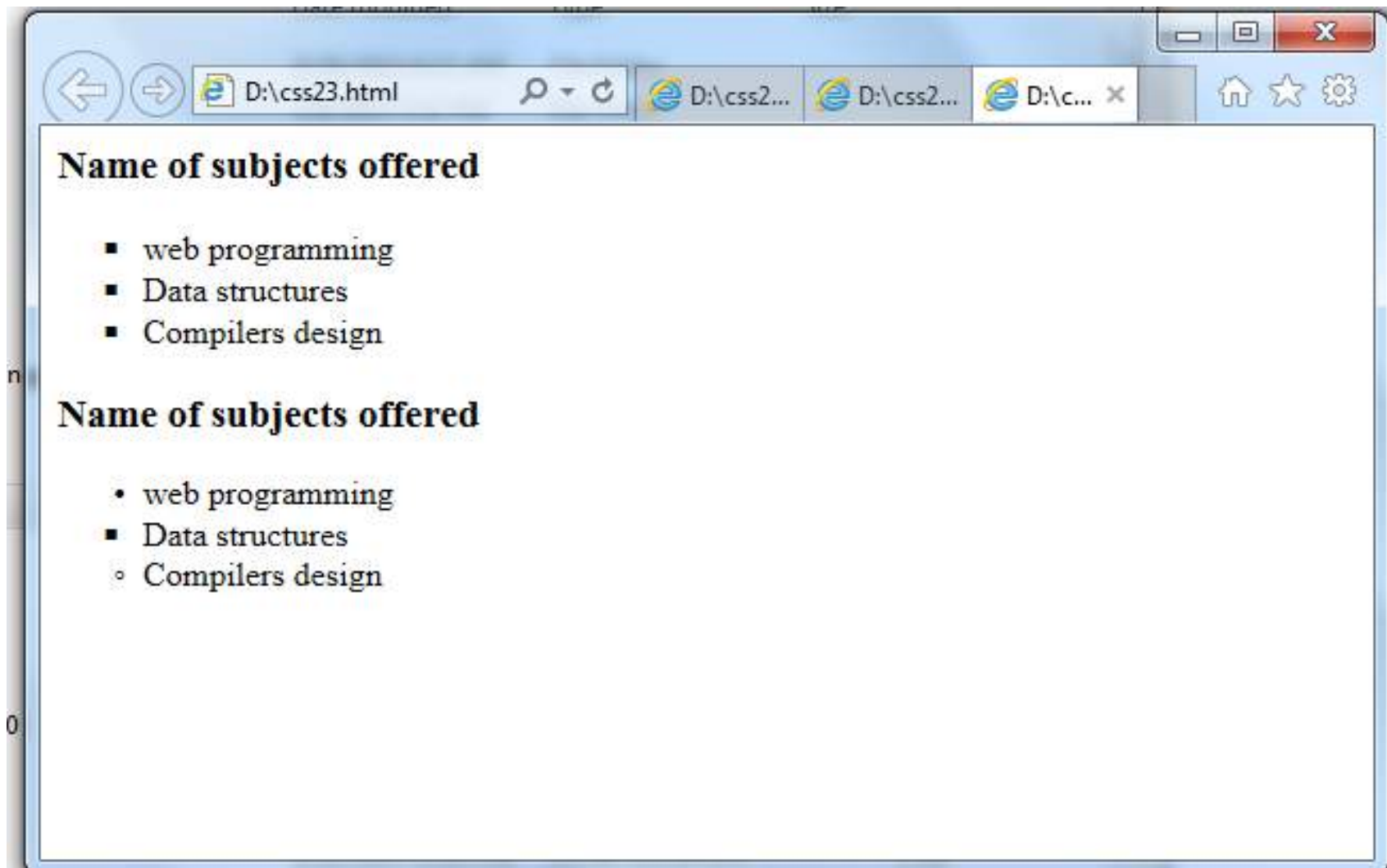
The length used here is 1.5ex



## **List properties:**

It is used to specify style of bullets or sequencing values in list items. The list-style-type of Unordered lists can be set to disc, circle, square or none.

```
<html>
</head><body>
<h3> Name of subjects offered</h3>
<ul style = "list-style-type: square">
<li> web programming</li>
<li> Data structures</li>
<li> Compilers design </li>
</ul>
<h3> Name of subjects offered</h3>
<ul>
<li style = "list-style-type: disc">
web programming </li>
<li style = "list-style-type: square">
Data structures</li>
<li style = "list-style-type: circle">
Compilers design </li>
</ul></body>
</html>
```

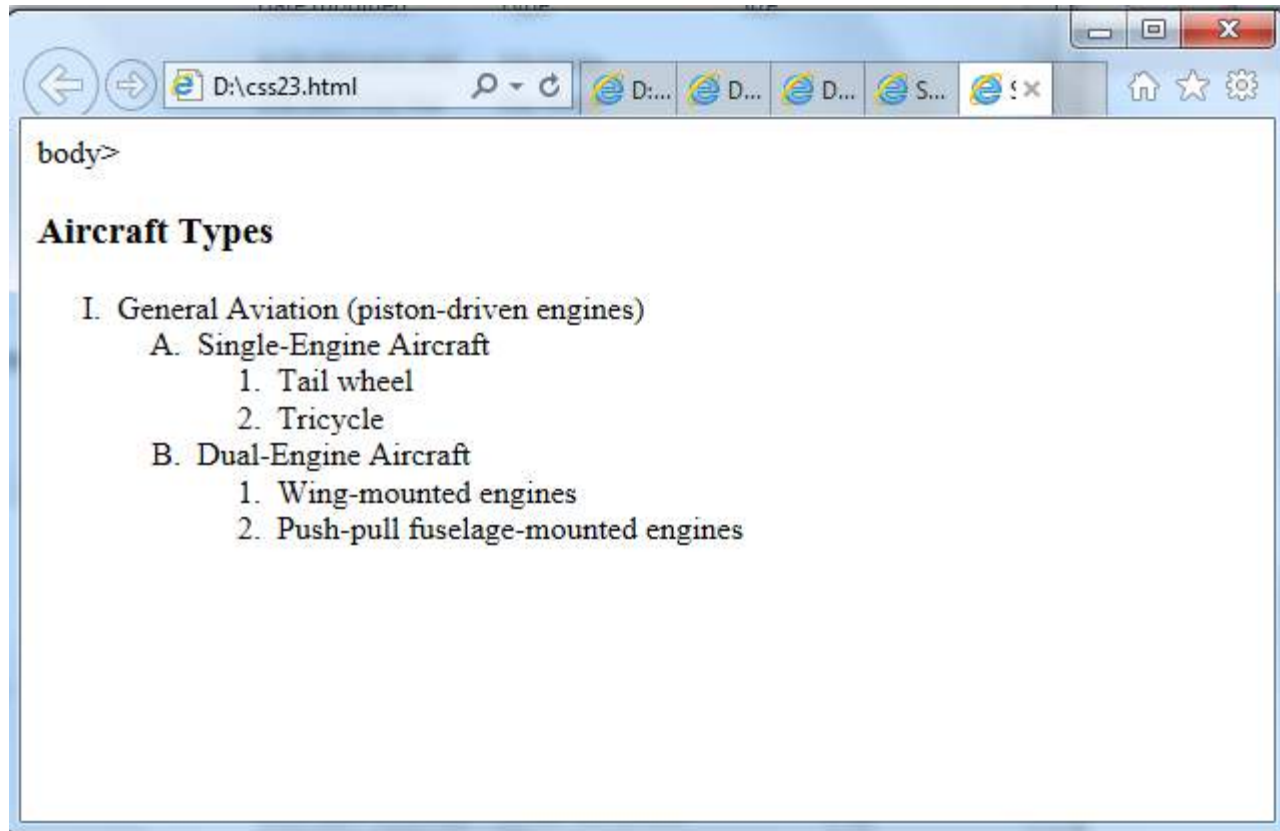




## Property value for list

Property value	Sequence type	First four values
Decimal	Arabic numerals	1, 2, 3, 4
upper-alpha	Uc letters	A, B, C, D
lower-alpha	Lc letters	a, b, c, d
upper-roman	Uc Roman	I, II, III, IV
lower-roman	Lc Roman	i, ii, iii, iv

# Assignment



```
<?xml version = "1.0"?>
<!DOCTYPE html PUBLIC "-//w3c//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
<head> <title> Sequence types </title>
<style type = "text/css">
ol {list-style-type: upper-roman;}
ol ol {list-style-type: upper-alpha;}
ol ol ol {list-style-type: decimal;}
</style>
</head>body>
<h3> Aircraft Types </h3>
<ol>
<li> General Aviation (piston-driven engines)
<ol>
<li> Single-Engine Aircraft
<ol>
<li> Tail wheel </li>
<li> Tricycle </li>
</ol>
</li>
<li> Dual-Engine Aircraft
<ol>
<li> Wing-mounted engines </li>
<li> Push-pull fuselage-mounted engines </li>
</ol>
</li>
</ol>
</li>
```

## Property : Letter Spacing

letter-spacing: 1cm;

letter-spacing: 10pt;

letter-spacing: 10px;

letter-spacing: none;

### Definition:

Using this attribute we can define or set the space between each letters. It takes the following values.

a) cm : You can set the value in centimeters as 1cm etc...

b) px : You can set the value in pixels as 1px or 10px etc...

c) pt : You can set the value in points as 1pt or 2pt etc

d) norm : on setting norm, normal / default word spacing will be taken

Ex: **<font style="letter-spacing: 1cm;"> Welcome</font>**

**Output: W e l c o m e**

# Property : Word Spacing

## Usage:

word-spacing: 1cm;  
word-spacing: 10pt;  
word-spacing: 10px;  
word-spacing: none;

## Definition:

Using this attribute we can define or set the space between each words.  
It takes the following values.

- a)cm : You can set the value in centimeters as 1cm etc...
- b)px : You can set the value in pixels as 1px or 10px etc...
- c)pt : you can set the value in points as 1pt or 2pt etc
- d)norm : on setting norm, normal / default word spacing will be taken.

Ex: **<font style="word-spacing: 10px;"> Welcome to FST</font>**

Output: Welcome      to      FST

## Property : Line height

```
p.small {  
  line-height: 90%;  
}
```

```
p.small {  
  line-height: 10px;  
}
```

```
p.big {  
  line-height: 200%;  
}
```

```
p.big {  
  line-height: 30px;  
}
```

**Normal:** A normal line height. This is default

**Number:** A number that will be multiplied with the current font size to set the line height

**Length:** A fixed line height in px, pt, cm, etc.

**%:** A line height in percent of the current font size

# Alignment of Text:

➤ The text-align property has the possible values, left (the default), center, right.

```
h1 {  
  text-align: center;  
}
```

```
h2 {  
  text-align: left;  
}
```

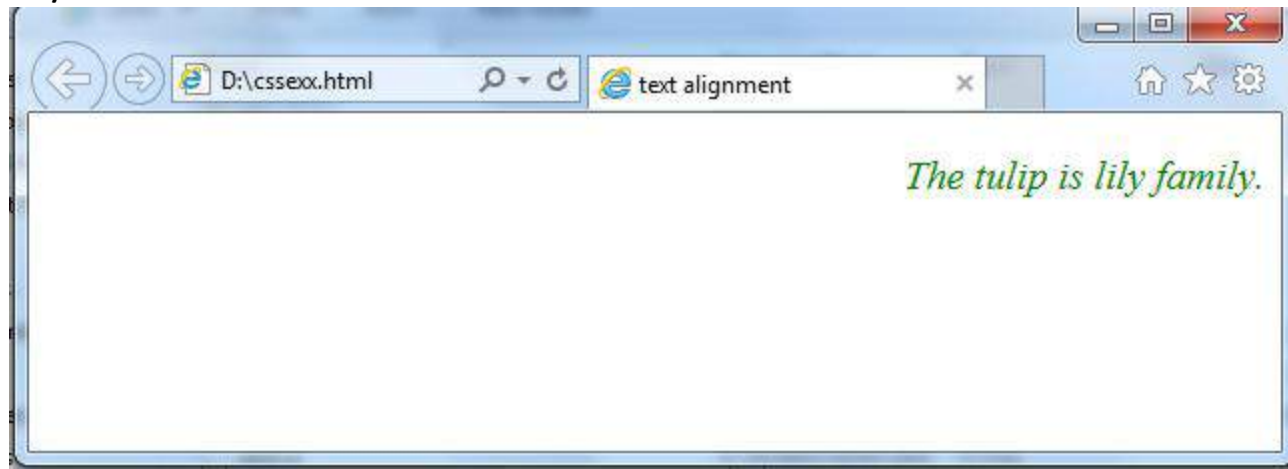
```
h3 {  
  text-align: right;  
}
```

**Left:** Aligns the text to the left

**Right:** Aligns the text to the right

**Center:** Centers the text

```
<!DOCTYPE html>
<!-- First Program -->
<html lang="en">
  <head>
    <title> text alignment </title>
    <meta charset="utf-8"/>
    <style type = "text/css">
      p{font-size: 20px;font-style: oblique;color: green;text-align: right;}
    </style>
  </head>
  <body>
    <p>
      The tulip is lily family.
    </p>
  </body>
</html>
```





# Alignment of Text

## Property: float

- To flow the text around another element.
- The float property has the possible values, left, right, and none (the default).
- If we have an element we want on the right, with text flowing on its left, we use the default text-align value (left) for the text and the right value for float on the element we want on the right.

```
<html xmlns = "http://www.w3.org/1999/xhtml">  
<head> <title> The float property </title>  
<style type = "text/css">  
img {float: right}
```

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title> text alignment </title>
    <meta charset="utf-8"/>
    <style type = "text/css">
      img {float: right;}
    </style>
  </head>
  <body>
    <p>
```

```

```

The tulip is a Eurasian and North African genus of perennial, bulbous plants in the lily family. It is an herbaceous herb with showy flowers, of which around 75 wild species are currently accepted. The genus's native range extends west to the Iberian Peninsula, through North Africa to Greece, the Balkans, Turkey, throughout the Levant (Syria, Israel, Palestinian Territories, Lebanon, Jordan) and Iran, north to Ukraine, southern Siberia and Mongolia, and east to the Northwest of China. The tulip's centre of diversity is in the Pamir, Hindu Kush, and Tien Shan mountains. It is a common element of steppe and winter-rain Mediterranean vegetation. A number of species and many hybrid cultivars are grown in gardens or as potted plants.

```
</p>
  </body>
</html>
```

# Output



Colors are a problem for the Web for two reasons:

- 1. Monitors vary widely**
- 2. Browsers vary widely**

There are three color collections

1. There is a larger set, the Web Palette 216 colors.  
Use hex color values
2. Any one of 16 million different colors due to 24 bit color rep
3. There is a set of 16 colors that are guaranteed to be displayable by all graphical browsers on all color monitors

## Color: Table

Black	000000
silver	C0C0C0
gray	808080
white	FFFFFF
maroon	800000
red	FF0000
purple	800080
fuchsia	FF00FF

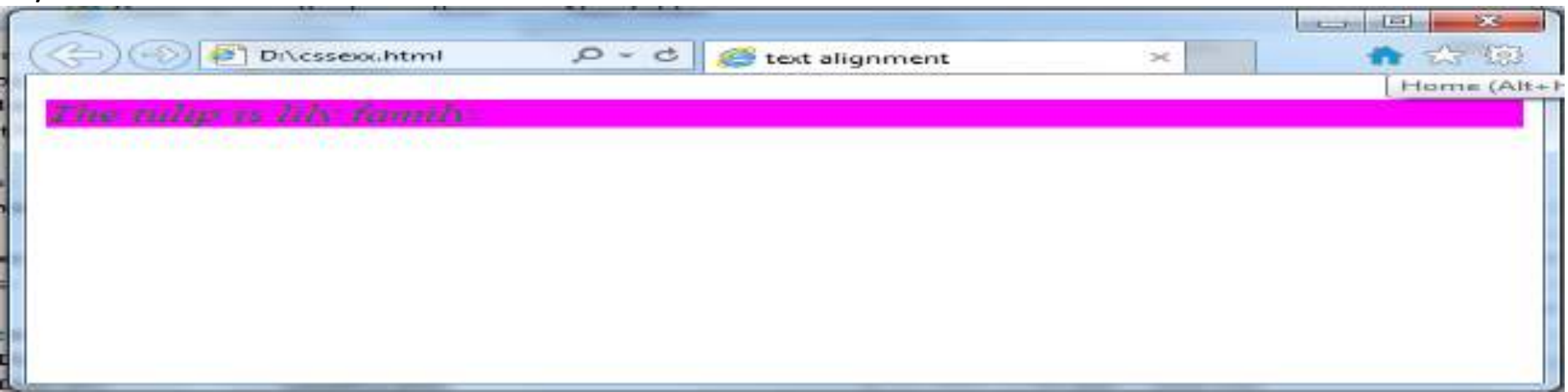
green	008000
lime	00FF00
olive	808000
yellow	FFFF00
navy	000080
blue	0000FF
teal	008080
aqua	00FFFF

EX:

```
<style type = "text/css">  
th.red {color: red}  
th.orange {color: orange}  
</style> ...  
<table border = "5">  
<tr>  
<th class = "red"> Apple </th>  
<th class = "orange"> Orange </th>  
<th class = "orange"> Screwdriver </th>  
</tr>  
</table>
```

**The background-color property specifies the background color of elements**

```
<!DOCTYPE html>
<!-- First Progam-- >
<html lang="en">
  <head>
    <title> text alignment </title>
    <meta charset="utf-8"/>
    <style type = "text/css">
      p.display{font-size: 20px;font-style: oblique;color: green;background-color:magenta;}
    </style>
  </head>
  <body>
    <p class="display">
      The tulip is lily family.
    </p>
  </body>
</html>
```



## Box Model:

- The amount space between the content of an element and its border is padding.
- Space between the border and an adjacent element known as margin.



## Borders:

- Every element has a **border-style property**.
- It **Controls** whether the element has a **border** and the **style** of the border.
- The styles of one of the four sides of an element can be set with **border-style values**: **none, dotted, dashed, and double**
- **border-width** – **thin, medium (default), thick**, or a length value in pixels.

Border width can be specified for any of the four borders (**e.g., border-top-width**)

- **bordercolor**— any color, Border color can be specified for any of the four borders (**e.g., border-topcolor**)

```

<html xmlns =
"http://www.w3.org/1999/xhtml">
<head> <title> Table borders </title>
<style type = "text/css">
table {border-top-width: medium;
border-bottom-width: thick;
border-top-color: red;
border-bottom-color: green;
border-top-style: dotted;
border-bottom-style: dashed;
}
p {border-style: dashed; border-width:
thin;
border-color: green
} </style> </head>
<body> <table border = "5">
<caption> Diet chart </caption>

```

```

<tr>
<th> </th>
<th> Fruits </th>
<th> vegetables </th>
<th> Carbohydrates </th>
</tr> <tr>
<th> Breakfast </th>
<td> 0 </td>
<td> 1 </td>
<td> 0 </td>
</tr> <tr>
<th> Lunch </th>
<td> 1 </td>
<td> 0 </td>
<td> 0 </td> </tr> <tr>
<th> Dinner </th>
<td> 0 </td>
<td> 0 </td>
<td> 1 </td>
</tr>
</table> <p>
If you strictly follow the chart you can easily
lose weight.
</p> </body>
</html>

```

D:\cssexx.html

text alignment

Table borders x

Diet chart

	Fruits	vegetables	Carbohydrates
Breakfast	0	1	0
Lunch	1	0	0
Dinner	0	0	1

If you strictly follow the chart you can easily lose weight.

## Margin

- The space between the border of an element and its neighbor element.
- The margins around an element can be set with margin-left, etc. - just assign them a length value

```
<img src = "c210.jpg " style = "float: right; margin-left: 0.35in;  
margin-bottom: 0.35in" />
```

Padding – the distance between the content of an element and its border

```
<html xmlns =  
"http://www.w3.org/1999/xhtml">  
<head><title> Margins and Padding  
</title><style type = "text/css">  
p.one {margin: 0.2in;  
padding: 0.2in;  
background-color: #C0C0C0;  
border-style: solid;  
}  
p.two {margin: 0.1in;  
padding: 0.3in;  
background-color: #C0C0C0;  
border-style: solid;  
}  
p.three {margin: 0.3in; padding: 0.1in;  
background-color: #C0C0C0;  
border-style: solid; }  
p.four {margin:0.4in;  
background-color: #C0C0C0;}  
p.five {padding: 0.4in;  
background-color: #C0C0C0;  
}  
</style> </head>
```

```
<body>  
<p> Here is the first line. </p>  
<p class = "one">  
Style sheets allow you to impose a standard  
style on a whole document, or even a whole  
collection of documents <br /> [margin = 0.2in,  
padding = 0.2in]  
</p>  
<p class = "two">  
Style sheets allow you to impose a standard  
style on a whole document, or even a whole  
collection of documents. <br /> [margin =  
0.1in,  
padding = 0.3in]  
</p>  
<p class = "three">  
Style sheets allow you to impose a standard  
style on a whole document, or even a whole  
collection of documents <br /> [margin = 0.3in,  
padding = 0.1in]  
</body>  
</html>
```



Here is the first line:

Style sheets allow you to impose a standard style on a whole document, or even a whole collection of documents.  
[margin = 0.2in, padding = 0.2in]

Style sheets allow you to impose a standard style on a whole document, or even a whole collection of documents.  
[margin = 0.1in, padding = 0.3in]

Style sheets allow you to impose a standard style on a whole document, or even a whole collection of documents.  
[margin = 0.3in, padding = 0.1in]

## Background Images

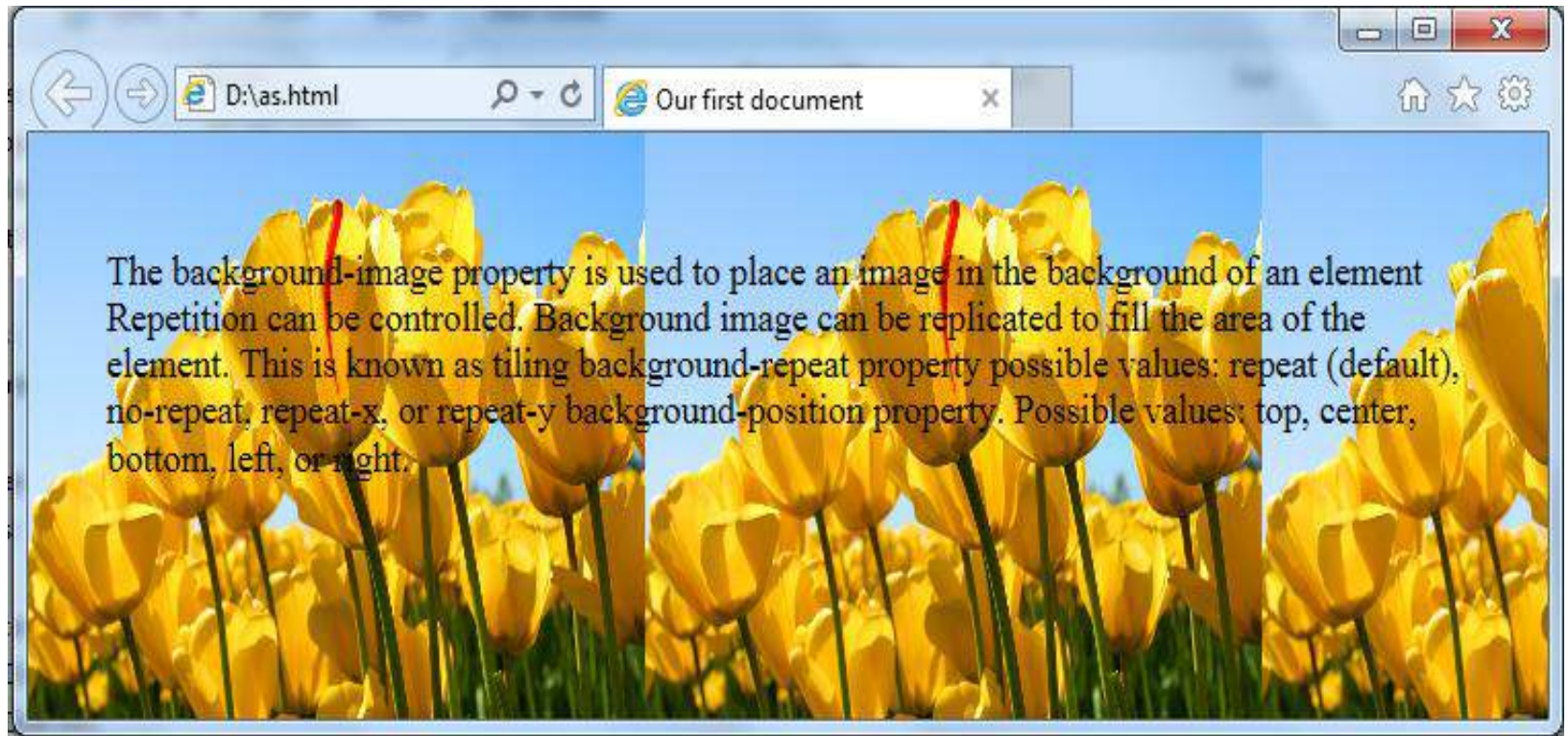
- The background-image property is used to place an image in the background of an element
- Repetition can be controlled.
- Background image can be replicated to fill the area of the element.
- This is known as tiling background-repeat property possible values: repeat (default), no-repeat, repeat-x, or repeat-y background-position property.
- Possible values: top, center, bottom, left, or right

```
<!DOCTYPE html>
<!-- First Program -->
<html lang="en">
  <head>
    <title> Our first document </title>
    <meta charset="utf-8">
<style type="text/css">
body{
background-
image:url("C:/Users/Public/Pictures/Samp
le Pictures/Tulips.jpg"); background-size:
300px 300px;}
p{margin-left:30px; margin-
right:30px;margin-top:50px;font-
size:1.1em}
</style>
  </head>
  <body>
```

```
<p>
The background-image property is
used to place an image in the
background of an element
Repetition can be controlled.
Background image can be
replicated to fill the area of the
element. This is known as tiling
background-repeat property possible
values: repeat (default),
no-repeat, repeat-x, or repeat-y
background-position property. Possible
values: top, center,
bottom, left, or right.
</p>
  </body>
</html>
```



## Output



## No-repeat:

```
<!DOCTYPE html>
<!-- First Program -->
<html lang="en">
  <head>
    <title> Our first document </title>
    <meta charset="utf-8">
<style type="text/css">
body{
background-
image:url("C:/Users/Public/Pictures/Samp
le Pictures/Tulips.jpg");
background-size: 300px 300px;
background-repeat: no-repeat;}
p{margin-left:30px; margin-
right:30px;margin-top:50px;font-
size:1.1em}
</style>
  </head>
  <body>
```

<p>

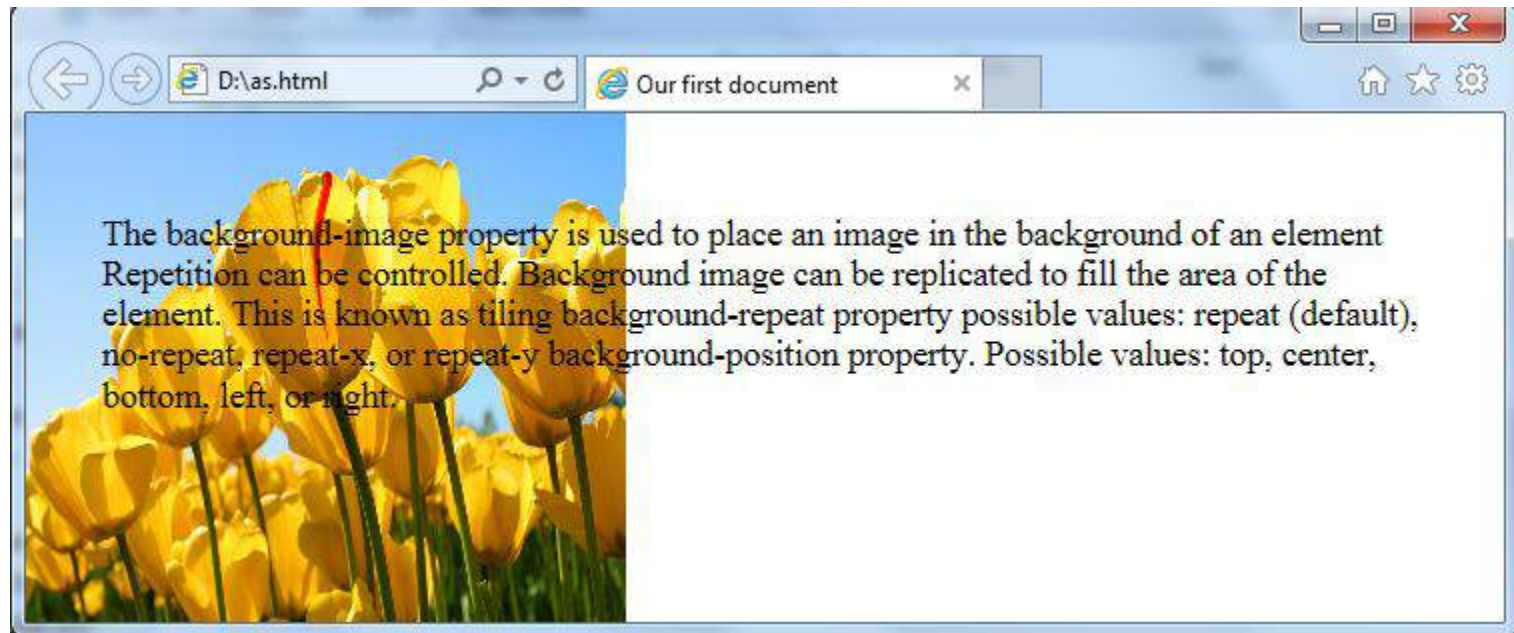
The background-image property is used to place an image in the background of an element. Repetition can be controlled. Background image can be replicated to fill the area of the element. This is known as tiling background-repeat property possible values: repeat (default), no-repeat, repeat-x, or repeat-y background-position property. Possible values: top, center, bottom, left, or right.

</p>

</body>

</html>

## Output





## The `<span>` tag

- One problem with the font properties is that they apply to whole elements, which are often too large.
- Solution: a new tag to define an element in the content of a larger element - `<span>`.
- it makes a word or a phrase appear different.
- The default meaning of `<span>` is to leave the content as it is. it has no default layout.
- The `<span>` tag is similar to other HTML tags, they can be nested and they have id and class attributes.



```
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
<title> Relative positioning </title>
</head>
<body style = "font-family: Times; font-size: 24pt;">
<p>
You are <span style =
"position: relative; top: 10px;
font-family: Times; font-size: 48pt;
font-style: italic; color: red;">
Welcome </span> to Web Programming class.
</p> </body>
</html>
```



# Conflict Resolution

- When two or more rules apply to the same tag there are resolutions for deciding which rule applies.
- In-line style sheets have precedence over document style sheets.
- Document style sheets have precedence over external style sheets.
- Within the same level there can be conflicts a tag may be used twice as a selector