

# **Cascading Style Sheets, part II**

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Web Design in a Nutshell, Third Edition

Chapters 18, 19, 20, 21, and 23

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# Objectives

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- Understand type design principles
  - Understand Cascading Style Sheets (CSS) measurement units
  - Use the CSS font properties
  - Use the CSS text properties
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# Understanding Type Design Principles

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- Choose fewer fonts and sizes
  - Choose available fonts
  - Design for legibility
  - Avoid using text as graphics
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# Basic Use of Fonts and Type Characteristics

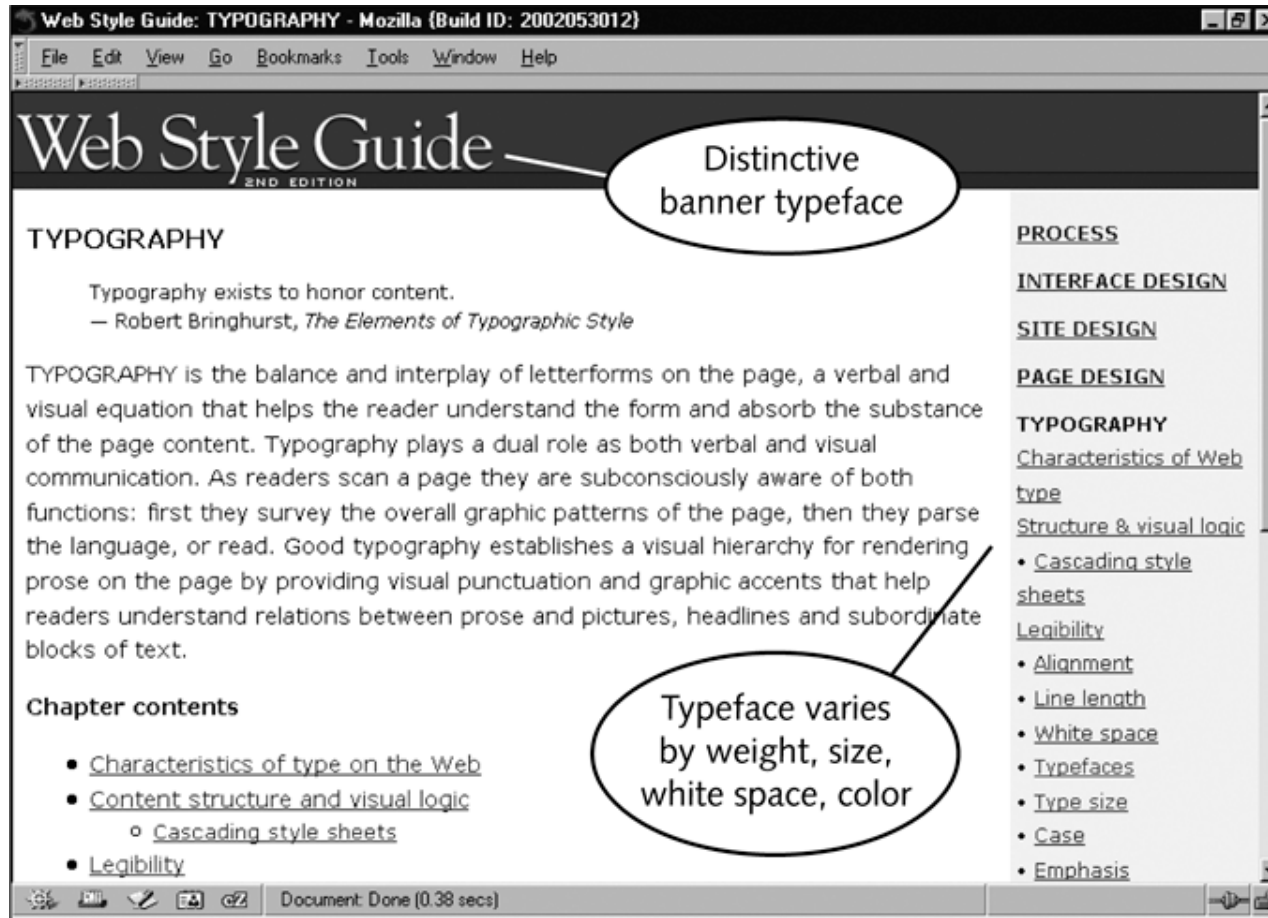


Figure 7-1 Effective typographic design

# Serif vs. Sans-Serif Type Faces

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**Figure 7-2** Serif and sans-serif type

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# Common Installed Fonts

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**Table 7-1** Common installed fonts

Common PC Fonts	Common UNIX Fonts	Common Macintosh Fonts
Arial	Helvetica	Helvetica
Courier New	Times	Courier
Times New Roman		Palatino
Trebuchet MS		Times
Verdana		Verdana Arial

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# Common Font Families

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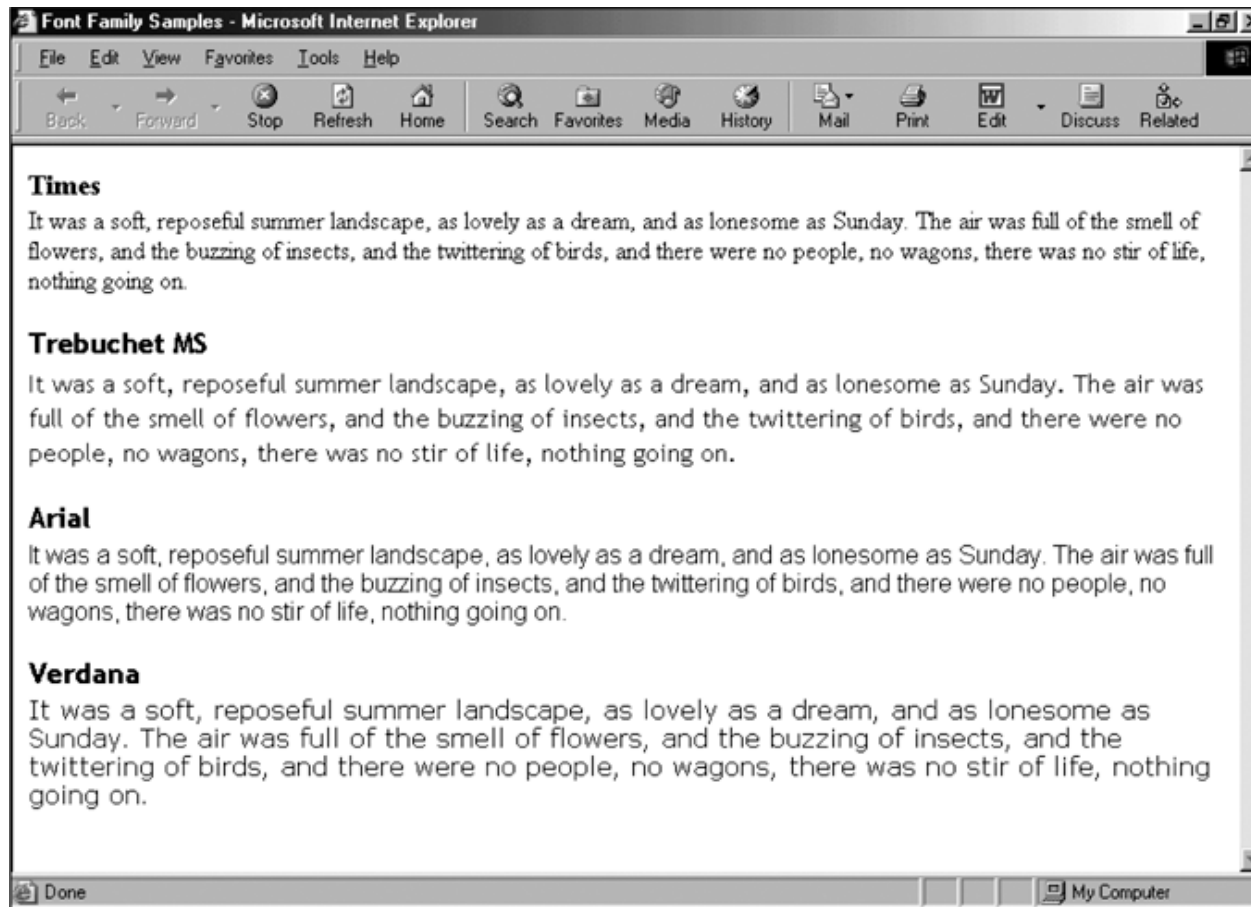


Figure 7-3 Common Web font families

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# Understanding CSS Measurement Units

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- CSS offers a variety of measurement units, almost to the point of offering too many choices
  - For example, to specify font size, you can use any of the measurement units listed in the following table
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# CSS Measurement Units

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**Table 7-2** CSS measurement units

Unit	Unit Abbreviation	Description
<b>Absolute Units</b>		
Centimeter	cm	Standard metric centimeter
Inch	in	Standard U.S. inch
Millimeter	mm	Standard metric millimeter
Pica	pc	Standard publishing unit equal to 12 points
Point	pt	Standard publishing unit, with 72 points in an inch
<b>Relative Units</b>		
Em	em	The width of the capital M in the current font, usually the same as the font size
Ex	ex	The height of the letter x in the current font
Pixel	px	The size of a pixel on the current monitor
Percentage	For example: 150%	Sets a font size relative to the base font size; 150% equals 1.5 times the base font size

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# Understanding CSS Measurement Units

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- Absolute Units
  - Specify a fixed value

**P {margin: 1.25in; font-size 12px;}**

- Cannot be scaled to client display
  - Should only be used when exact measurements of destination medium are known
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# Understanding CSS Measurement Units

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- Relative Units
    - Enables scalable Web pages that adapt to different display types and sizes
    - Recommended method for Web page design
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# Understanding CSS Measurement Units

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- Relative measurement values such as em and px are designed to let you build scalable Web pages that adapt to different display types and sizes.
  - The W3C recommends that you always use relative values.
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# Using the CSS Font Properties

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- font-family
  - font-size
  - font-style
  - font-variant
  - font-weight
  - font (shorthand property)
-

# Specifying Font Family

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- Allows specification of generic font family names (e.g., sans-serif) or a specific name (e.g., arial)

```
p {font-family: sans-serif;}
```

```
p {font-family: arial;}
```

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# Specifying Font Size

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- The following rule sets the `<p>` element to 1.5em Arial:

```
p {font-family: arial; font-size: 1.5em;}
```

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# Specifying Font Style

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- The font-style property lets you specify italic or oblique text.

```
p {font-style: italic;}
```

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# Specifying Font Variant

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- The font-variant property lets you define small capitals, which are often used for chapter openings, acronyms, and other special purposes.

```
h1 {font-variant: small-caps;}
```

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# Specifying Font Weight

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- The font-weight property lets you set the weight of the typeface.

```
p {font-weight: bold;}
```

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# Using the Font Shortcut Property

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- The font shortcut property lets you abbreviate the more verbose individual property listings. The following rules produce the same results.

```
p {font-weight: bold; font-size: 18pt; line-height:  
    24pt; font-family: arial;}
```

```
p {font: bold 18pt/24pt arial;}
```

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# CSS Text Properties

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- text-indent
  - text-align
  - text-decoration
  - text-shadow
  - line-height
  - vertical-align
  - letter-spacing
  - word-spacing
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# Specifying Text Indents

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- Use the text indent property to set the amount of indentation for the first line of text in an element, such as a paragraph. The following rule sets an indent of 24 points:

```
p {font-family: text-indent: 24pt;}
```

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# Text Indents

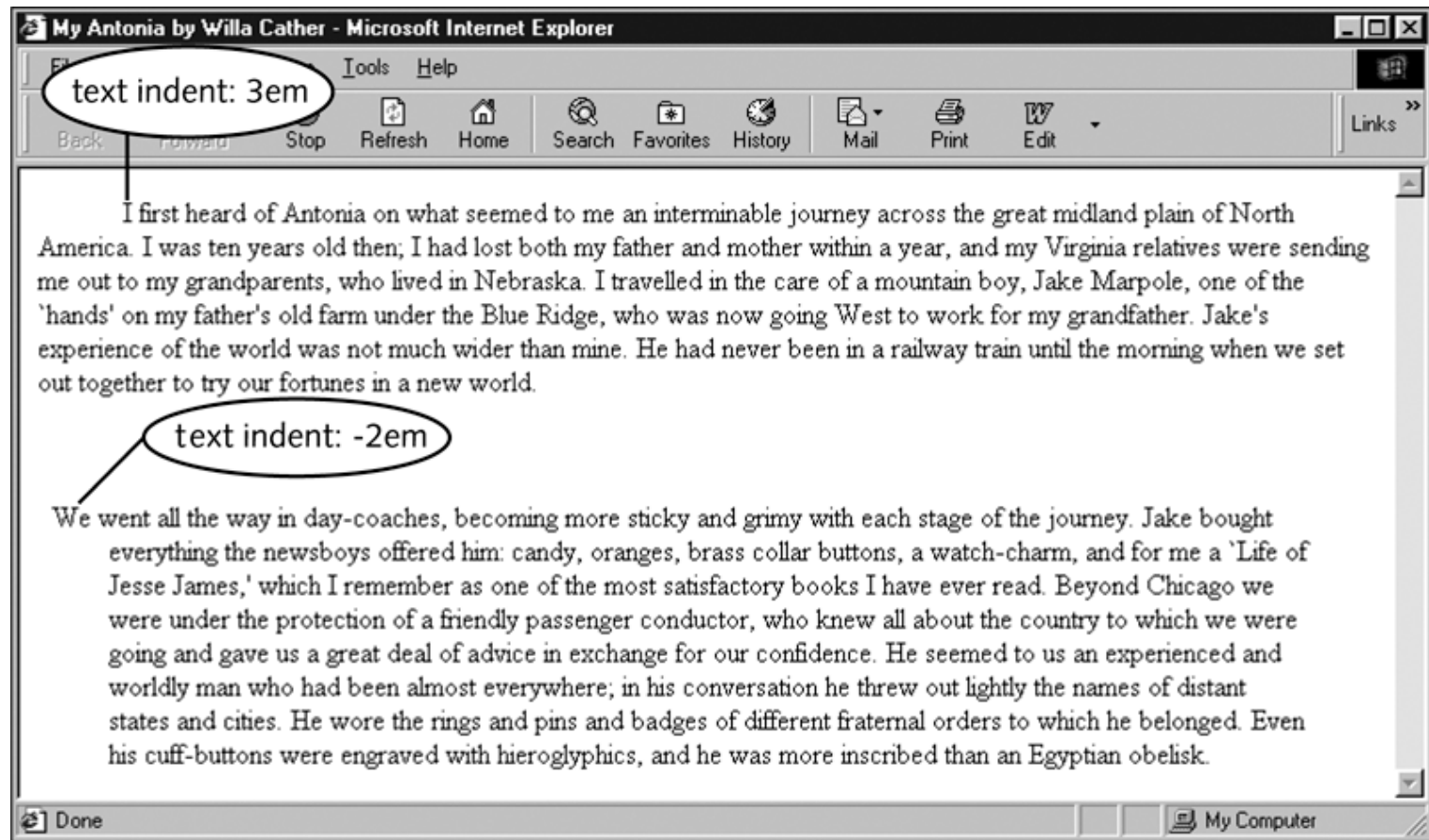


Figure 7-7 Text indents

# Specifying Text Alignment

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- Use the `text-align` property to set horizontal alignment for the lines of text in an element.

```
p {text-align: justify}
```

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# Text Alignment

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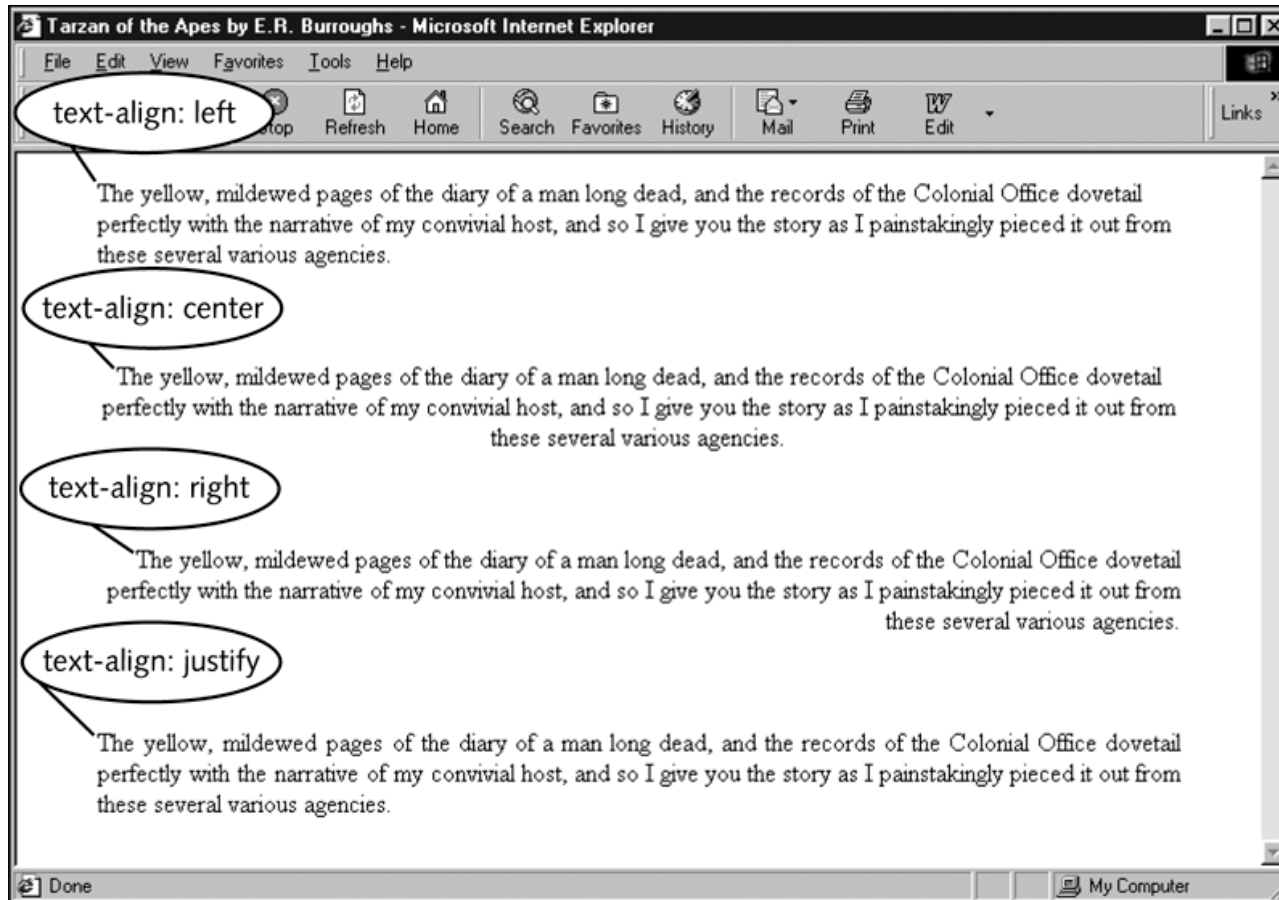


Figure 7-8 Text alignments

# Specifying Text Decoration

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- Use the text-decoration property to add or remove underlining from text. The following code removes the underlining from hypertext links.

```
a {text-decoration: none}
```

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# Specifying Text Decoration

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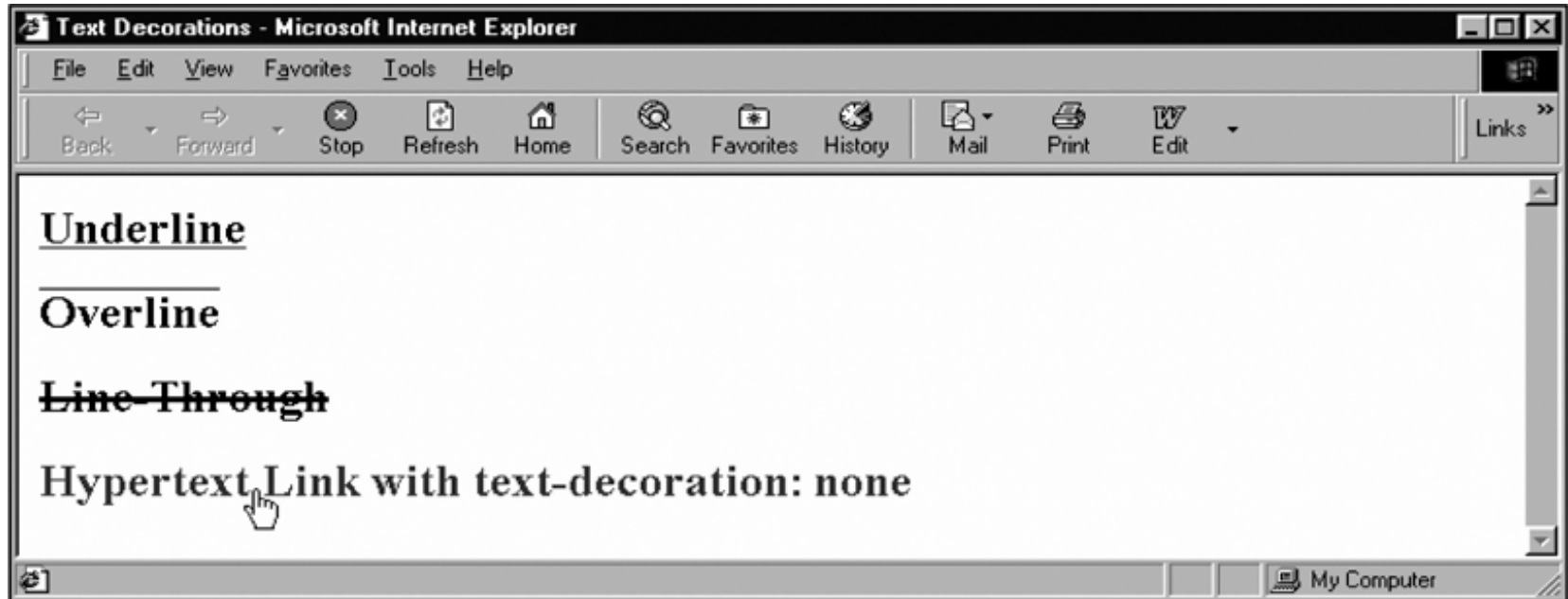


Figure 7-9 Text decorations

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# Specifying Text Shadow

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- Use the text-shadow property to add drop shadows that are supported in some browsers, like Safari

```
#header{ text-shadow: #333 3px 3px 3px; }
```

**Safari supports this property...**



*Putting HDTV  
on the map  
in Oklahoma*

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# Specifying Text Shadow

---

- Use the text-shadow property to add drop shadows that are supported in some browsers, like Safari

```
#header{ text-shadow: #333 3px 3px 3px; }
```

**Firefox does not support this property...**



*HDTV  
on the map  
in Oklahoma*

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# Specifying Line Height

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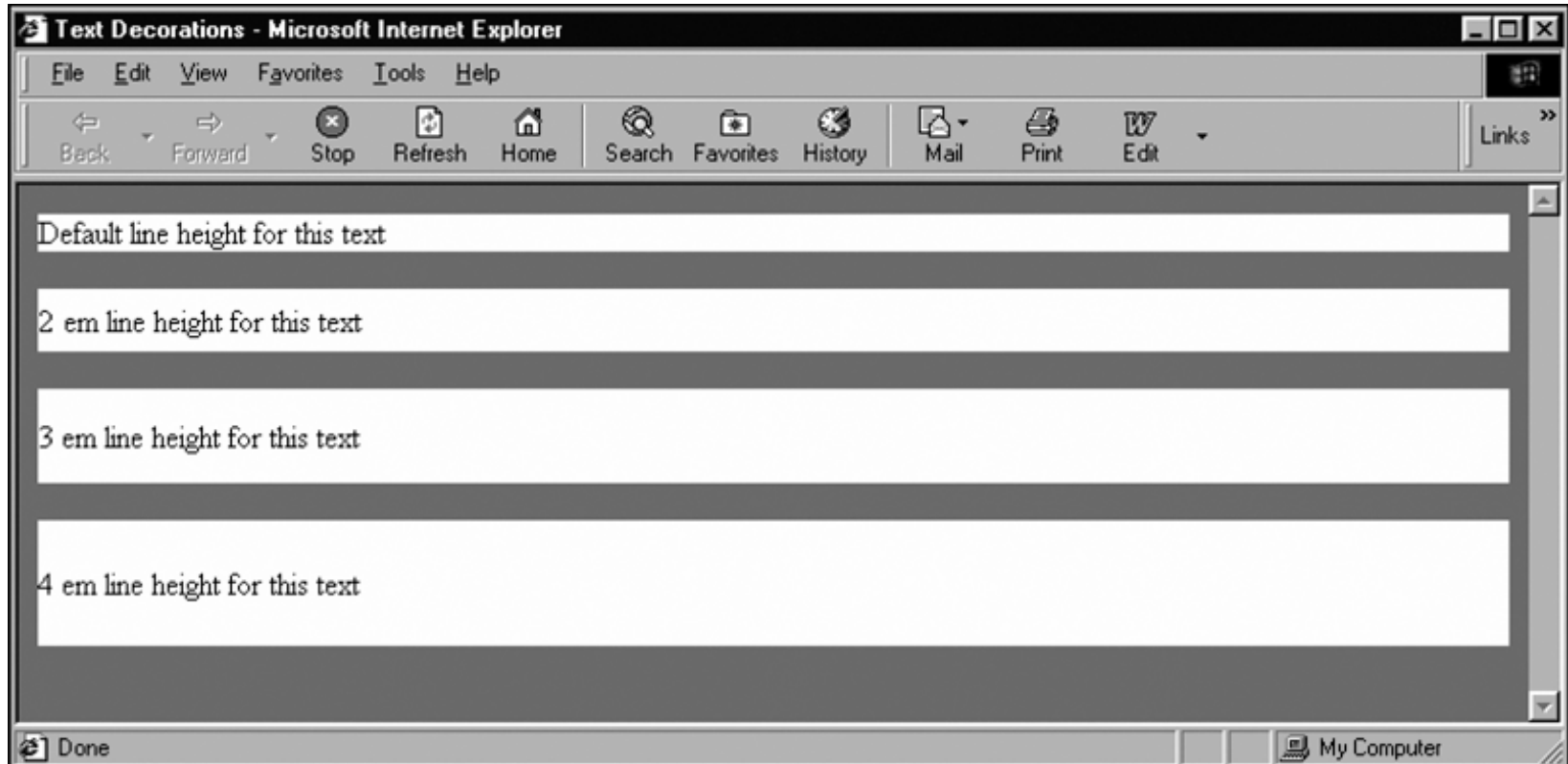
- CSS allows you to specify either a percentage or absolute value for the line height, which is more commonly called leading. The following rule sets the line height to 2 em:

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

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# Web Leading

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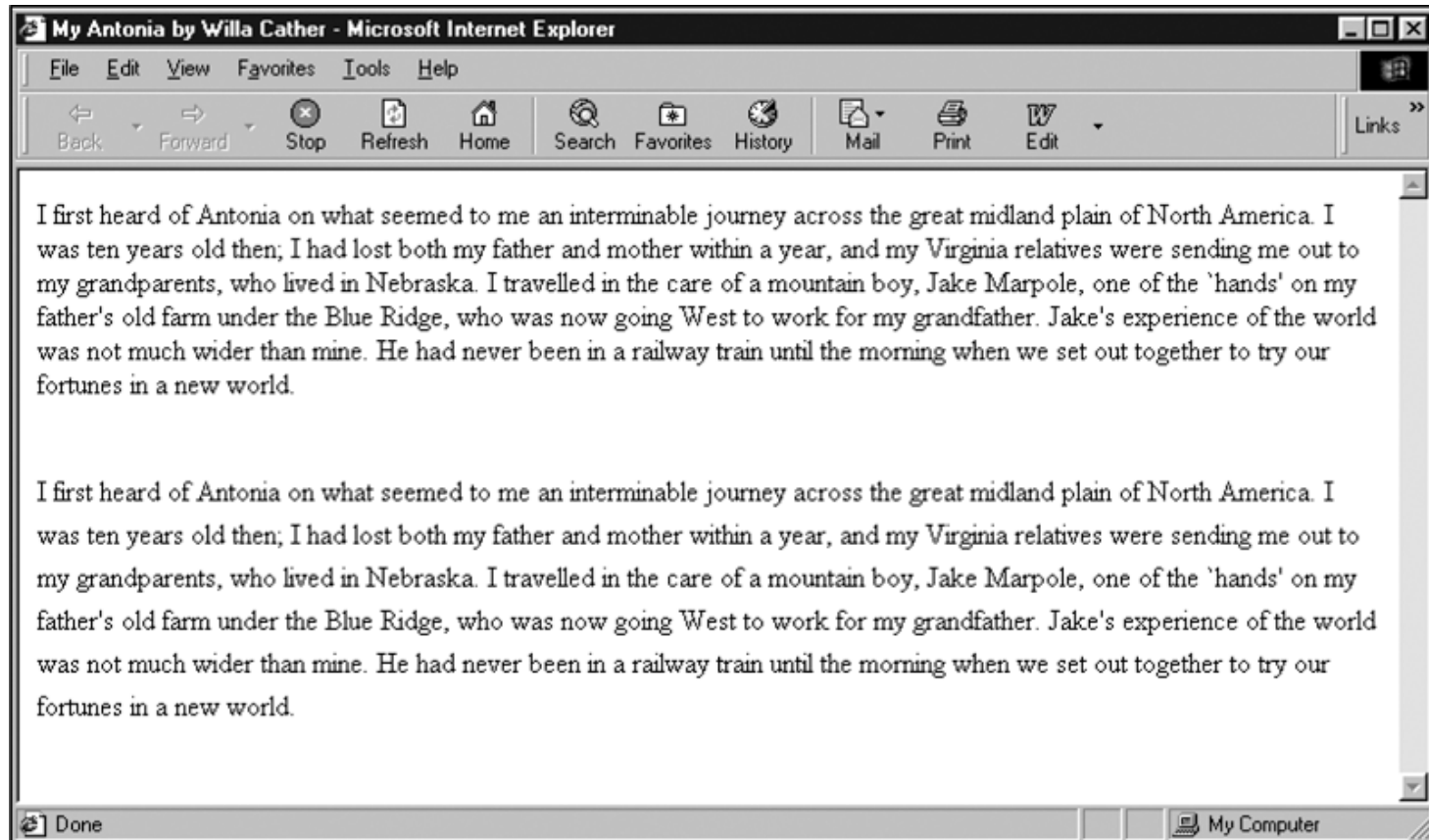


**Figure 7-10** Line height

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# Adjusting Leading Increases Legibility

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**Figure 7-11** Adjusting line height increases legibility

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# Specifying Vertical Alignment

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- The vertical-align property lets you adjust the vertical alignment of text within the line box.
  - Vertical-align works on inline elements only.
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# Vertical Align Properties

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**Table 7-5** Vertical-align property values

Value	Definition
baseline	Align the baseline of the text with the baseline of the parent element.
sub	Lower the baseline of the box to the proper position for subscripts of the parent's box; this value does not automatically create a smaller font size for the subscripted text.
middle	The CSS2 specification defines "middle" as "the vertical midpoint of the box with the baseline of the parent box plus half the x-height of the parent"; realistically, this means the middle-aligned text is aligned to half the height of the lowercase letters.
super	Raise the baseline of the box to the proper position for superscripts of the parent's box; this value does not automatically create a smaller font size for the superscripted text.
text-top	Align the top of the box with the top of the parent element's font.
text-bottom	Align the bottom of the box with the bottom of the parent element's font.
top	Align the top of the box with the top of the line box.
bottom	Align the bottom of the box with the bottom of the line box.

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# Vertical Alignment

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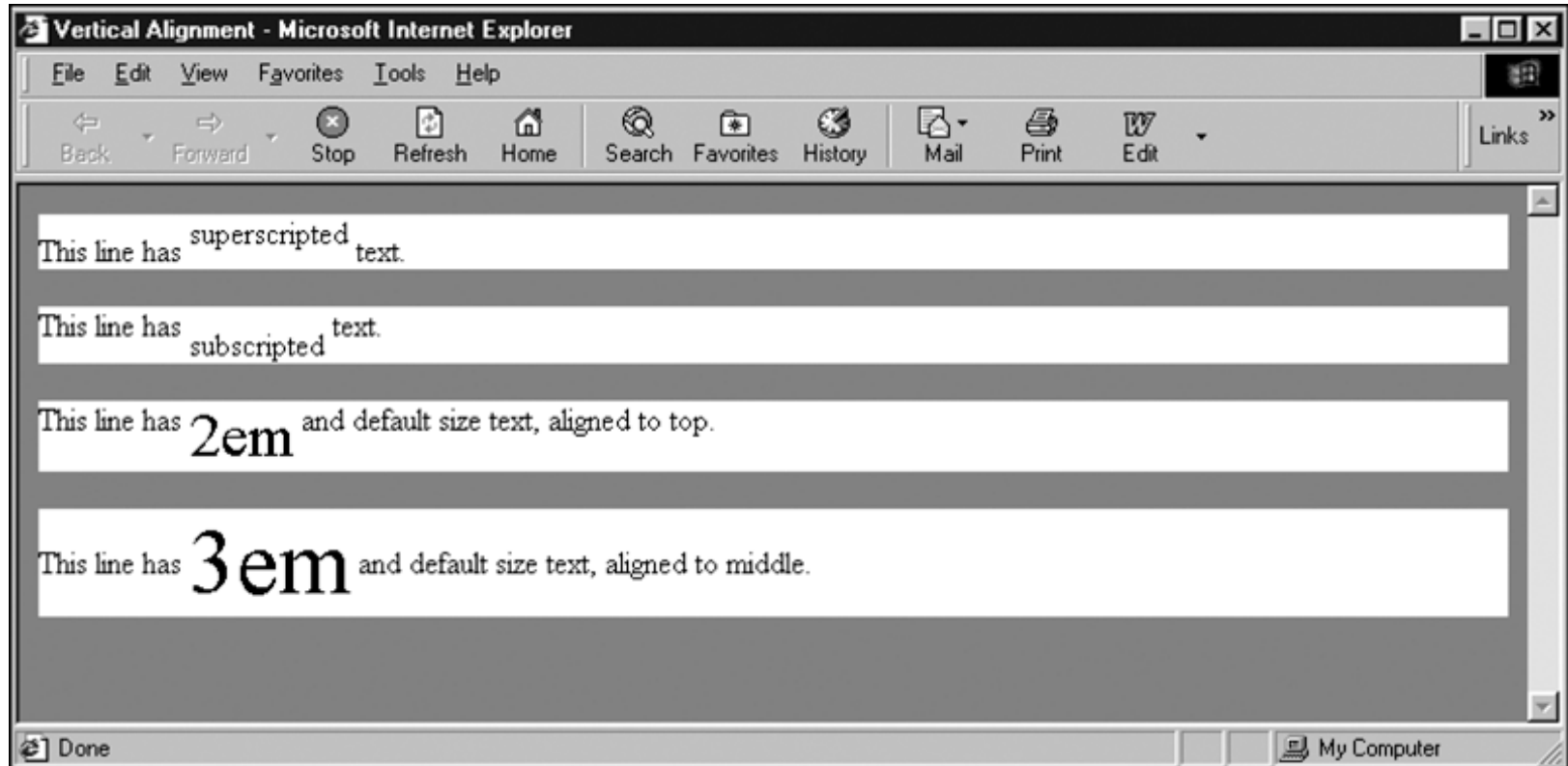


Figure 7-12 Vertical alignments

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# Specifying Vertical Alignment

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- You can also use vertical alignment to align text with graphics. The following rule, added to the `<img>` element with the `style` attribute, sets the vertical alignment to top:

```

```

# Vertically Aligning Text and Graphics

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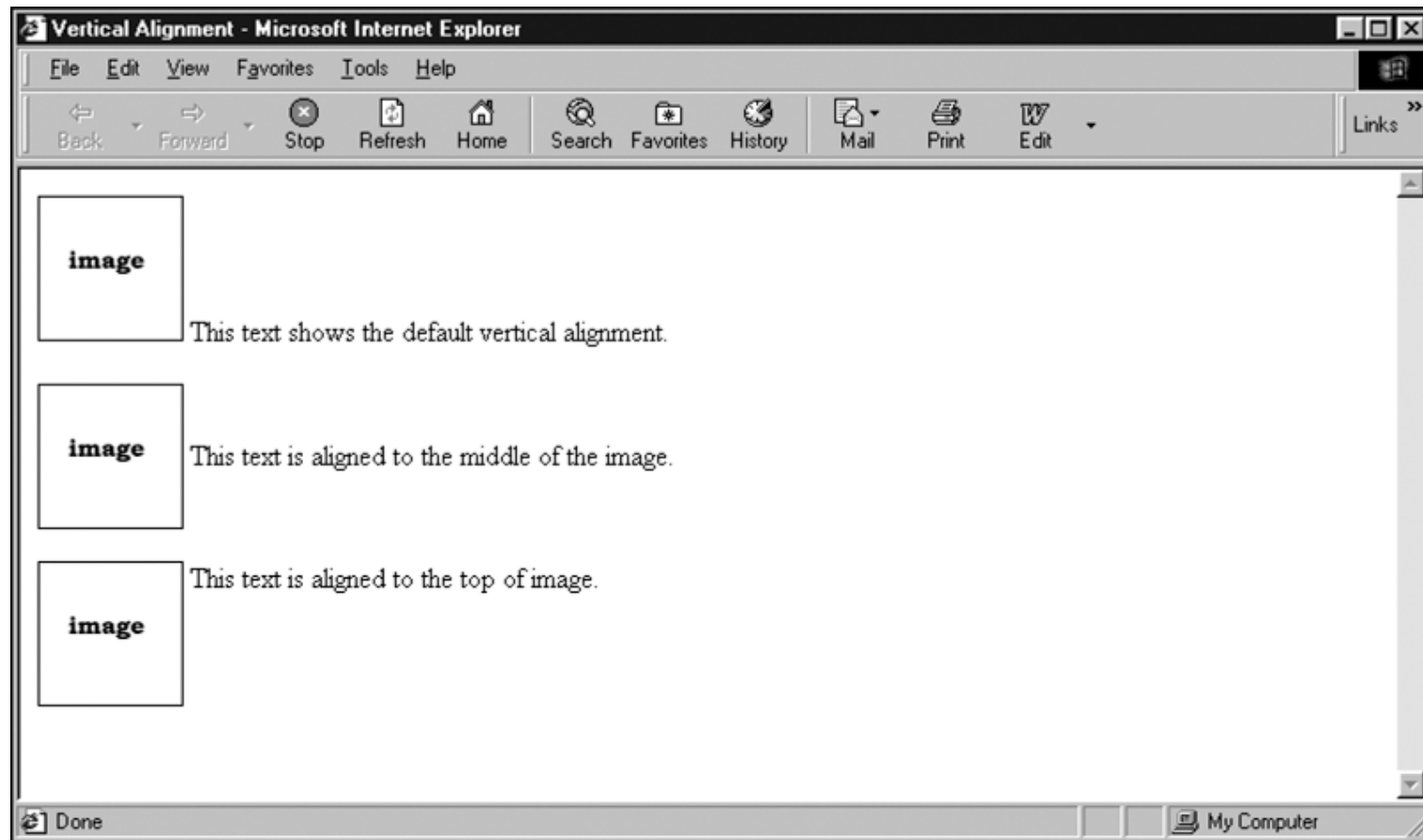


Figure 7-13 Vertically aligning text and graphics

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# Specifying Letter Spacing

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- To adjust kerning, the printer's term for adjusting the white space between letters, use the letter spacing property. The following rule sets the letter spacing to 4 points.

```
h1 {letter-spacing: 4pt;}
```

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# Web Kerning

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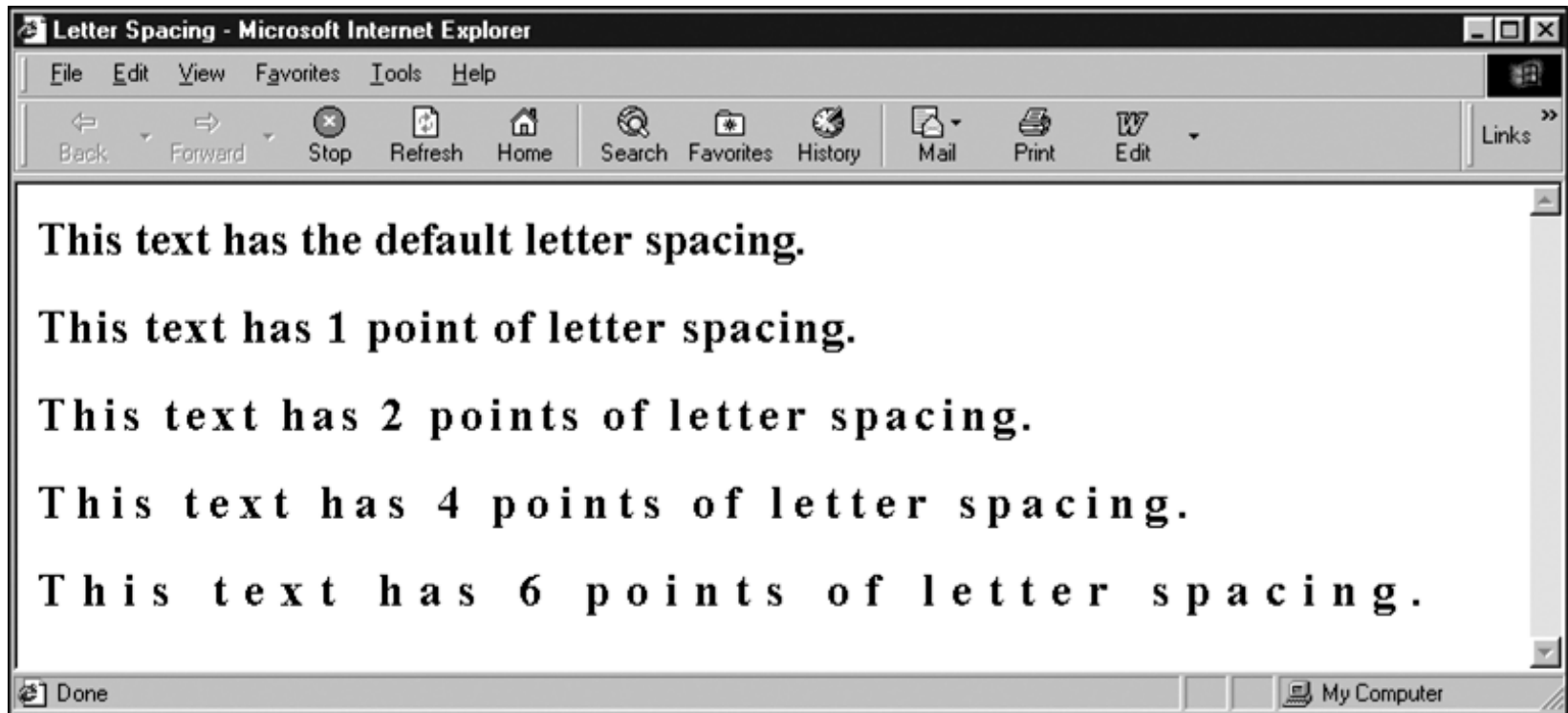


Figure 7-14 Adjusting letter spacing

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# Specifying Word Spacing

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- The word-spacing property lets you adjust the white space between words in the text. The following code sets the word spacing to 2 em.

```
h1 {word-spacing: 2em;}
```

# Adjusting Word Spacing

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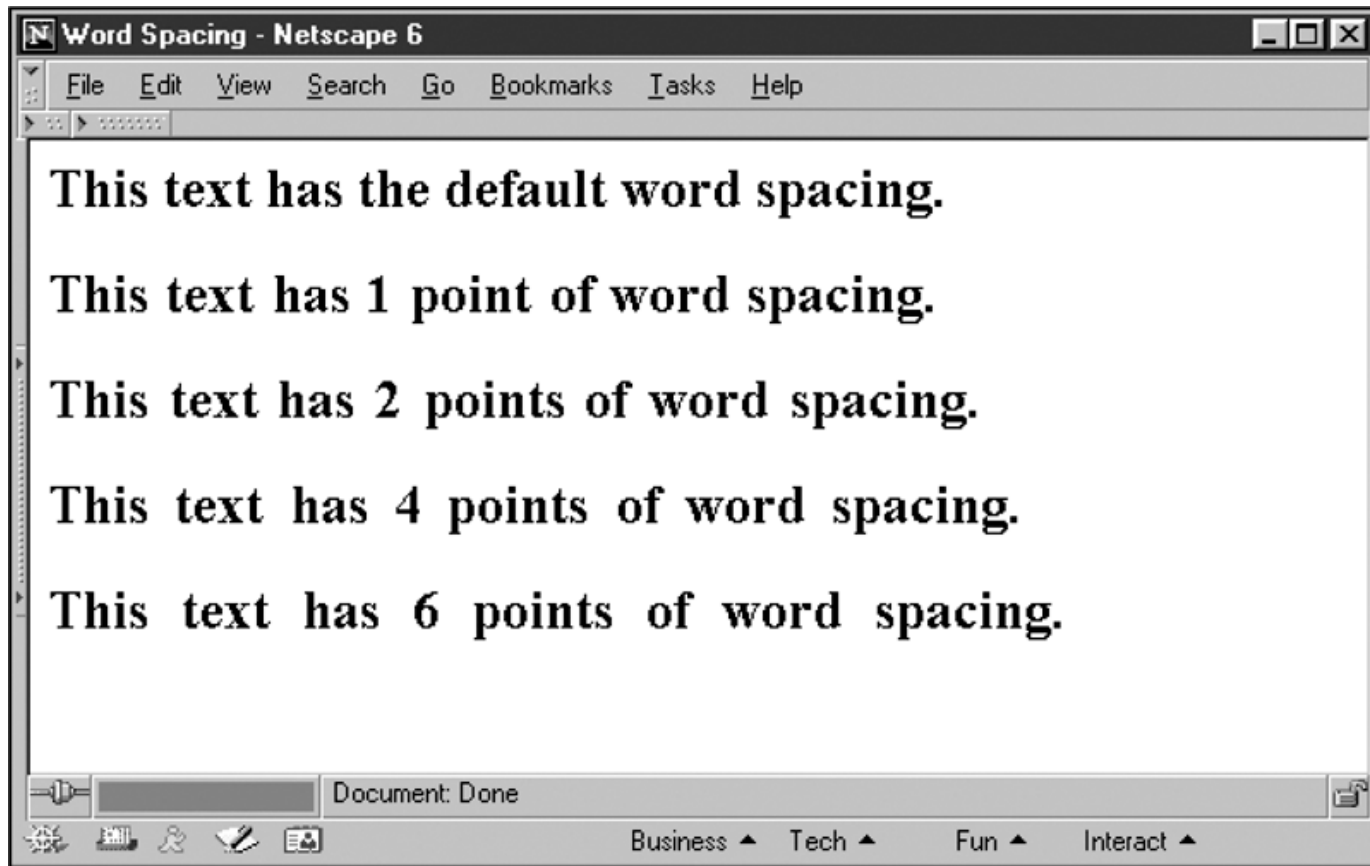


Figure 7-15 Adjusting word spacing

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# Summary

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- Use type to communicate information structure. Be sparing with your type choices, and use fonts consistently.
  - Remember that XHTML text downloads faster than graphics-based text. Use XHTML text whenever possible.
  - Use browser-safe fonts that will display as consistently as possible across operating systems
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# Summary

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- Standardize your styles by building external style sheets and linking them to multiple documents.
  - Test your work. Different browsers and computing platforms render text in different sizes.
  - Use type effectively by choosing available fonts and sizes. Design for legibility and use text to communicate information about the structure of your material.
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# Summary

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- For the computer screen, ems, pixels, or percentage measurements can scale to the user's preferences.
  - Use the font properties to control the look of your letter forms.
  - Use the text spacing properties to create more visually interesting and legible text.
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