

# Styling Typography

- Controlling fonts and type size
- CSS enables typography for whole web site to be changed in one style sheet
- Note: limitations of user's browser and platform

# Font Family

- Specify chosen fonts in order of preference, separated by comma
- Always include a generic font family last – all browsers do not have all fonts
- Generic font families:
  - sans-serif (e.g. Helvetica or Arial) **S**
  - serif (e.g. Times New Roman) **S**
  - monospace (e.g. Courier or New Courier) **S**
  - cursive (e.g. Saph-Chancery or Comic Sans) **S**
  - fantasy (e.g. Western, Impact) **S**
- Example:

```
h1{font-family: "Trebuchet MS", Verdana, sans-serif}
```

(Note: quotes around font family name of more than one word)

# Font Size

- Size may be specified as absolute or relative
- Absolute size: `xx-small`..... `xx-large`
- Relative size: `smaller`, `larger` or `%`
- Examples:

```
p {font-size: x-small}
```

```
h2 {font-size: 1.2em;}
```

```
p#intro{font-size: 120%}
```

# Font Size Measurement Units

- pt (points, 1/72 inch)
- pc (picas, 1 pica – 12 points)
- mm (millimeters)
- cm (centimeters)
- in (inches)
- em (relative to size M)
- ex (relative to size of X)
- px (pixels)
- Note: most used are px, pt, em (and %)

# Other font settings

- **font-weight**
  - normal, bold, bolder, lighter, 100, 200 .... 900
- **font-style**
  - normal, italic, oblique
- **font-variant**
  - normal, small-caps

# Combining font-related properties

- Font-size and font-family minimum requirements for using font property

```
h1{font:1.75em sans-serif}
```

- Order is important:

```
h1{font: oblique bold small-caps 1.75em Vedana,  
Arial, sans-serif;}
```

– Size and font-family come last

# Text Transformation and Text Decoration

- Text transformation – capitalisation
  - `capitalize`, `lowercase`, `uppercase`
- Text decoration (underlines etc.)
  - `underline`, `overline`, `line-through`
- Color (change colour of text)
  - Example: `color=#003366`

# Alignment and Spacing

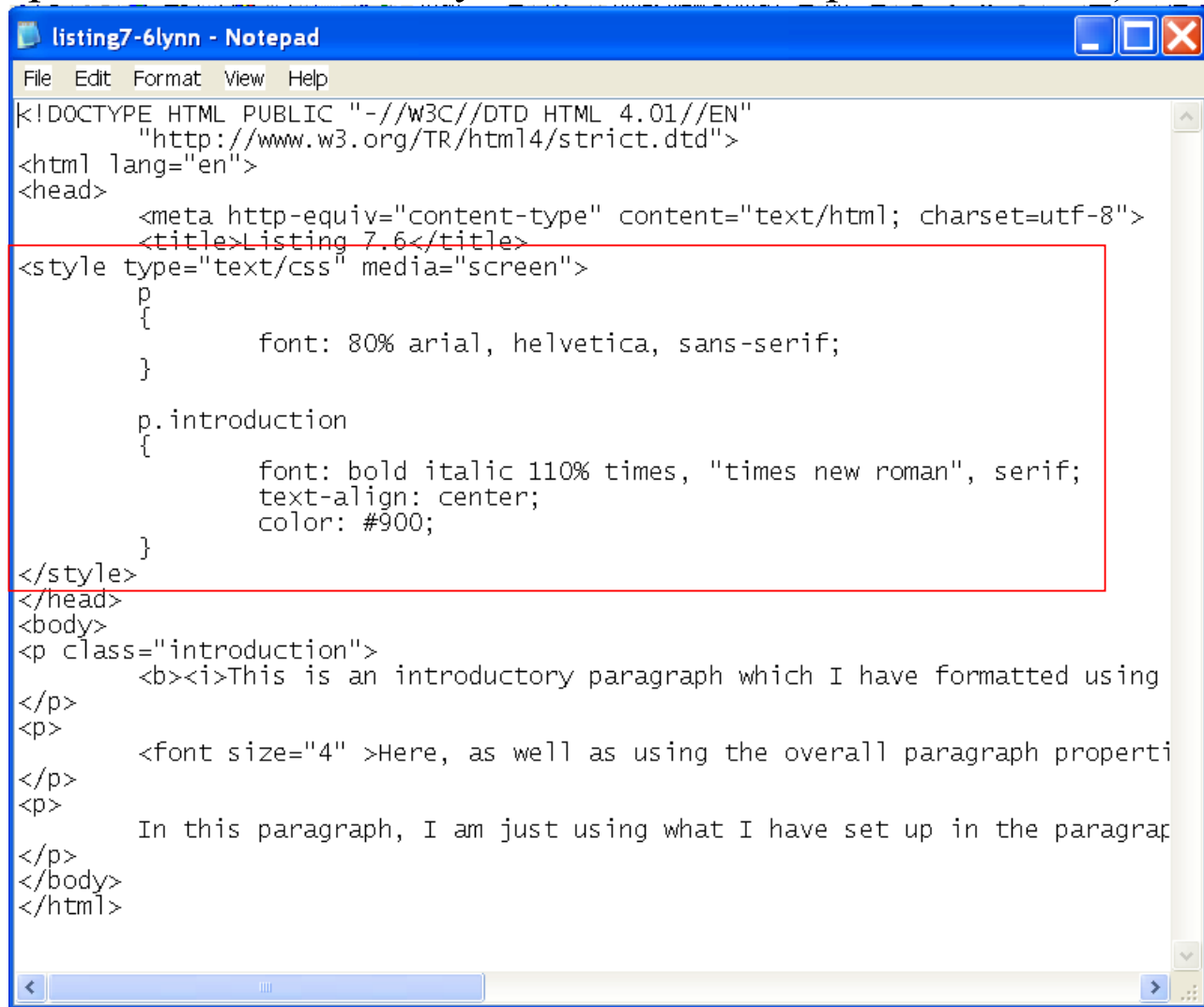
- `text-align` (horizontal alignment)
  - `left`, `right`, `center`, `justify`
- `Text-indent` (absolute or relative indentation)
- `vertical-align` (vertical alignment)
  - `baseline`, `sub`, `super`.....etc
- `letter-spacing` (specify space length between letters)
- `Word-spacing` (space length between words)

**Example:** `p {letter-spacing: 8px; }`

- `Line-height` (spacing between lines)

**Example:** `p {line-height: 2em; }`

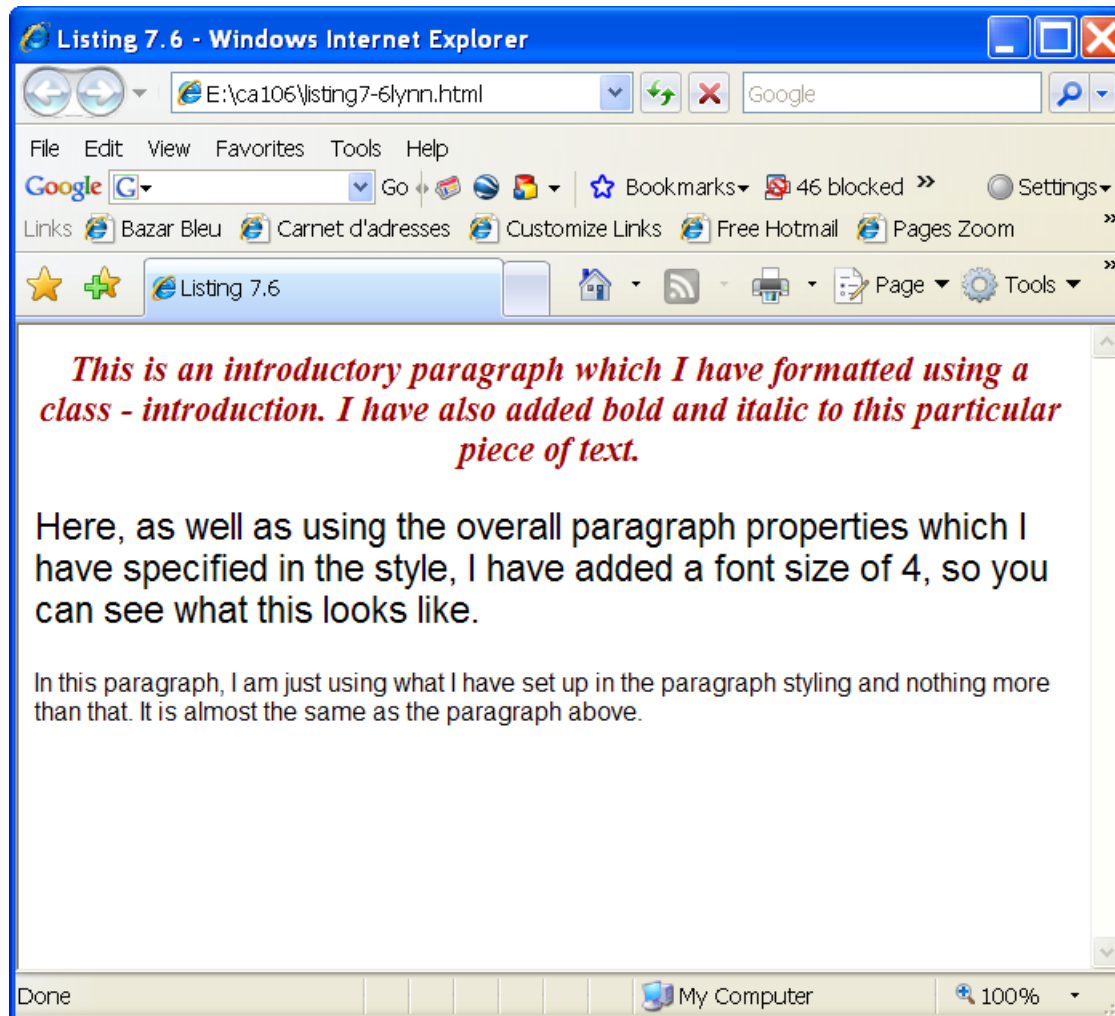
# Example (Important Note: Style is embedded to save space for presentation here – style should be in separate .css file)



```
listing7-6lynn - Notepad
File Edit Format View Help
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
<html lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=utf-8">
  <title>Listing 7.6</title>
  <style type="text/css" media="screen">
    p
    {
      font: 80% arial, helvetica, sans-serif;
    }

    p.introduction
    {
      font: bold italic 110% times, "times new roman", serif;
      text-align: center;
      color: #900;
    }
  </style>
</head>
<body>
<p class="introduction">
  <b><i>This is an introductory paragraph which I have formatted using
</p>
<p>
  <font size="4" >Here, as well as using the overall paragraph properti
</p>
<p>
  In this paragraph, I am just using what I have set up in the paragraph
</p>
</body>
</html>
```

# Example - view



# Adding margins, borders, padding – remember the box model

- Margins – space added around an element's border
- Can set all margins, or one side at a time  
`margin: <length> <percentage> auto`
- Margins may be negative. If use `auto`, browser chooses margins.
- Example:

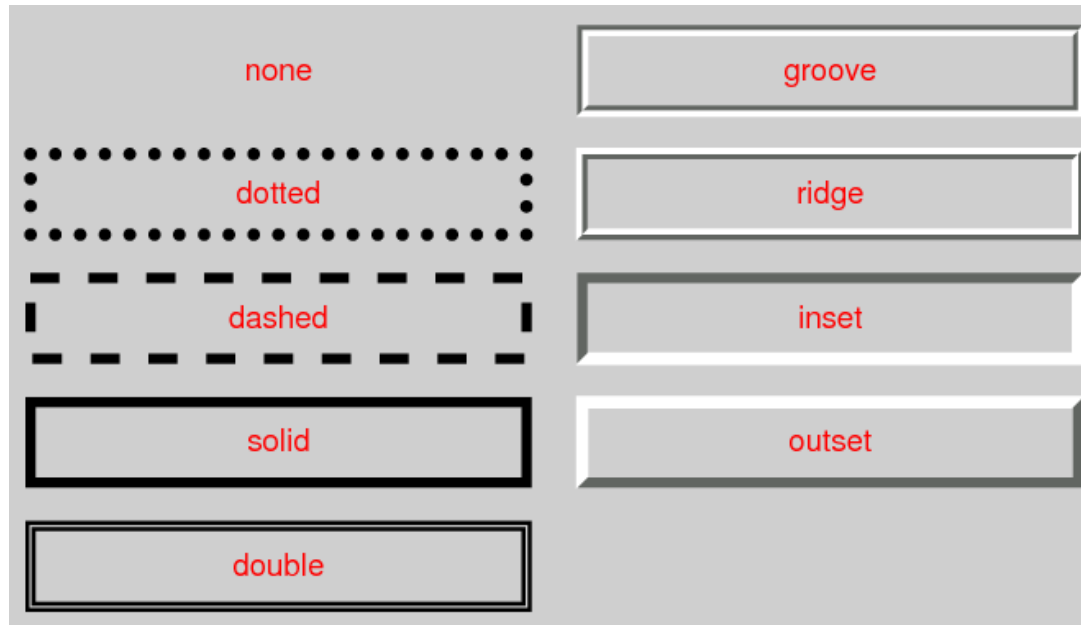
```
h1 {margin-top: 3px; }
```

# Combining four side margins

- `{margin: top right bottom left;}`
- `{margin: top left/right bottom;}`
- `{margin: top/bottom left/right;}`
- `{margin: top/bottom/left/right;}`
- **Examples:**
  - To set four margins
    - `{margin: 3px 20px 3px 20px;}`
  - To set top/bottom and left/right
    - `{margin: 3px 20px;}`
  - To set four margins the same
    - `{margin: 20px;}`

# Borders

- `border-style` (appearance of border) – dotted, dashed, solid, double, groove, ridge, inset, outset



# Borders

- `border-width (thickness)` –  
`thin, medium, thick, <length>`
- `border-color` – `<color>`,  
`transparent`
- **Border properties may be also side specific**  
(e.g. `border-style-top`)

# Combining border style, width, color

Border(or border-side): style,  
width, color

- Examples:

```
h1{border-left: .5em solid blue;}
```

```
p.example {border: 2px dotted #666633;}
```

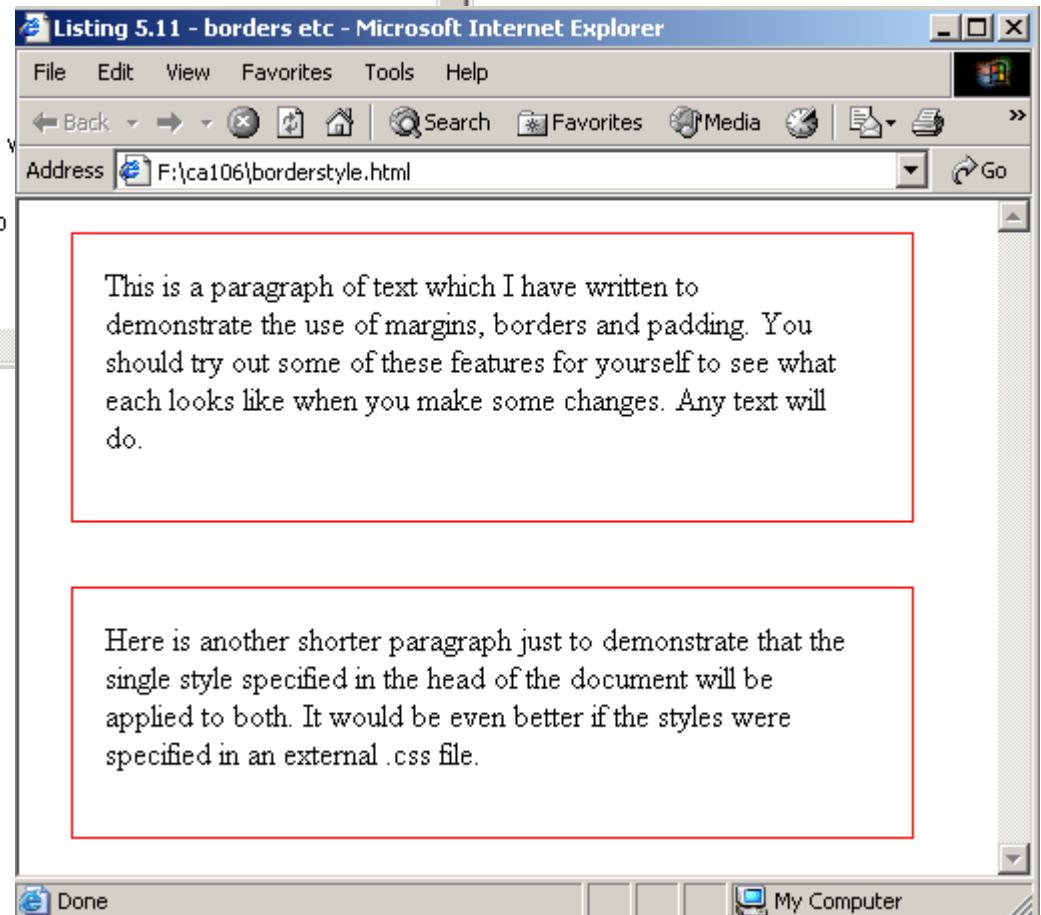
# Padding

- Padding can be added to any element - usually add some padding if there is a border
- Can be side specific
- Example

```
h2 {padding: 4px; }
```

# Example of margin, borders, padding

```
borderstyle - Notepad
File Edit Format Help
<html>
<head>
  <title>Listing 5.11 - borders etc</title>
  <style type="text/css" media="screen">
    p { margin: 1em 2em 2em 1em; }
    p { border: 1px solid red; }
    p { padding: 1em 2em 2em 1em; }
  </style>
</head>
<body>
<p>
  This is a paragraph of text which I have written to
</p>
<p>
  Here is another shorter paragraph just to demonstrate that the
</p>
</body>
</html>
```



# Backgrounds

- To set background colour:

```
background-color: <color> transparent
```

- Can apply background colour (or image) to any element – whole document, single paragraph etc. Can easily avoid repeating tile pattern of HTML.
- Syntax for background image:

```
– background-image: <url>
```

```
Example: {background-image: url(bluehills.gif);}
```

# Backgrounds

- **Background Tiling (repeat)**

```
{background-repeat: repeat repeat-x  
repeat-y no-repeat}
```

- **Position**

```
{background-position: percentage <length> left  
center right top bottom} etc.
```

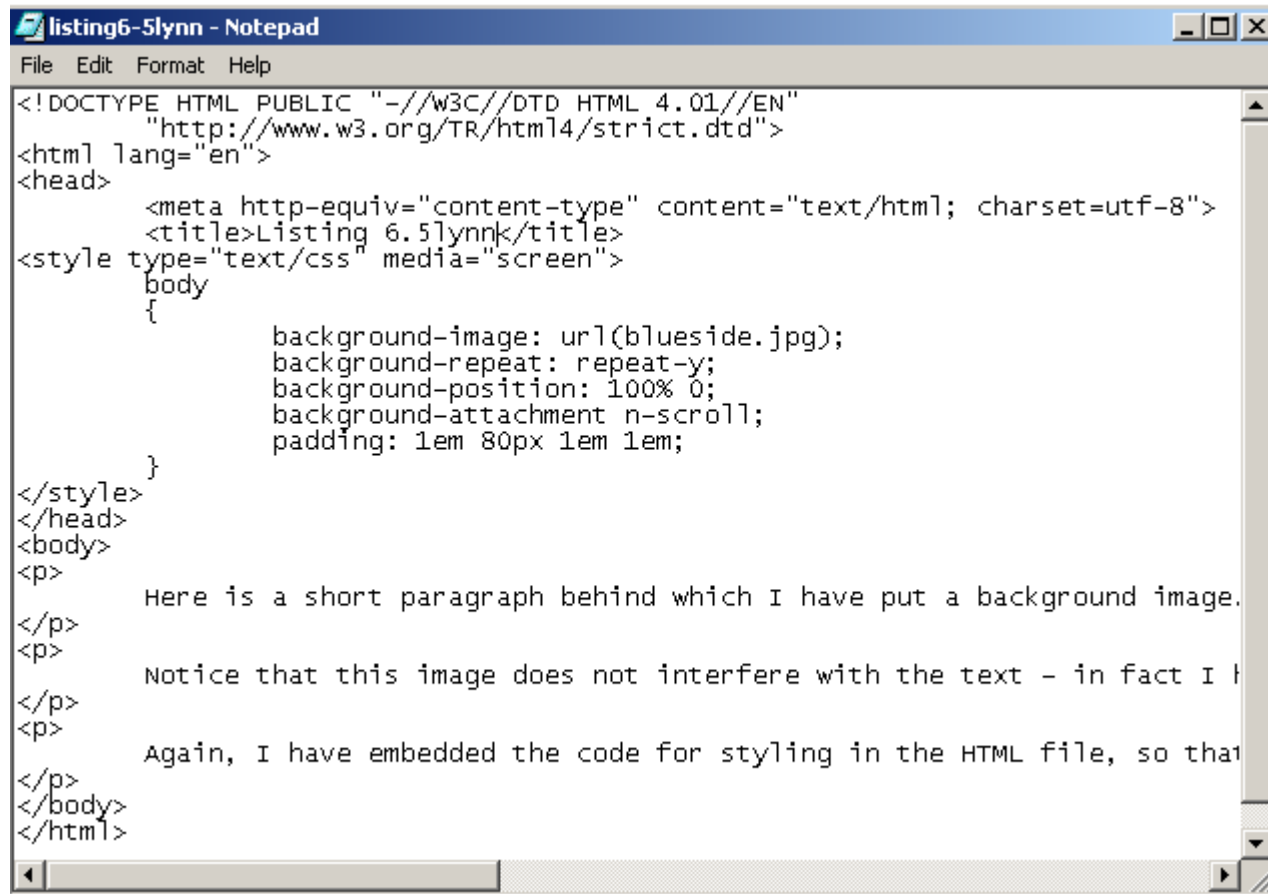
- **Background scrolling**

```
{background-attachment: scroll fixed}
```

# Combining background properties

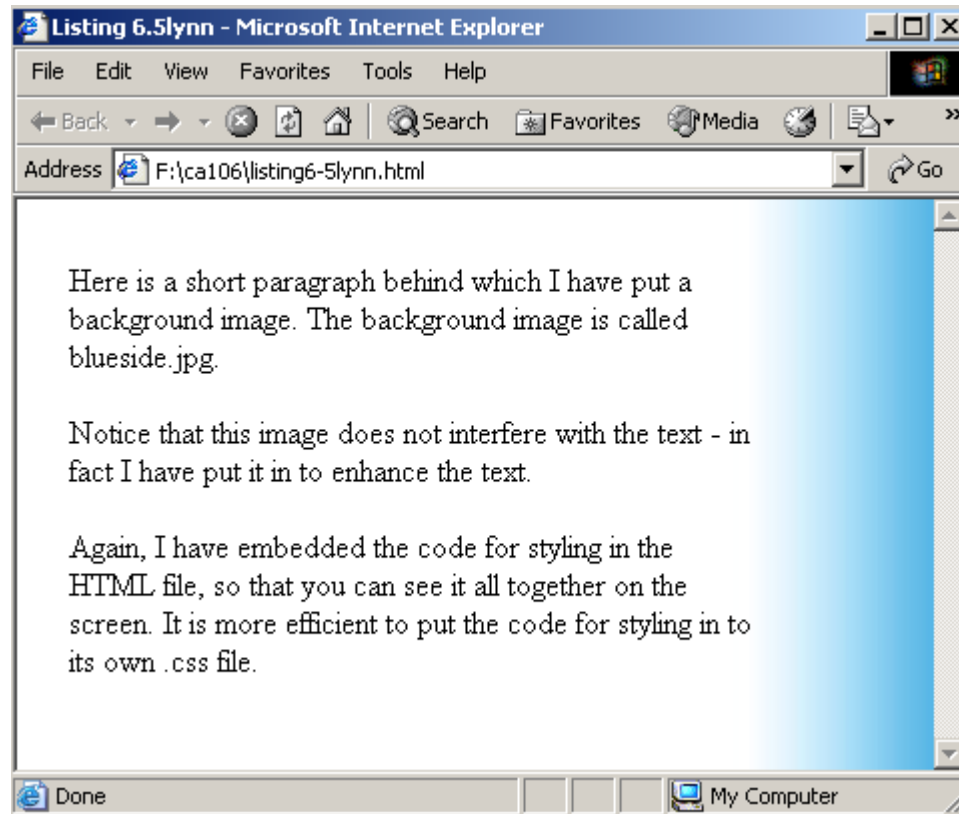
- `background: <background-color>  
<background-image> <background-repeat>  
<background-attachment> <background-position>`
- **Example**
- `{background: url(blueside.jpg: fixed  
top center no-repeat}`

# Example – background image style



```
listing6-5lynn - Notepad
File Edit Format Help
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
    "http://www.w3.org/TR/html4/strict.dtd">
<html lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=utf-8">
  <title>Listing 6.5lynn</title>
<style type="text/css" media="screen">
  body
  {
    background-image: url(blueside.jpg);
    background-repeat: repeat-y;
    background-position: 100% 0;
    background-attachment: n-scroll;
    padding: 1em 80px 1em 1em;
  }
</style>
</head>
<body>
<p>
  Here is a short paragraph behind which I have put a background image.
</p>
<p>
  Notice that this image does not interfere with the text - in fact I h
</p>
<p>
  Again, I have embedded the code for styling in the HTML file, so that
</p>
</body>
</html>
```

# Background image - view



# Foreground Colour

- `color` property used to describe text colour of an element.
- This colour is also used for element's border (if it has one).

# div and span elements

- `<div>` and `<span>` used to group and structure a document . Often used with attributes `class` and `id`.
- `<span>` is HTML element with no structural meaning – allows you to apply style in HTML

# Floating and Positioning

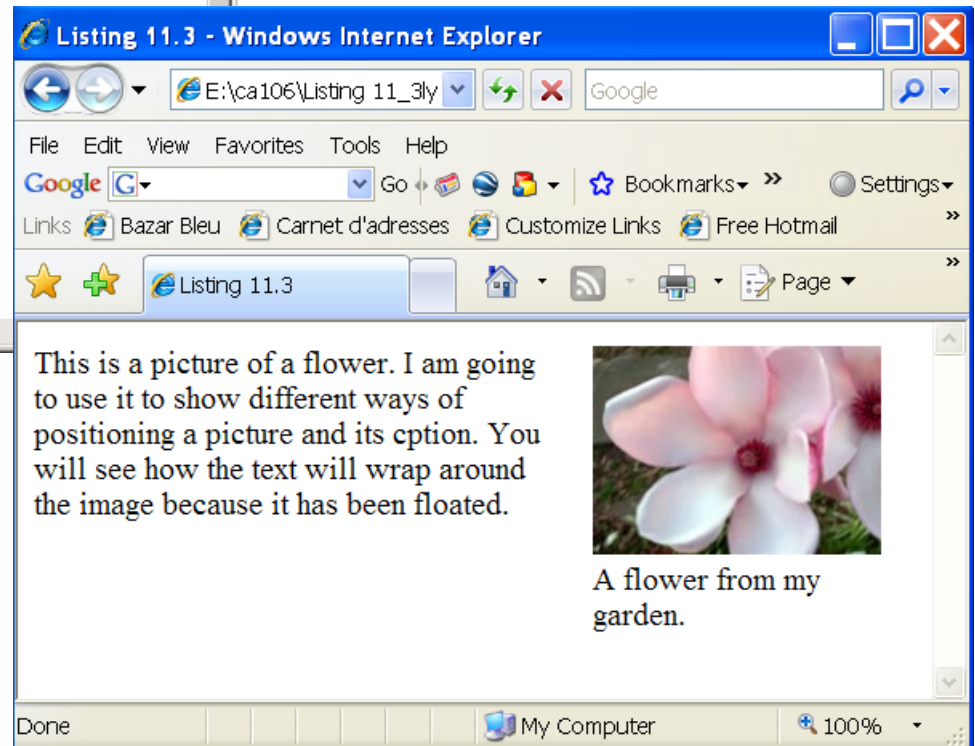
- Control positioning of elements
- Normal flow of document
  - Left to right
  - Top to bottom
- Any element can be floated
- Floating – e.g. align image and let text flow around it
- Floated elements are separated from normal flow

# Positioning

- Element positioning may be
  - Static - normal
  - Relative – element moves, its space is preserved
  - Absolute – positioned relative to container rather than document
  - Fixed – element stays put when document scrolls
- **Containing block** – think of every element as being contained in a box/container (the box model)

# Floating the container of an image of the right- example

```
listing11-3lynn - Notepad
File Edit Format Help
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
<html lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=utf-8">
  <title>Listing 11.3</title>
<style type="text/css" media="screen">
  div.imagecaption
  {
    float: right;
    width: 182px;
    margin: 0 1em 1em 1em;
    display: inline;
  }
</style>
</head>
<body>
<div class="imagecaption">
  
  A flower from my garden.
</div>
<p>
This is a picture of a flower. I am going to
use it to show different ways of positioning a picture
and its caption. You will see how the text will wrap
around the image because it has been floated.
</p>
</body>
```



# Styling captions, applying margins, padding backgrounds etc. - example

```
listing11-7 - Notepad
File Edit Format View Help
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
"http://www.w3.org/TR/html4/strict.dtd">
<html lang="en">
<head>
<meta http-equiv="content-type" content="text/html";
<title>Listing 11.7</title>
<style type="text/css" media="screen">
div.imagecaption
{
float: right;
width: 302px;
margin: 0 1em 1em 1em;

padding: 10px;
background: #036;
color: #fff;
}

div.imagecaption img
{
float: right;
margin-left: 1em;
border: 1px solid #fff;
}
</style>
</head>
<body>
<div class="imagecaption">

A flower from my garden.
</div>
<p>This is a picture of a flower. I am going to
use it to show different ways of positioning a picture
and its caption. You will see how the text will wrap
around the image because it has been floated.
</p>
</body>
</html>
```

