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HTML(5) Tutorial

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With HTML you can create your own Web site.

This tutorial teaches you everything about HTML.

HTML is easy to learn - You will enjoy it.

Examples in Every Chapter

This HTML tutorial contains hundreds of HTML examples.

With our online HTML editor, you can edit the HTML, and click on a button to view the result.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Try it Yourself » (tryit.asp?filename=tryhtml_default)

💡 Click on the "Try it Yourself" button to see how it works.

Start learning HTML now! (html_intro.asp)

HTML Examples

At the end of the HTML tutorial, you can find more than 200 examples.

With our online editor, you can edit and test each example yourself.

Go to HTML Examples! (html_examples.asp)

HTML Quiz Test

Test your HTML skills at W3Schools!

Start HTML Quiz! (html_quiz.asp)

HTML References

At W3Schools you will find complete references about tags, attributes, events, color names, entities, character-sets, URL encoding, language codes, HTTP messages, and more.

HTML Tag Reference (/tags/default.asp)

HTML Exam - Get Your Diploma!

(/cert/default.asp)

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More than 10 000 certificates already issued!

Get Your Certificate » (/cert/default.asp)

The HTML Certificate (/cert/default.asp) documents your knowledge of HTML.

The HTML5 Certificate (/cert/default.asp) documents your knowledge of advanced HTML5.

The CSS Certificate (/cert/default.asp) documents your knowledge of advanced CSS.

The JavaScript Certificate (/cert/default.asp) documents your knowledge of JavaScript and HTML DOM.

The jQuery Certificate (/cert/default.asp) documents your knowledge of jQuery.

The PHP Certificate (/cert/default.asp) documents your knowledge of PHP and SQL (MySQL).

The XML Certificate (/cert/default.asp) documents your knowledge of XML, XML DOM and XSLT.

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HTML Introduction

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What is HTML?

HTML is a **markup** language for **describing** web documents (web pages).

- HTML stands for **H**yper **T**ext **M**arkup **L**anguage
- A markup language is a set of **markup tags**
- HTML documents are described by **HTML tags**
- Each HTML tag **describes** different document content

HTML Example

A small HTML document:

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

Try it Yourself » (tryit.asp?filename=tryhtml_intro)

Example Explained

- The **DOCTYPE** declaration defines the document type to be HTML
- The text between **<html>** and **</html>** describes an HTML document
- The text between **<head>** and **</head>** provides information about the document
- The text between **<title>** and **</title>** provides a title for the document
- The text between **<body>** and **</body>** describes the visible page content
- The text between **<h1>** and **</h1>** describes a heading
- The text between **<p>** and **</p>** describes a paragraph

Using this description, a web browser can display a document with a heading and a paragraph.

HTML Tags

HTML tags are **keywords** (tag names) surrounded by **angle brackets**:

`<tagname>content</tagname>`

- HTML tags normally come **in pairs** like <p> and </p>
- The first tag in a pair is the **start tag,** the second tag is the **end tag**
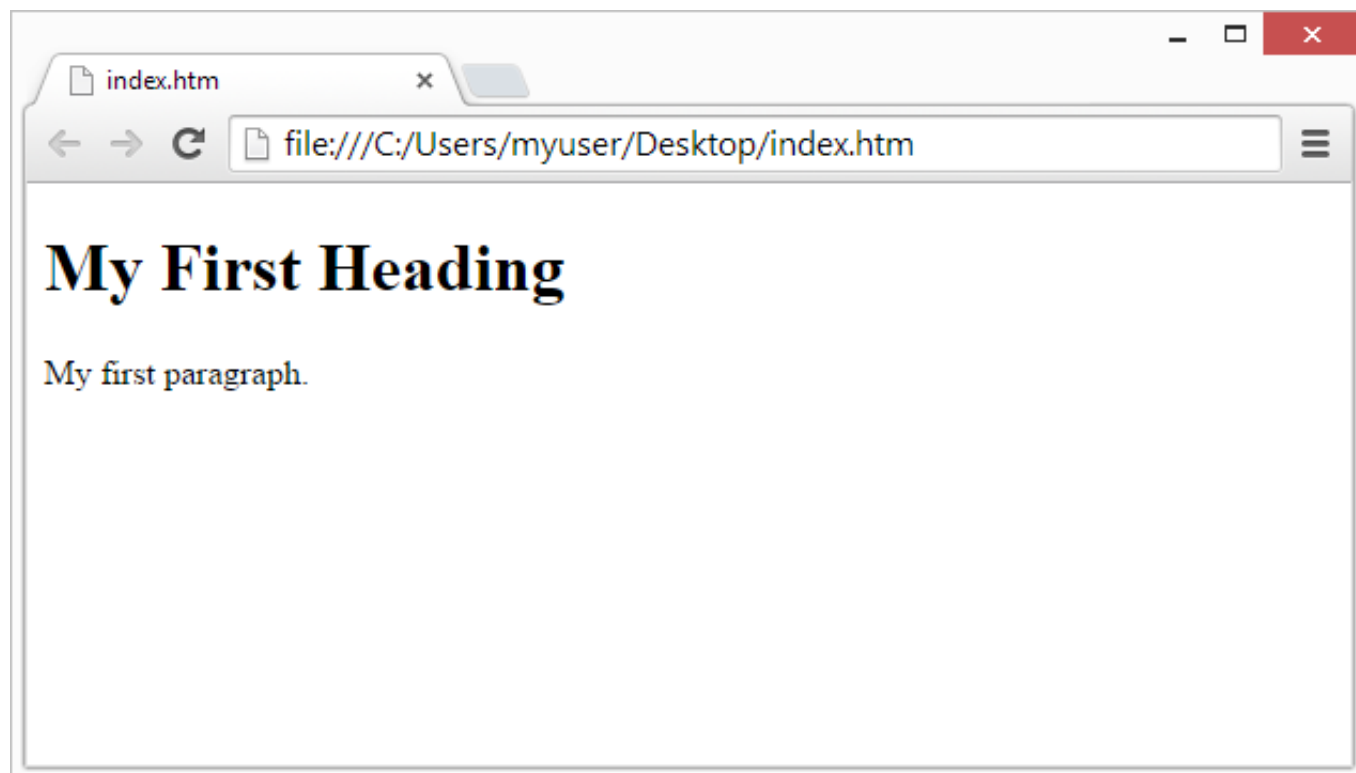- The end tag is written like the start tag, but with a **slash** before the tag name

> 💡 The start tag is often called the **opening tag**. The end tag is often called the **closing tag**.

Web Browsers

The purpose of a web browser (Chrome, IE, Firefox, Safari) is to read HTML documents and display them.

The browser does not display the HTML tags, but uses them to determine how to display the document:

HTML Page Structure

Below is a visualization of an HTML page structure:

```
<html>

    <head>

        <title>Page title</title>

    </head>

    <body>

        <h1>This is a heading</h1>

        <p>This is a paragraph.</p>

        <p>This is another paragraph.</p>

    </body>

</html>
```

💡 Only the <body> area (the white area) is displayed by the browser.

The <!DOCTYPE> Declaration

The <!DOCTYPE> declaration helps the browser to display a web page correctly.

There are different document types on the web.

To display a document correctly, the browser must know both type and version.

The doctype declaration is not case sensitive. All cases are acceptable:

```
<!DOCTYPE html>

<!DOCTYPE HTML>

<!doctype html>

<!Doctype Html>
```

Common Declarations

HTML5

```
<!DOCTYPE html>
```

HTML 4.01

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

XHTML 1.0

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

💡 All tutorials and examples at W3Schools use HTML5.

HTML Versions

Since the early days of the web, there have been many versions of HTML:

Version	Year
HTML	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML5	2014

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HTML Editors

« Previous (html_intro.asp)   Next Chapter » (html_basic.asp)

Write HTML Using Notepad or TextEdit

HTML can be edited by using professional HTML editors like:

- Microsoft WebMatrix
- Sublime Text

However, for learning HTML we recommend a text editor like Notepad (PC) or TextEdit (Mac).

We believe using a simple text editor is a good way to learn HTML.

Follow the 4 steps below to create your first web page with Notepad.

Step 1: Open Notepad

To open Notepad in Windows 7 or earlier:

Click **Start** (bottom left on your screen). Click **All Programs**. Click **Accessories**. Click **Notepad**.

To open Notepad in Windows 8 or later:

Open the **Start Screen** (the window symbol at the bottom left on your screen). Type **Notepad**.

Step 2: Write Some HTML

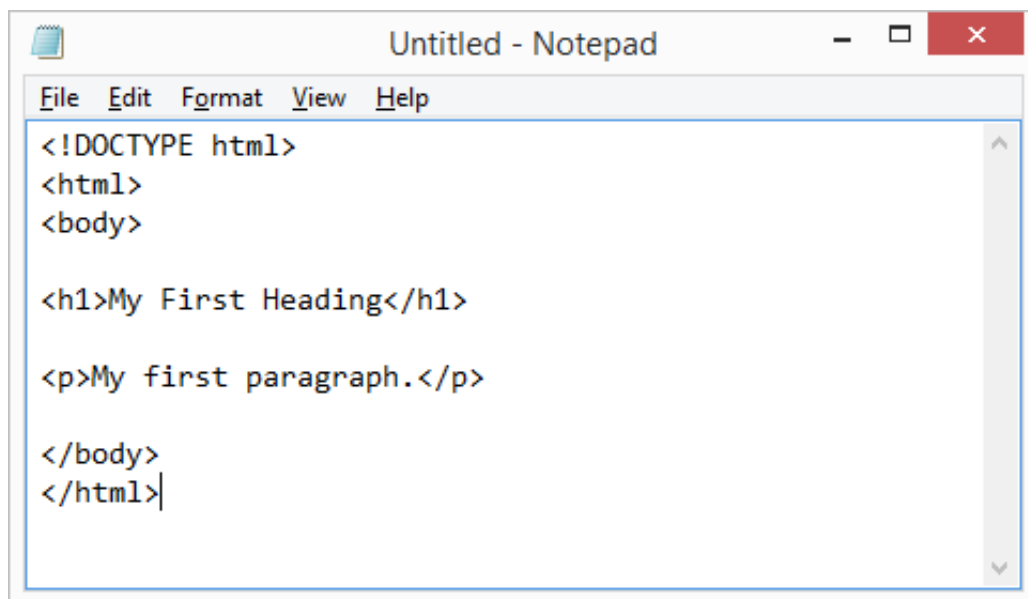Write or copy some HTML into Notepad.

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```
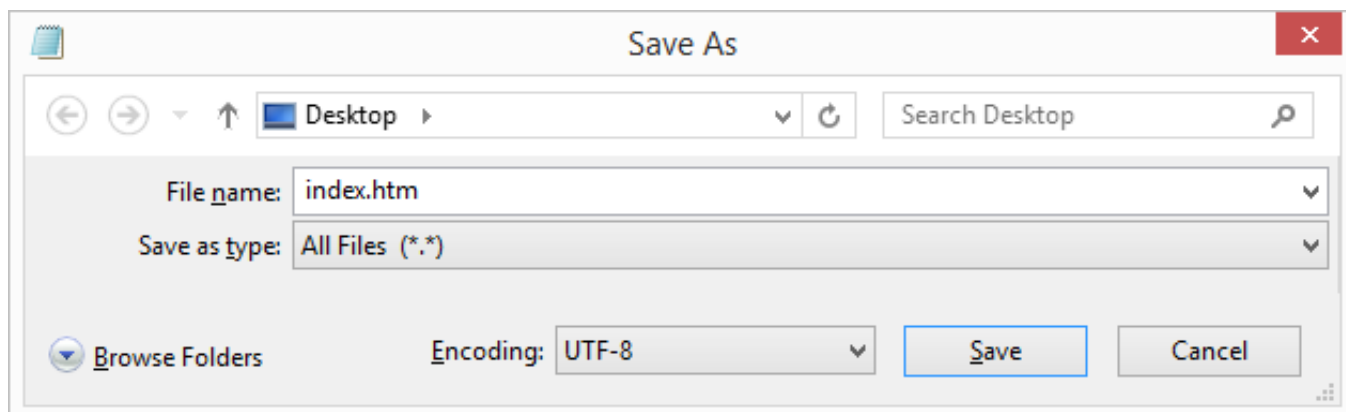
Step 3: Save the HTML Page

Save the file on your computer.

Select **File > Save as** in the Notepad menu.

Name the file "index.html" or any other name ending with html or htm.
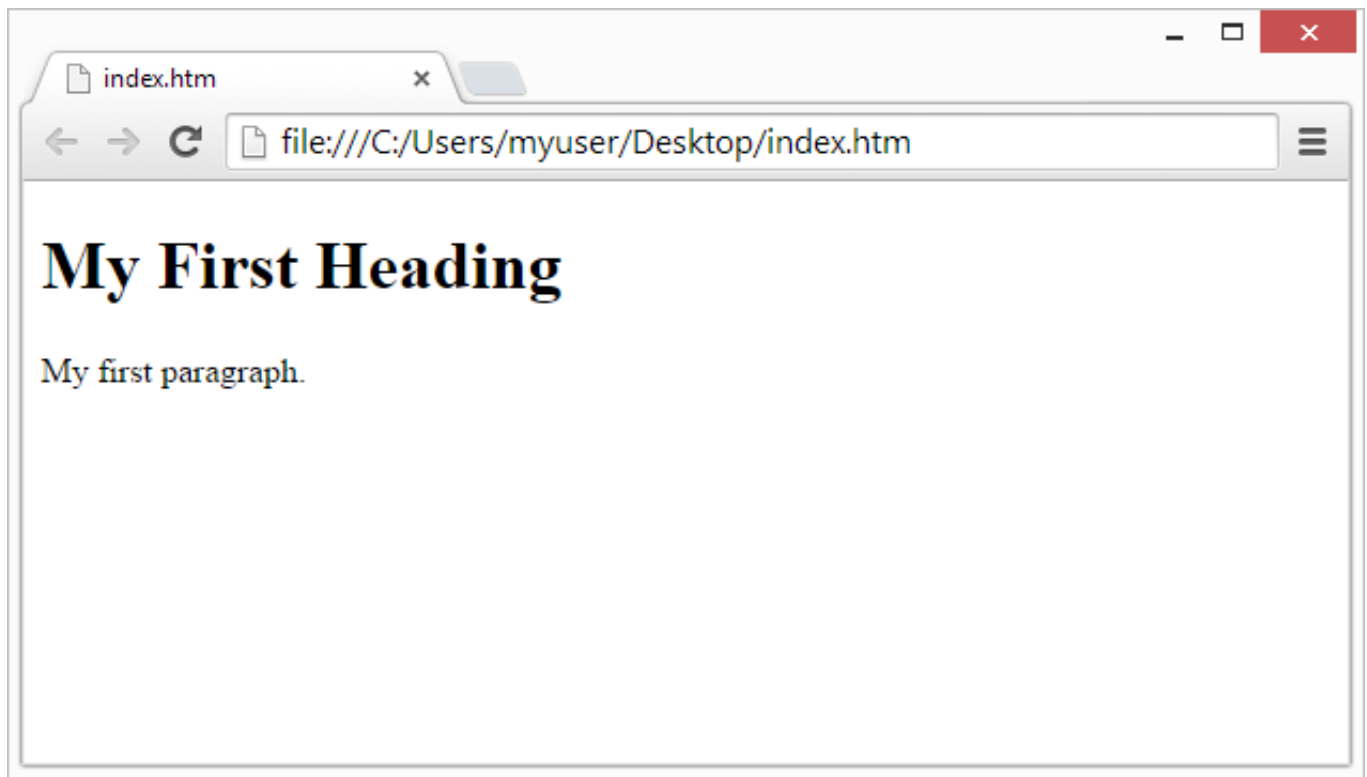
UTF-8 is the preferred encoding for HTML files.

ANSI encoding covers US and Western European characters only.

💡 You can use either .htm or .html as file extension. There is no difference, it is up to you.

Step 4: View HTML Page in Your Browser

Open the saved HTML file in your favorite browser. The result will look much like this:

My First Heading

My first paragraph.

To open a file in a browser, double click on the file, or right-click, and choose open with.

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HTML Basic Examples

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Don't worry if these examples use tags you have not learned.

You will learn about them in the next chapters.

HTML Documents

All HTML documents must start with a type declaration: **<!DOCTYPE html>**.

The HTML document itself begins with **<html>** and ends with **</html>**.

The visible part of the HTML document is between **<body>** and **</body>**.

Example

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```

Try it Yourself » (tryit.asp?filename=tryhtml_basic_document)

HTML Headings

HTML headings are defined with the **<h1>** to **<h6>** tags:

Example

```
<h1>This is a heading</h1>
<h2>This is a heading</h2>
<h3>This is a heading</h3>
```

Try it Yourself » (tryit.asp?filename=tryhtml_basic_headings)

HTML Paragraphs

HTML paragraphs are defined with the **<p>** tag:

Example

```
<p>This is a paragraph.</p>
<p>This is another paragraph.</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_basic_paragraphs)

HTML Links

HTML links are defined with the **<a>** tag:

Example

```
<a href="http://www.w3schools.com">This is a link</a>
```

Try it Yourself » (tryit.asp?filename=tryhtml_basic_link)

The link's destination is specified in the **href attribute**.

Attributes are used to provide additional information about HTML elements.

HTML Images

HTML images are defined with the **<img>** tag.

The source file (**src**), alternative text (**alt**), and size (**width** and **height**) are provided as **attributes**:

Example

```
<img src="w3schools.jpg" alt="W3Schools.com" width="104" height="142">
```

Try it Yourself » (tryit.asp?filename=tryhtml_basic_img)

💡 You will learn more about attributes in a later chapter.

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HTML Elements

HTML **documents** are made up by HTML **elements**.

HTML Elements

HTML elements are written with a **start** tag, with an **end** tag, with the **content** in between:

<tagname>content</tagname>

The HTML **element** is everything from the start tag to the end tag:

<p>My first HTML paragraph.</p>

Start tag	Element content	End tag
<h1>	My First Heading	</h1>
<p>	My first paragraph.	</p>

💡 Some HTML elements do not have an end tag.

Nested HTML Elements

HTML elements can be nested (elements can contain elements).

All HTML documents consist of nested HTML elements.

This example contains 4 HTML elements:

Example

```
<!DOCTYPE html>
<html>
<body>
```

```
<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

Try it yourself » (tryit.asp?filename=tryhtml_elements)

HTML Example Explained

The **<html>** element defines the **whole document**.

It has a **start** tag <html> and an **end** tag </html>.

The element **content** is another HTML element (the <body> element).

```
<html>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

The **<body>** element defines the **document body**.

It has a **start** tag <body> and an **end** tag </body>.

The element **content** is two other HTML elements (<h1> and <p>).

```
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
```

The **<h1>** element defines a **heading**.

It has a **start** tag <h1> and an **end** tag </h1>.

The element **content** is: My First Heading.

```
<h1>My First Heading</h1>
```

The **<p>** element defines a **paragraph**.

It has a **start** tag <p> and an **end** tag </p>.

The element **content** is: My first paragraph.

```
<p>My first paragraph.</p>
```

Don't Forget the End Tag

Some HTML elements will display correctly, even if you forget the end tag:

Example

```
<html>
<body>

<p>This is a paragraph
<p>This is a paragraph

</body>
</html>
```

Try it yourself » (tryit.asp?filename=tryhtml_no_endtag)

The example above works in all browsers, because the closing tag is considered optional.

Never rely on this. It might produce unexpected results and/or errors if you forget the end tag.

Empty HTML Elements

HTML elements with no content are called empty elements.

 is an empty element without a closing tag (the <br> tag defines a line break).

Empty elements can be "closed" in the opening tag like this: <br />.

HTML5 does not require empty elements to be closed. But if you want stricter validation, or you need to make your document readable by XML parsers, you should close all HTML elements.

HTML Tip: Use Lowercase Tags

HTML tags are not case sensitive: <P> means the same as <p>.

The HTML5 standard does not require lowercase tags, but W3C **recommends** lowercase in HTML4, and **demands** lowercase for stricter document types like XHTML.

💡 At W3Schools we always use lowercase tags.

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HTML Attributes

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Attributes provide additional information about HTML elements.

HTML Attributes

- HTML elements can have **attributes**
- Attributes provide **additional information** about an element
- Attributes are always specified in **the start tag**
- Attributes come in name/value pairs like: **name="value"**

The lang Attribute

The document language can be declared in the **<html>** tag.

The language is declared in the **lang** attribute.

Declaring a language is important for accessibility applications (screen readers) and search engines:

```
<!DOCTYPE html>
<html lang="en-US">
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

The first two letters specify the language (en). If there is a dialect, use two more letters (US).

The title Attribute

HTML paragraphs are defined with the **<p>** tag.

In this example, the **<p>** element has a **title** attribute. The value of the attribute is "**About W3Schools**":

Example

```
<p title="About W3Schools">
W3Schools is a web developer's site.
It provides tutorials and references covering
many aspects of web programming,
including HTML, CSS, JavaScript, XML, SQL, PHP, ASP, etc.
</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_attributes_title)

💡 When you move the mouse over the element, the title will be displayed as a tooltip.

The href Attribute

HTML links are defined with the **<a>** tag. The link address is specified in the **href** attribute:

Example

```
<a href="http://www.w3schools.com">This is a link</a>
```

Try it Yourself » (tryit.asp?filename=tryhtml_attributes_link)

You will learn more about links and the <a> tag later in this tutorial.

Size Attributes

HTML images are defined with the **<img>** tag.

The filename of the source (**src**), and the size of the image (**width** and **height**) are all provided as **attributes**:

Example

```
<img src="w3schools.jpg" width="104" height="142">
```

Try it Yourself » (tryit.asp?filename=tryhtml_attributes_img)

The image size is specified in pixels: width="104" means 104 screen pixels wide.

You will learn more about images and the <img> tag later in this tutorial.

The alt Attribute

The **alt** attribute specifies an alternative text to be used, when an HTML element cannot be displayed.

The value of the attribute can be read by "screen readers". This way, someone "listening" to the webpage, i.e. a blind person, can "hear" the element.

Example

```
<img src="w3schools.jpg" alt="W3Schools.com" width="104" height="142">
```

Try it Yourself » (tryit.asp?filename=tryhtml_attributes_alt)

We Suggest: Always Use Lowercase Attributes

The HTML5 standard does not require lower case attribute names.

The title attribute can be written with upper or lower case like **Title** and/or **TITLE**.

W3C **recommends** lowercase in HTML4, and **demands** lowercase for stricter document types like XHTML.

💡 Lower case is the most common. Lower case is easier to type.
At W3Schools we always use lower case attribute names.

We Suggest: Always Quote Attribute Values

The HTML5 standard does not require quotes around attribute values.

The **href** attribute, demonstrated above, can be written as:

Example

```
<a href=http://www.w3schools.com>
```

Try it Yourself » (tryit.asp?filename=tryhtml_attributes_noquotes)

W3C **recommends** quotes in HTML4, and **demands** quotes for stricter document types like XHTML.

Sometimes it is **necessary** to use quotes. This will not display correctly, because it contains a space:

Example

```
<p title=About W3Schools>
```

Try it Yourself » (tryit.asp?filename=tryhtml_attributes_error)

> 💡 Using quotes are the most common. Omitting quotes can produce errors.
> At W3Schools we always use quotes around attribute values.

Single or Double Quotes?

Double style quotes are the most common in HTML, but single style can also be used.

In some situations, when the attribute value itself contains double quotes, it is necessary to use single quotes:

```
<p title='John "ShotGun" Nelson'>
```

Or vice versa:

```
<p title="John 'ShotGun' Nelson">
```

Chapter Summary

- All HTML elements can have **attributes**
- The HTML **title** attribute provides additional "tool-tip" information
- The HTML **href** attribute provides address information for links
- The HTML **width** and **height** attributes provide size information for images
- The HTML **alt** attribute provides text for screen readers
- At W3Schools we always use **lowercase** HTML attribute names
- At W3Schools we always **quote** attributes with double quotes

Test Yourself with Exercises!

Exercise 1 » (exercise.asp?filename=exercise_attributes1)

Exercise 2 » (exercise.asp?filename=exercise_attributes2)

Exercise 3 » (exercise.asp?filename=exercise_attributes3)

Exercise 4 » (exercise.asp?filename=exercise_attributes4)

Exercise 5 » (exercise.asp?filename=exercise_attributes5)

HTML Attributes

Below is an alphabetical list of some attributes often used in HTML:

Attribute	Description
alt	Specifies an alternative text for an image
disabled	Specifies that an input element should be disabled
href	Specifies the URL (web address) for a link
id	Specifies a unique id for an element
src	Specifies the URL (web address) for an image
style	Specifies an inline CSS style for an element
title	Specifies extra information about an element (displayed as a tool tip)
value	Specifies the value (text content) for an input element.

A complete list of all attributes for each HTML element, is listed in our: HTML Tag Reference (/tags/default.asp).

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Exercise:

Add a tooltip to the paragraph below with the text "About W3Schools".

Hint

Edit This Code: See Result »   **Result:**   Show Answer

```
<!DOCTYPE html>
<html>
<body>

<p>W3Schools is a web developer's site.
</p>

</body>
</html>
```

W3Schools is a web developer's site.

Exercise - © w3schools.com

Exercise:

Change the size of the image to 250 pixels wide and 400 pixels tall.

Hint

Edit This Code: See Result »   **Result:**   Show Answer

```
<!DOCTYPE html>
<html>
<body>

<img src="w3schools.jpg" width="104"
height="142">

</body>
</html>
```


Exercise - © w3schools.com

Exercise:

Transform the text below into a link that goes to "www.w3schools.com".
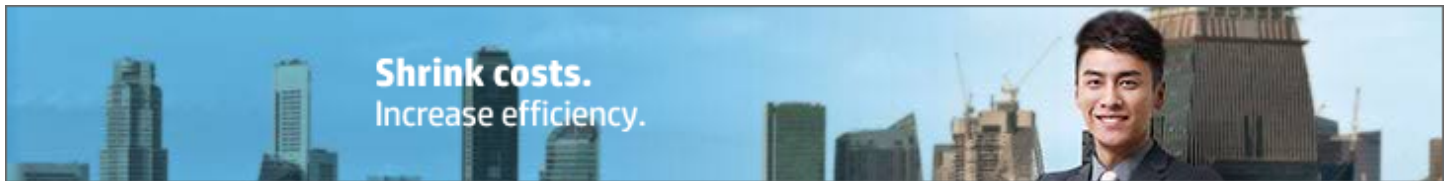
Hint

Edit This Code:

See Result »

Result:

Show Answer

```
<!DOCTYPE html>
<html>
<body>

This is a link

</body>
</html>
```

This is a link

Exercise - © w3schools.com

Shrink costs.
Increase efficiency.

Exercise:

Change the destination of the link below to "www.wwf.org.uk".

Hint

Edit This Code: See Result »   Result: Show Answer

```
<!DOCTYPE html>
<html>
<body>

<a href="http://www.w3schools.com">This is
a link</a>

</body>
</html>
```

[This is a link](#)

Exercise - © w3schools.com

Exercise:

The image below is unavailable on purpose. Specify an alternate text of "w3schools.com" to be used,
so it can be read by "screen readers".

Hint

Edit This Code:

See Result »

Result:

Show Answer

```
<!DOCTYPE html>
<html>
<body>

<img src="w3schoooools.jpg" width="135"
height="50">

</body>
</html>
```

Exercise - © w3schools.com

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HTML Headings

Headings are important in HTML documents.

HTML Headings

Headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading. <h6> defines the least important heading.

Example

```
<h1>This is a heading</h1>
<h2>This is a heading</h2>
<h3>This is a heading</h3>
```

Try it Yourself » (tryit.asp?filename=tryhtml_headings)

Note: Browsers automatically add some empty space (a margin) before and after each heading.

Headings Are Important

Use HTML headings for headings only. Don't use headings to make text **BIG** or **bold**.

Search engines use your headings to index the structure and content of your web pages.

Users skim your pages by its headings. It is important to use headings to show the document structure.

h1 headings should be main headings, followed by h2 headings, then the less important h3, and so on.

HTML Horizontal Rules

The **<hr>** tag creates a horizontal line in an HTML page.

The hr element can be used to separate content:

Example

```
<p>This is a paragraph.</p>
<hr>
<p>This is a paragraph.</p>
<hr>
<p>This is a paragraph.</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_headings_hr)

The HTML <head> Element

The HTML **<head>** element has nothing to do with HTML headings.

The HTML <head> element contains **meta data**. Meta data are not displayed.

The HTML <head> element is placed between the <html> tag and the <body> tag:

Example

```
<!DOCTYPE html>
<html>

<head>
  <title>My First HTML</title>
  <meta charset="UTF-8">
</head>

<body>
.
.
.
```

Try it Yourself » (tryit.asp?filename=tryhtml_headings_head)

💡 Meta data means data **about** data. HTML meta data is data **about** the HTML document.

The HTML <title> Element

The HTML **<title>** element is meta data. It defines the HTML document's title.

The title will not be displayed in the document, but might be displayed in the browser tab.

The HTML <meta> Element

The HTML **<meta>** element is also meta data.

It can be used to define the character set, and other information about the HTML document.

More Meta Elements

In the chapter about HTML styles you discover more meta elements:

The HTML **<style>** element is used to define internal CSS style sheets.

The HTML **<link>** element is used to define external CSS style sheets.

HTML Tip - How to View HTML Source

Have you ever seen a Web page and wondered "Hey! How did they do that?"

To find out, right-click in the page and select "View Page Source" (in Chrome) or "View Source" (in IE), or similar in another browser. This will open a window containing the HTML code of the page.

Test Yourself with Exercises!

Exercise 1 » (exercise.asp?filename=exercise_headings1)

Exercise 2 » (exercise.asp?filename=exercise_headings2)

Exercise 3 » (exercise.asp?filename=exercise_headings3)

Exercise 4 » (exercise.asp?filename=exercise_headings4)

HTML Tag Reference

W3Schools' tag reference contains additional information about these tags and their attributes.

You will learn more about HTML tags and attributes in the next chapters of this tutorial.

Tag	Description
<html> (/tags/tag_html.asp)	Defines an HTML document
<body> (/tags/tag_body.asp)	Defines the document's body
<head> (/tags/tag_head.asp)	Defines the document's head element
<h1> to <h6> (/tags/tag_hn.asp)	Defines HTML headings
<hr> (/tags/tag_hr.asp)	Defines a horizontal line

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Exercise:

Add a horizontal rule between the heading and the paragraph.

Hint

Edit This Code:

See Result »

```
<!DOCTYPE html>
<html>
<body>

<h1>London</h1>

<p>London is the capital city of England.
It is the most populous city in the United
Kingdom, with a metropolitan area of over
13 million inhabitants.</p>

</body>
</html>
```

Result:

Show Answer

London

London is the capital city of England. It is the most populous city in the United Kingdom, with a metropolitan area of over 13 million inhabitants.

Exercise - © w3schools.com

Exercise:

Add six headings to the document with the text "Hello".

Start with the most important heading and end with the least important heading.

Hint

Edit This Code:

See Result »

Result:

Show Answer

```
<!DOCTYPE html>
<html>
<body>

</body>
</html>
```

Exercise - © w3schools.com

Exercise:

Mark up the following text with appropriate tags:
"Universal Studios" is the most important content.
"Jurassic Park" is the next most important content.
"About" is of lesser importance than Jurassic Park.
The last sentence is just a paragraph.

Hint

Edit This Code:

See Result »

```
<!DOCTYPE html>
<html>
<body>

Universal Studios Presents

Jurassic Park

About

On the Island of Isla Nublar, a new park
has been built: Jurassic Park is a theme
park of cloned dinosaurs!!

</body>
</html>
```

Result:

Show Answer

Universal Studios Presents Jurassic Park About On the Island of Isla Nublar, a new park has been built: Jurassic Park is a theme park of cloned dinosaurs!!

Exercise - © w3schools.com

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HTML Paragraphs

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HTML documents are divided into paragraphs.

HTML Paragraphs

The HTML **<p>** element defines a **paragraph**.

Example

```
<p>This is a paragraph</p>
<p>This is another paragraph</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_paragraphs1)

💡 Browsers automatically add an empty line before and after a paragraph.

HTML Display

You cannot be sure how HTML will be displayed.

Large or small screens, and resized windows will create different results.

With HTML, you cannot change the output by adding extra spaces or extra lines in your HTML code.

The browser will remove extra spaces and extra lines when the page is displayed.

Any number of spaces, and any number of new lines, count as **only one space**.

Example

```
<p>
This paragraph
contains a lot of lines
in the source code,
but the browser
ignores it.
</p>

<p>
```

```
This paragraph
contains          a lot of spaces
in the source          code,
but the          browser
ignores it.
</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_paragraphs2)

Don't Forget the End Tag

Most browsers will display HTML correctly even if you forget the end tag:

Example

```
<p>This is a paragraph
<p>This is another paragraph
```

Try it Yourself » (tryit.asp?filename=tryhtml_paragraphs0)

The example above will work in most browsers, but do not rely on it.

Forgetting the end tag can produce unexpected results or errors.

💡 Stricter versions of HTML, like XHTML, do not allow you to skip the end tag.

HTML Line Breaks

The HTML **
** element defines a **line break**.

Use <br> if you want a line break (a new line) without starting a new paragraph:

Example

```
<p>This is<br>a para<br>graph with line breaks</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_paragraphs)

The <br> element is an empty HTML element. It has no end tag.

The Poem Problem

Example

```
<p>This poem will display as one line:</p>
<p>
  My Bonnie lies over the ocean.

  My Bonnie lies over the sea.

  My Bonnie lies over the ocean.

  Oh, bring back my Bonnie to me.
</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_poem)

The HTML <pre> Element

The HTML <pre> element defines preformatted text.

The text inside a <pre> element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:

Example

```
<pre>
  My Bonnie lies over the ocean.

  My Bonnie lies over the sea.

  My Bonnie lies over the ocean.

  Oh, bring back my Bonnie to me.
</pre>
```

Try it Yourself » (tryit.asp?filename=tryhtml_pre)

Test Yourself with Exercises!

Exercise 1 » (exercise.asp?filename=exercise_paragraphs)

Exercise 2 » (exercise.asp?filename=exercise_paragraphs1)

Exercise 3 » (exercise.asp?filename=exercise_paragraphs2)

Exercise 4 » (exercise.asp?filename=exercise_paragraphs3)

HTML Tag Reference

W3Schools' tag reference contains additional information about HTML elements and their attributes.

Tag	Description
<p> (/tags/tag_p.asp)	Defines a paragraph
  (/tags/tag_br.asp)	Inserts a single line break
<pre> (/tags/tag_pre.asp)	Defines pre-formatted text

« Previous (html_headings.as   Next Chapter » (html_styles.asp)

Exercise:

Add a paragraph to this document with the text "Hello World!".

Hint

Edit This Code:	See Result »	Result:	Show Answer

```
<!DOCTYPE html>
<html>
<body>

</body>
</html>
```

Exercise - © w3schools.com

Exercise:

Fix the display of the poem below. Display the poem over 4 lines.

Hint

Edit This Code: See Result »

```
<!DOCTYPE html>
<html>
<body>

<p>
My Bonnie lies over the ocean.
My Bonnie lies over the sea.
My Bonnie lies over the ocean.
Oh, bring back my Bonnie to me.
</p>

</body>
</html>
```

Result: Show Answer

My Bonnie lies over the ocean. My Bonnie lies over the sea. My Bonnie lies over the ocean. Oh, bring back my Bonnie to me.

Exercise - © w3schools.com

HTML Styles

I am Red

I am Blue

Try it Yourself » (tryit.asp?filename=tryhtml_styles_intro)

HTML Styling

Every HTML element has a **default style** (background color is white and text color is black).

Changing the default style of an HTML element, can be done with the **style attribute**.

This example changes the default background color from white to lightgrey:

Example

```
<body style="background-color:lightgrey">

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
```

Try it Yourself » (tryit.asp?filename=tryhtml_styles_background-color)

💡 The bgcolor attribute, supported in older versions of HTML, is not valid in HTML5.

The HTML Style Attribute

The HTML style attribute has the following **syntax**:

```
style="property:value"
```

The *property* is a CSS property. The *value* is a CSS value.

💡 You will learn more about CSS later in this tutorial.

HTML Text Color

The **color** property defines the text color to be used for an HTML element:

Example

```
<h1 style="color:blue">This is a heading</h1>
<p style="color:red">This is a paragraph.</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_styles_color)

HTML Fonts

The **font-family** property defines the font to be used for an HTML element:

Example

```
<h1 style="font-family:verdana">This is a heading</h1>
<p style="font-family:courier">This is a paragraph.</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_styles_font-family)

💡 The <font> tag, supported in older versions of HTML, is not valid in HTML5.

HTML Text Size

The **font-size** property defines the text size to be used for an HTML element:

Example

```
<h1 style="font-size:300%">This is a heading</h1>
<p style="font-size:160%">This is a paragraph.</p>
```

HTML Text Alignment

The **text-align** property defines the horizontal text alignment for an HTML element:

Example

```
<h1 style="text-align:center">Centered Heading</h1>
<p>This is a paragraph.</p>
```

💡 The <center> tag, supported in older versions of HTML, is not valid in HTML5.

Chapter Summary

- Use the **style** attribute for styling HTML elements
- Use **background-color** for background color
- Use **color** for text colors
- Use **font-family** for text fonts
- Use **font-size** for text sizes
- Use **text-align** for text alignment

Test Yourself with Exercises!

Exercise:

Change the text color of the paragraph to "blue".

Edit This Code:

See Result »

Result:

Show Answer

```
<!DOCTYPE html>
<html>
<body>

<p style="color:red">This is a paragraph.
</p>

</body>
</html>
```

This is a paragraph.

Exercise:

Change the font of the paragraph to "courier".

Hint

Edit This Code:

See Result »

```
<!DOCTYPE html>
<html>
<body>

<p>This is a paragraph.</p>

</body>
</html>
```

Result:

Show Answer

This is a paragraph.

Exercise:

Center align the paragraph.

Edit This Code:

See Result »

Result:

Show Answer

```
<!DOCTYPE html>
<html>
<body>

<p>This is a paragraph.</p>

</body>
</html>
```

This is a paragraph.

Exercise:

Change the text size of the paragraph to 200%.

Hint

Correct Code:

Hide Answer

```
<!DOCTYPE html>
<html>
<body>

<p style="font-size:200%">This is a
paragraph.</p>

</body>
</html>
```

Correct Result:

This is a paragraph.

Exercise:

Change the background color of the page below to yellow.

Hint

Edit This Code:

See Result »

```
<!DOCTYPE html>
<html>
<body>

<h1>This is a heading</h1>

<p>This is a paragraph.</p>

</body>
</html>
```

Result:

Show Answer

This is a heading

This is a paragraph.

Exercise:

Center align all content on the page.

Edit This Code: **See Result »**

Result: **Show Answer**

```
<!DOCTYPE html>
<html>
<body>

<h1>This is a heading</h1>

<h2>This is also a heading</h2>

<p>This is a paragraph.</p>

<p>This is also paragraph.</p>

</body>
</html>
```

This is a heading

This is also a heading

This is a paragraph.

This is also paragraph.

HTML Text Formatting Elements

Text Formatting

This text is bold

This text is italic

This is ^{superscript}

HTML Formatting Elements

In the previous chapter, you learned about HTML **styling**, using the HTML **style attribute**.

HTML also defines special **elements**, for defining text with a special **meaning**.

HTML uses elements like <b> and <i> for formatting output, like **bold** or *italic* text.

Formatting elements were designed to display special **types of text**:

- Bold text
- Important text
- Italic text
- Emphasized text
- Marked text
- Small text
- Deleted text
- Inserted text
- Subscripts
- Superscripts

HTML **Bold** and **Strong** Formatting

The HTML **<b>** element defines **bold** text, without any extra importance.

Example

```
<p>This text is normal.</p>

<p><b>This text is bold</b>.</p>
```

The HTML **<strong>** element defines **strong** text, with added semantic "strong" importance.

Example

```
<p>This text is normal.</p>

<p><strong>This text is strong</strong>.</p>
```

HTML *Italic* and *Emphasized* Formatting

The HTML **<i>** element defines *italic* text, without any extra importance.

Example

```
<p>This text is normal.</p>

<p><i>This text is italic</i>.</p>
```

The HTML **<em>** element defines *emphasized* text, with added semantic importance.

Example

```
<p>This text is normal.</p>

<p><em>This text is emphasized</em>.</p>
```

Browsers display <strong> as <b>, and <em> as <i>.

However, there is a difference in the meaning of these tags: <b> and <i> defines bold and italic text,
but <strong> and <em> means that the text is "important".

HTML Small Formatting

The HTML **<small>** element defines **small** text:

Example

```
<h2>HTML <small>Small</small> Formatting</h2>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_small)

HTML Marked Formatting

The HTML **<mark>** element defines **marked** or highlighted text:

Example

```
<h2>HTML <mark>Marked</mark> Formatting</h2>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_mark)

HTML ~~Deleted~~ Formatting

The HTML **<del>** element defines **deleted** (removed) of text.

Example

```
<p>My favorite color is <del>blue</del> red.</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_del)

HTML <u>Inserted</u> Formatting

The HTML **<ins>** element defines **inserted** (added) text.

Example

```
<p>My favorite <ins>color</ins> is red.</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_ins)

HTML _{Subscript} Formatting

The HTML **<sub>** element defines **subscripted** text.

Example

```
<p>This is <sub>subscripted</sub> text.</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_sub)

HTML ^{Superscript} Formatting

The HTML **<sup>** element defines **superscripted** text.

Example

```
<p>This is <sup>superscripted</sup> text.</p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_sup)

Test Yourself with Exercises!

Exercise 1 » (exercise.asp?filename=exercise_formatting1)

Exercise 2 » (exercise.asp?filename=exercise_formatting2)

Exercise 3 » (exercise.asp?filename=exercise_formatting3)

Exercise 4 » (exercise.asp?filename=exercise_formatting4)

Exercise 5 » (exercise.asp?filename=exercise_formatting5)

HTML Text Formatting Elements

Tag	Description
<b> (/tags/tag_b.asp)	Defines bold text
<em> (/tags/tag_em.asp)	Defines emphasized text

<i> (/tags/tag_i.asp)	Defines italic text
<small> (/tags/tag_small.asp)	Defines smaller text
<strong> (/tags/tag_strong.asp)	Defines important text
<sub> (/tags/tag_sub.asp)	Defines subscripted text
<sup> (/tags/tag_sup.asp)	Defines superscripted text
<ins> (/tags/tag_ins.asp)	Defines inserted text
<del> (/tags/tag_del.asp)	Defines deleted text
<mark> (/tags/tag_mark.asp)	Defines marked/highlighted text

Exercise:

Add extra importance to the word "degradation" in the paragraph below.

Edit This Code:

See Result »

Result:

Show Answer

```
<!DOCTYPE html>
<html>
<body>

<h1>What Does WWF Do?</h1>

<p>WWF's mission is to stop the
degradation of our planet's natural
environment.</p>

</body>
</html>
```

What Does WWF Do?

WWF's mission is to stop the degradation of our planet's natural environment.

Exercise:

Emphasize the word "metropolitan" in the text below.

Edit This Code:

See Result »

Result:

```
<!DOCTYPE html>
<html>
<body>

<h1>Tokyo</h1>

<p>Tokyo is the capital of Japan, the
center of the Greater Tokyo Area, and the
most populous metropolitan area in the
world.</p>

</body>
</html>
```

Tokyo

Tokyo is the capital of Japan, the center of the Greater Tokyo Area, and the most populous metropolitan area in the world.

Exercise:

Highlight the word "FUN!" in the text below.

Edit This Code:

See Result »

```
<!DOCTYPE html>
<html>
<body>

<p>HTML is FUN to learn!</p>

</body>
</html>
```

Result:

Show Answer

HTML is FUN to learn!

Exercise:

Apply subscript formatting to the number "2" in the text below.

Hint

Edit This Code:

See Result »

```
<!DOCTYPE html>
<html>
<body>

<p>H2O is the scientific term for water.
</p>

</body>
</html>
```

Result:

Show Answer

H2O is the scientific term for water.

Exercise:

Add a line through (strikeout) the letters "blue" in the text below.

Hint

Edit This Code:

See Result »

```
<!DOCTYPE html>
<html>
<body>

<p>My favorite color is blue red.</p>

</body>
</html>
```

Result:

Show Answer

My favorite color is blue red.

HTML Quotation and Citation Elements

Quotation

Here is a quote from WWF's website:

> For 50 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million globally.

HTML <q> for Short Quotations

The HTML **<q>** element defines a short quotation.

Browsers usually insert quotation marks around the <q> element.

Example

```
<p>WWF's goal is to: <q>Build a future where people live in harmony with nature.</q></p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_q)

HTML <blockquote> for Long Quotations

The HTML **<blockquote>** element defines a quoted section.

Browsers usually indent <blockquote> elements.

Example

```
<p>Here is a quote from WWF's website:</p>
<blockquote cite="http://www.worldwildlife.org/who/index.html">
For 50 years, WWF has been protecting the future of nature.
The world's leading conservation organization,
WWF works in 100 countries and is supported by
1.2 million members in the United States and
close to 5 million globally.
</blockquote>
```

HTML <abbr> for Abbreviations

The HTML **<abbr>** element defines an abbreviation or an acronym.

Marking abbreviations can give useful information to browsers, translation systems and search-engines.

Example

```
<p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>
```

HTML <address> for Contact Information

The HTML **<address>** element defines contact information (author/owner) of a document or article.

The <address> element is usually displayed in italic. Most browsers will add a line break before and after the element.

Example

```
<address>
Written by Jon Doe.<br>
Visit us at:<br>
Example.com<br>
Box 564, Disneyland<br>
USA
</address>
```

HTML <cite> for Work Title

The HTML **<cite>** element defines the title of a work.

Browsers usually display <cite> elements in italic.

Example

```
<p><cite>The Scream</cite> by Edward Munch. Painted in 1893.</p>
```

HTML <bdo> for Bi-Directional Override

The HTML **<bdo>** element defines bi-directional override.

The <bdo> element is used to override the current text direction:

Example

```
<bdo dir="rtl">This text will be written from right to left</bdo>
```

Test Yourself with Exercises!

HTML Quotation and Citation Elements

Tag	Description
<abbr> (/tags/tag_abbr.asp)	Defines an abbreviation or acronym
<address> (/tags/tag_address.asp)	Defines contact information for the author/owner of a document
<bdo> (/tags/tag_bdo.asp)	Defines the text direction
<blockquote> (/tags/tag_blockquote.asp)	Defines a section that is quoted from another source

<cite> (/tags/tag_cite.asp)	Defines the title of a work
<q> (/tags/tag_q.asp)	Defines a short inline quotation

Exercise:

Use an HTML element to add quotation marks around the letters "cool".

Edit This Code:

See Result »

Result:

Show Answer

```
<!DOCTYPE html>
<html>
<body>

<p>I am so cool.</p>

</body>
</html>
```

I am so cool.

Exercise:

The text below should be a quoted section.
Add the proper HTML element to it, and specify that it is quoted from the following URL:
http://www.worldwildlife.org/who/index.html.

Edit This Code:

See Result »

```
<!DOCTYPE html>
<html>
<body>

For 50 years, WWF has been protecting the
future of nature.
The world's leading conservation
organization,
WWF works in 100 countries and is
supported by
1.2 million members in the United States
and
close to 5 million globally.

</body>
</html>
```

Result:

Show Answer

For 50 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million globally.

Exercise:

Make the text below go right-to-left.

Hint

Correct Code:

Hide Answer

```
<!DOCTYPE html>
<html>
<body>

<bdo dir="rtl">What a beautiful day!</bdo>

</body>
</html>
```

Correct Result:

!yad lufituaeb a tahW

Exercise:

The letters "WHO" in the text below is an abbreviation of "World Health Organization".
Use an HTML element to provide the specified abbreviation of "WHO".

Correct Code:

Correct Result:

```
<!DOCTYPE html>
<html>
<body>

<p>The <abbr title="World Health
Organization">WHO</abbr> was founded in
1948.</p>

</body>
</html>
```

The WHO was founded in 1948.

HTML Computer Code Elements

Computer Code

```
var person = {
    firstName:"John",
    lastName:"Doe",
    age:50,
    eyeColor:"blue"
}
```

HTML `Computer Code` Formatting

Normally, HTML uses **variable** letter size, and variable letter spacing.

This is not wanted when displaying examples of **computer code**.

The **<kbd>**, **<samp>**, and **<code>** elements all support **fixed** letter size and spacing.

HTML `Keyboard` Formatting

The HTML **<kbd>** element defines **keyboard input**:

Example

```
<p>To open a file, select:</p>

<p><kbd>File | Open...</kbd></p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_kbd)

HTML `Sample` Formatting

The HTML **<samp>** element defines a **computer output**:

Example

```
<samp>
demo.example.com login: Apr 12 09:10:17
Linux 2.6.10-grsec+gg3+e+fhs6b+nfs+gr0501+++p3+c4a+gr2b-reslog-v6.189
</samp>
```

HTML `Code` Formatting

The HTML **<code>** element defines **programming code**:

Example

```
<code>
var person = { firstName:"John", lastName:"Doe", age:50, eyeColor:"blue" }
</code>
```

The <code> element does **not** preserve extra **whitespace** and **line-breaks**:

Example

```
<p>Coding Example:</p>

<code>
var person = {
    firstName:"John",
    lastName:"Doe",
    age:50,
    eyeColor:"blue"
}
</code>
```

To fix this, you must wrap the code in a <pre> element:

Example

```
<p>Coding Example:</p>

<code>
<pre>
var person = {
    firstName:"John",
    lastName:"Doe",
```

```
    age:50,
    eyeColor:"blue"
}
</pre>
</code>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_codepre)

HTML *Variable* Formatting

The HTML **<var>** element defines a **mathematical variable**:

Example

```
<p>Einstein wrote:</p>

<p><var>E = m c<sup>2</sup></var></p>
```

Try it Yourself » (tryit.asp?filename=tryhtml_formatting_var)

Test Yourself with Exercises!

Exercise 1 » (exercise.asp?filename=exercise_computercode_elements1)

Exercise 2 » (exercise.asp?filename=exercise_computercode_elements2)

Exercise 3 » (exercise.asp?filename=exercise_computercode_elements3)

HTML Computer Code Elements

Tag	Description
<code> (/tags/tag_code.asp)	Defines programming code
<kbd> (/tags/tag_kbd.asp)	Defines keyboard input
<samp> (/tags/tag_samp.asp)	Defines computer output
<var>	Defines a mathematical variable

(/tags/tag_var.asp)	
<pre> (/tags/tag_pre.asp)	Defines preformatted text

« Previous (html_quotation_e   Next Chapter » (html_comments.as

HTML Comments

Comment tags <!-- and --> are used to insert comments in HTML.

HTML Comment Tags

You can add comments to your HTML source by using the following syntax:

```
<!-- Write your comments here -->
```

> 💡 **Note:** There is an exclamation point (!) in the opening tag, but not in the closing tag.

Comments are not displayed by the browser, but they can help document your HTML.

With comments you can place notifications and reminders in your HTML:

Example

```
<!-- This is a comment -->

<p>This is a paragraph.</p>

<!-- Remember to add more information here -->
```

Try it Yourself » (tryit.asp?filename=tryhtml_comment)

Comments are also great for debugging HTML, because you can comment out HTML lines of code, one at a time, to search for errors:

Example

```
<!-- Do not display this at the moment
<img border="0" src="pic_mountain.jpg" alt="Mountain">
-->
```

Try it Yourself » (tryit.asp?filename=tryhtml_comment_out)

Conditional Comments

You might stumble upon conditional comments in HTML:

```
<!--[if IE 8]>
    .... some HTML here ....
<![endif]-->
```

Conditional comments defines HTML tags to be executed by Internet Explorer only.

Software Program Tags

HTML comments tags can also be generated by various HTML software programs.

For example <!--webbot bot--> tags wrapped inside HTML comments by FrontPage and Expression Web.

As a rule, let these tags stay, to help support the software that created them.

Test Yourself with Exercises!

Exercise 1 » (exercise.asp?filename=exercise_comments1)

Exercise 2 » (exercise.asp?filename=exercise_comments2)