HTML

WHAT IS HTML?

HTML is a language for describing web pages.

HTML stands for **Hyper Text Markup Language**

HTML is not a programming language, it is a **markup language**

A markup language is a set of **markup tags**

The markup tags describe how text should be **displayed**

HTML MARKUP TAGS

HTML markup tags are usually called HTML tags

HTML tags are keywords surrounded by **angle brackets** like <html>

HTML tags normally **come in pairs** like and

The first tag in a pair is the **start tag,** the second tag is the **end tag**

Note: The start and end tags are also called the opening and closing tags.

WHAT IS AN HTML FILE

-An HTML file is **a text file with HTML tags**

-An HTML file name must end with **.htm** or **.html**

-An HTML file can be created using a **simple text editor**

-An HTML file is often called an **HTML document** or a **Web Page**

HTM or HTML EXTENSION

When you save an HTML file, you can use either the .htm or the .html extension. We use .htm in our examples. It is a habit from the past when commonly used software allowed only three letters in file extensions.

With newer software it is perfectly safe to use .html.

BASIC HTML TAGS

EXAMPLE

<html>

<body>

The content of the body element is displayed in your browser.

</body>

</html>

OUTPUT

The content of the body element is displayed in your browser.

HTML PARAGRAPHS

```
<html>
<body>
<p>This is a paragraph.</p>
<p>This is a paragraph.</p>
<p>This is a paragraph.</p>
<p>Paragraph elements are defined by the p tag.</p>
</body>
</html>
```

OUTPUT

This is a paragraph.

This is a paragraph.

This is a paragraph.

Paragraph elements are defined by the p tag.

HTML HEADINGS

Headings are defined with the <h1> to <h6> tags. <h1> defines the largest heading. <h6> defines the smallest heading.

<h1>This is a heading </h1>

<h2>This is a heading </h2>

<h3>This is a heading </h3>

Result:

This is a heading

This is a heading

This is a heading

HTML automatically displays an empty line before and after headings.

EXAMPLE

```
<html>
<body>
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>

<p>Use heading tags only for headings.
Don't use them to make something <b>BIG or BOLD</b>.
Use other tags for that.</p>
</body>
</html>
```

OUTPUT

This is heading 1

This is heading 2

This is heading 3

This is heading 4

This is heading 5

This is heading 6

Use heading tags only for headings. Don't use them to make something **BIG or BOLD**. Use other tags for that.

HTML PARAGRAPHS

Paragraphs are defined with the tag.

This is a paragraph
This is another paragraph

HTML automatically displays an empty line before and after a paragraph.

EXAMPLE

```
<html>
<body>

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

<p>Paragraph elements are defined by the p
tag.</p>

</body>
</html>
```

OUTPUT

This is a paragraph.

This is a paragraph.

This is a paragraph.

Paragraph elements are defined by the p tag.

HTML LINE BREAKS

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

This is
a para
graph with line breaks

The <br> tag is an empty tag. It has no end tag like </br>.

HTML COMMENTS

Comments can be inserted in the HTML code to make it more readable and understandable. Comments are ignored by the browser and not displayed.

Comments are written like this:

<!-- This is a comment -->

Note: There is an exclamation point after the opening bracket, but not before the closing bracket.

EXAMPLE

```
<html>
<body>

<!--This comment will not be displayed-->
<p>This is a regular paragraph</p>

</body>
</html>
```

OUTPUT

This is a regular paragraph

EXAMPLE

```
<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>

<p>Note that your browser ignores your layout!</p>

</body>
</html>
```

OUTPUT

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.

Note that your browser ignores your layout!

HOW TO VIEW HTML SOURCE

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

To find out, click the VIEW option in your browser's toolbar and select SOURCE or PAGE SOURCE. This will open a window that shows you the HTML code of the page.

HORIZONTAL RULE

This example demonstrates how to insert a horizontal rule.

```
<html>
<body>
<p>The hr tag defines a horizontal rule:</p>
<hr>
<p>This is a paragraph</p>
<hr>
<p>This is a paragraph</p>
<hr>
<p>This is a paragraph</p>
</body>
</html>
```

OUTPUT

The hr tag defines a horizontal rule:

This is a paragraph

This is a paragraph

This is a paragraph

Revision

Tag	Description
<html>	Defines an HTML document
<body>	Defines the document's body
<h1> to <h6>	Defines header 1 to header 6
<p>	Defines a paragraph
 	Inserts a single line break
<hr>	Defines a horizontal rule
<!-->	Defines a comment

HTML ELEMENT

An HTML Element		
Start	Element	ContentEnd
	This is a paragraph	

WHY LOWERCASE TAGS?

HTML tags are not case sensitive:

<P> means the same as <p>.

Plenty of web sites use uppercase HTML tags in their pages.

Recommends lowercase in HTML 4, and **demands** lowercase tags in newer versions of (X)HTML.

HTML ATTRIBUTES

Attributes provide additional information about HTML elements.

HTML ATTRIBUTES

HTML tags can have attributes. Attributes provide additional information about the HTML element.

Attributes always come in name/value pairs like this: name="value“.

Attributes are always specified in the start tag of an HTML element.

ATTRIBUTES EXAMPLE-1

<body> defines the body of an HTML document.

<body bgcolor="yellow"> has additional information about the background color.

CENTER ALIGNED HEADING

```
<html>
<body>

<h1 align="center">This is heading 1</h1>

<p>The heading above is aligned to the center of this page.
The heading above is aligned to the center of this page. The
heading above is aligned to the center of this page.</p>

</body>
</html>
```

OUTPUT

This is heading 1

The heading above is aligned to the center of this page. The heading above is aligned to the center of this page. The heading above is aligned to the center of this page.

ATTRIBUTES EXAMPLE- 2

<body> defines the body of an HTML document.

<body bgcolor="yellow"> has additional information about the background color.

EXAMPLE: BACKGROUND COLOR

```
<html>
<body bgcolor="yellow">
<h2>Look: Colored Background!</h2>
</body>
</html>
```

OUTPUT

ATTRIBUTES EXAMPLE- 3

<table> defines an HTML table.

<table border="1"> has additional information about the border around the table.

HTML TEXT FORMATTING

This text is bold

This text is big

This text is italic

This is computer output

This is and superscript
subscript

EXAMPLE

```
<html>
<body>

<p><b>This text is bold</b></p>
<p><big>This text is big</big></p>
<p><i>This text is italic</i></p>
<p><code>This is computer output</code></p>
<p>This is<sub> subscript</sub> and
<sup>superscript</sup></p>

</body>
</html>
```

HTML FORMATTING TAGS

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

These HTML tags are called formatting tags.

EXAMPLE - TEXT FORMATTING

```
<html>
<body>

<p><b>This text is bold</b></p>
<p><strong>This text is strong</strong></p>
<p><big>This text is big</big></p>
<p><em>This text is emphasized</em></p>
<p><i>This text is italic</i></p>
<p><small>This text is small</small></p>
<p>This is<sub> subscript</sub> and <sup>superscript</sup></p>

</body>
</html>
```

OUTPUT

This text is bold

This text is strong

This text is big

This text is emphasized

This text is italic

This text is small

This is subscript and superscript

EXAMPLE – PREFORMATTED TEXT

```
<html>
<body>

<pre>
This is
preformatted text.
It preserves      both spaces
and line breaks.
</pre>

<p>The pre tag is good for displaying computer code:</p>

<pre>
for i = 1 to 10
    print i
next i
</pre>

</body>
</html>
```

OUTPUT

This is preformatted text. It preserves both spaces and line breaks.

The pre tag is good for displaying computer code:

```
for i = 1 to 10
 print i
next i
```

ADDRESS

```
<html>
<body>

<address>
Donald Duck<br>
BOX 555<br>
Disneyland<br>
USA
</address>

</body>
</html>
```

OUTPUT

Donald Duck
BOX 555
Disneyland
USA

ABBREVIATIONS AND ACRONYMS

```
<html>
<body>

<abbr title="United Nations">UN</abbr>
<br>
<acronym title="World Wide Web">WWW</acronym>

<p>The title attribute is used to show the spelled-out version when
holding the mouse pointer over the acronym or abbreviation.</p>

<p>This only works for the acronym element in IE 5.</p>

<p>This works for both the abbr and acronym element in Netscape
6.2.</p>

</body>
</html>
```

OUTPUT

UN
WWW

The title attribute is used to show the spelled-out version when holding the mouse pointer over the acronym or abbreviation.

This only works for the acronym element in IE 5.

This works for both the abbr and acronym element in Netscape 6.2.

EXAMPLE – QUOTATIONS

```
<html>
<body>

Here comes a long quotation:
<blockquote>
This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation.
This is a long quotation.
</blockquote>

Here comes a short quotation:
<q>
This is a short quotation
</q>

<p>
With the block quote element, the browser inserts line breaks and margins, but the q element
does not render as anything special.
</p>

</body>
</html>
```

OUTPUT

Here comes a long quotation:

This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation.

Here comes a short quotation: This is a short quotation

With the block quote element, the browser inserts line breaks and margins, but the q element does not render as anything special.

DELETED AND INSERTED TEXT

```
<html>
<body>

<p>
a dozen is
<del>twenty</del>
<ins>twelve</ins>
pieces
</p>

<p>
Most browsers will overstrike deleted text and underline inserted text.
</p>

<p>
Some older browsers will display deleted or inserted text as plain text.
</p>

</body>
</html>
```

OUTPUT

a dozen is ~~twenty~~ twelve pieces

Most browsers will overstrike deleted text and underline inserted text.

Some older browsers will display deleted or inserted text as plain text.

Revision

Tag	Description
<b>	Defines bold text
<big>	Defines big text
	Defines emphasized text
<i>	Defines italic text
<small>	Defines small text
	Defines strong text

Tag	Description
<sub>	Defines subscripted text
<sup>	Defines superscripted text
<ins>	Defines inserted text
<del>	Defines deleted text
<s>	Deprecated. Use <del> instead
<strike>	Deprecated. Use <del> instead
<u>	Deprecated. Use styles instead

NON-BREAKING SPACE

The most common character entity in HTML is the non-breaking space.

Normally HTML will truncate spaces in your text. If you write 10 spaces in your text HTML will remove 9 of them.

To add lots of spaces to your text, use the   character entity.

COMMONLY USED CHARACTER

Result	Description	Entity Name	Entity Number
	non-breaking space		
<	less than	&lt;	&#60;
>	greater than	&gt;	&#62;
&	ampersand	&amp;	&#38;
¢	cent	&cent;	&#162;

Result	Description	Entity Name	Entity Number
£	pound	£	£
¥	yen	&yen	¥
€	euro	€	€
§	section	§	§
©	copyright	©	©
®	registered trademark	®	®

HTML LINKS

HTML uses a hyperlink to link to another document on the Web.

EXAMPLES

Create hyperlinks

This example demonstrates how to create links in an HTML document.

An image as a link

This example demonstrates how to use an image as a link.

EXAMPLE - CREATE HYPERLINKS

```
<html>
<body>

<p>
<a href="lastpage.htm">
This text</a> is a link to a page on
this Web site.
</p>

<p>
<a href="http://www.microsoft.com/">
This text</a> is a link to a page on
the World Wide Web.
</p>

</body>
</html>
```

OUTPUT

This text is a link to a page on this Web site.

This text is a link to a page on the World Wide Web.

AN IMAGE AS A LINK

```
<html>
<body>
<p>
You can also use an image as a link:
<a href="lastpage.htm">
<img border="0" src="buttonnext.gif" width="65" height="38">
</a>
</p>

</body>
</html>
```

OUTPUT

You can also use an image as a link: 

THE ANCHOR TAG AND THE href ATTRIBUTE

HTML uses the <a> (anchor) tag to create a link to another document.

An anchor can point to any resource on the Web: an HTML page, an image, a sound file, a movie, etc.

The syntax of creating an anchor:

THE ANCHOR TAG AND THE Href ATTRIBUTE

Text to be displayed

The <a> tag is used to create an anchor to link from, the href attribute is used to address the document to link to, and the words between the open and close of the anchor tag will be displayed as a hyperlink.

THE TARGET ATTRIBUTE

With the target attribute, you can define **where** the linked document will be opened. The line below will open the document in a new browser window:

Visit *St.Aloysius College.*

The Anchor Tag and the Name Attribute

The name attribute is used to create a named anchor. When using named anchors we can create links that can jump directly into a specific section on a page, instead of letting the user scroll around to find what he/she is looking for.

Below is the syntax of a named anchor:

Text to be displayed

OPEN A LINK IN A NEW BROWSER WINDOW

```
<html>
<body>

<a href="lastpage.htm" target="_blank">Last Page</a>

<p>
If you set the target attribute of a link to "_blank",
the link will open in a new window.
</p>

</body>
</html>
```

OUTPUT

Last Page

If you set the target attribute of a link to "_blank", the link will open in a new window.

LINK TO A LOCATION ON THE SAME PAGE

```
<html>
<body>

<p>
<a href="#C4">See also Chapter 4.</a>
</p>

<h2>Chapter 1</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 2</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 3</h2>
<p>This chapter explains ba bla bla</p>


</body>
</html>
```

OUTPUT

See also Chapter 4.

Chapter 1

This chapter explains ba bla bla

Chapter 2

This chapter explains ba bla bla

Chapter 3

This chapter explains ba bla bla

CREATE A MAILTO LINK

```
<html>

<body>

<p>
This is a mail link:
<a href="mailto:someone@microsoft.com?subject=Hello%20again">
Send Mail</a>
</p>

<p>
<b>Note:</b> Spaces between words should be replaced by %20 to
<b>ensure</b> that the browser will display your text properly.
</p>

</body>
</html>
```

OUTPUT

This is a mail link: Send Mail

Note: Spaces between words should be replaced by %20 to ensure that the browser will display your text properly.

HTML FRAMES

With frames, you can display more than one Web page in the same browser window.

VERTICAL FRAMESET

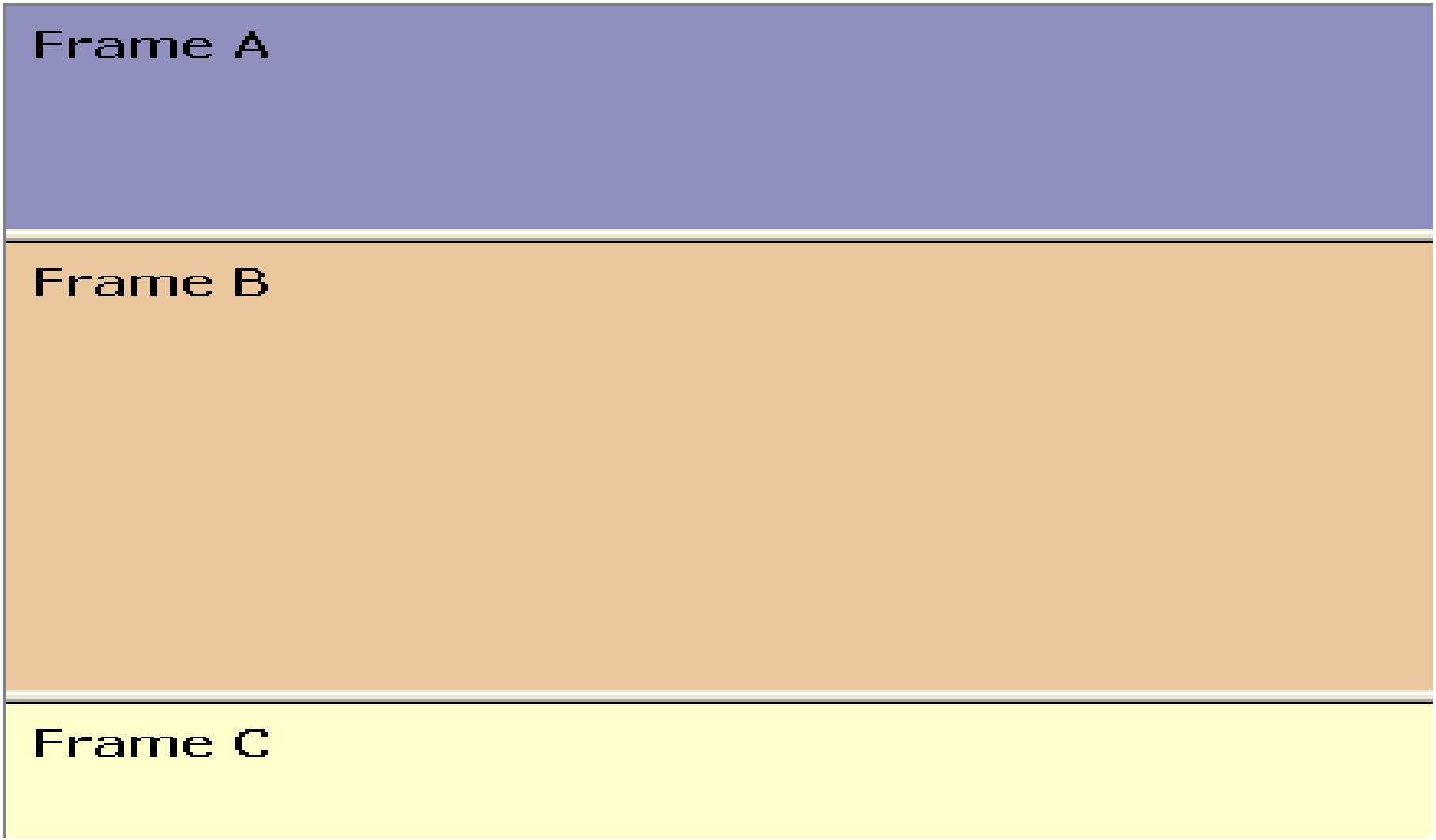
```
<html>

<frameset cols="25%,50%,25%">

  <frame src="frame_a.htm">
  <frame src="frame_b.htm">
  <frame src="frame_c.htm">

</frameset>

</html>
```

OUTPUT

HORIZONTAL FRAMESET

```
<html>

<frameset rows="25%,50%,25%">

   <frame src="frame_a.htm">
   <frame src="frame_b.htm">‘
   <frame src="frame_c.htm">

</frameset>

</html>
```

OUTPUT



FRAMES

With frames, you can display more than one HTML document in the same browser window. Each HTML document is called a frame, and each frame is independent of the others.

The disadvantages of using frames are:

- The web developer must keep track of more HTML documents
- It is difficult to print the entire page

THE FRAMESET TAG

The <frameset> tag defines how to divide the window into frames.

Each frameset defines a set of rows **or** Columns.

The values of the rows/columns indicate the amount of screen area each row/column will occupy.

THE FRAME TAG

The <frame> tag defines what HTML document to put into each frame.

In the example below we have a frameset with two columns.

The first column is set to 25% of the width of the browser window. The second column is set to 75% of the width of the browser window. The HTML document "frame_a.htm" is put into the first column, and the HTML document "frame_b.htm" is put into the second column:

THE FRAME TAG

```
<frameset cols="25%,75%">
        <frame src="frame_a.htm">
        <frame src="frame_b.htm">
 </frameset>
```

Note: The frameset column size value can also be set in pixels (cols="200,500"), and one of the columns can be set to use the remaining space (cols="25%,*").

BASIC NOTES - USEFUL TIPS

If a frame has visible borders, the user can resize it by dragging the border. To prevent a user from doing this, you can add noresize="noresize" to the <frame> tag.

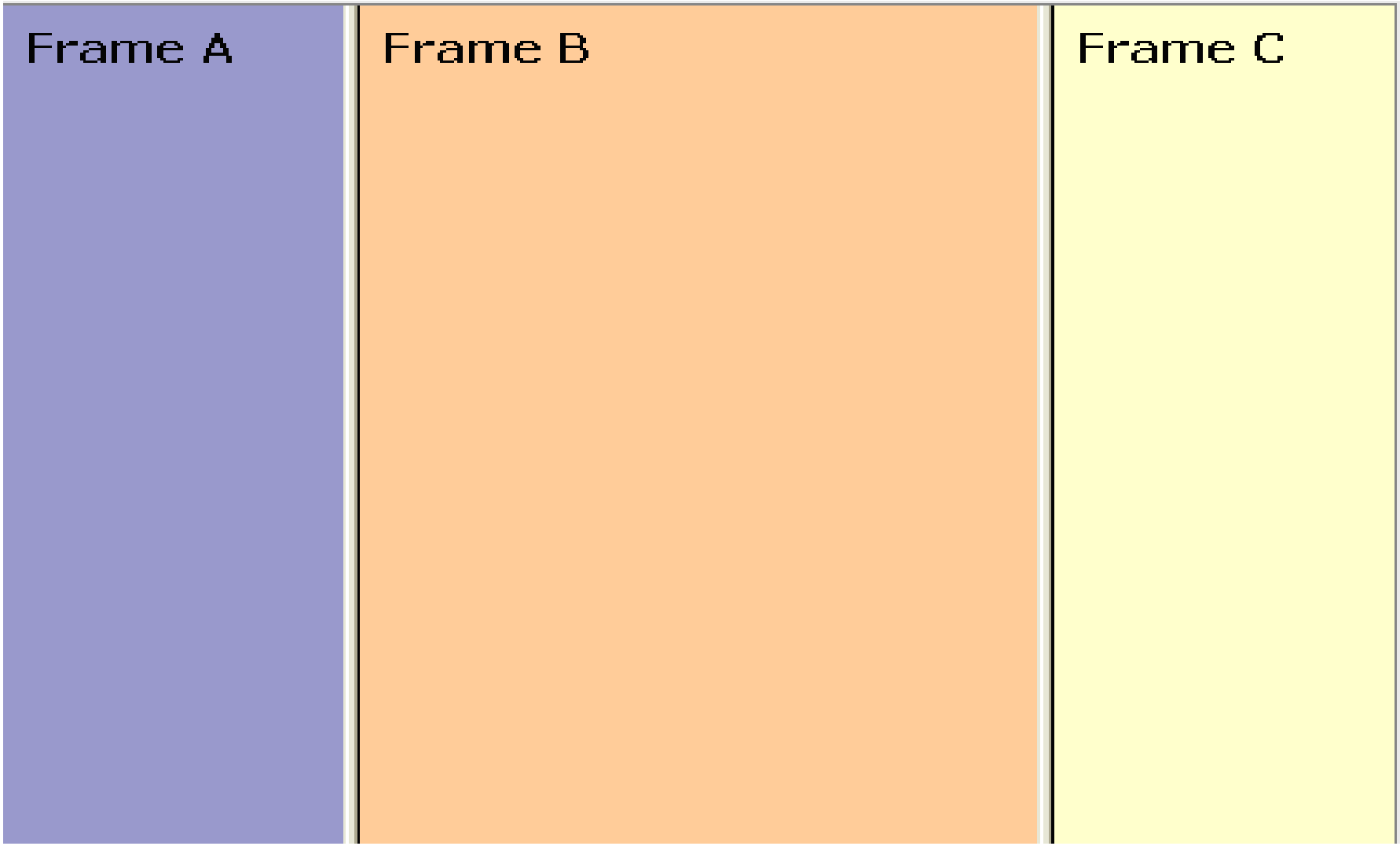
Add the <noframes> tag for browsers that do not support frames.

Important: You cannot use the <body></body> tags together with the <frameset></frameset> tags! However, if you add a <noframes> tag containing some text for browsers that do not support frames, you will have to enclose the text in <body></body> tags! See how it is done in the first example below.

HOW TO USE THE <NOFRAMES> TAG

```
<html>

<frameset cols="25%,50%,25%">
    <frame src="frame_a.htm">
    <frame src="frame_b.htm">
    <frame src="frame_c.htm">

<noframes>
<body>Your browser does not handle frames!</body>
</noframes>

</frameset>

</html>
```

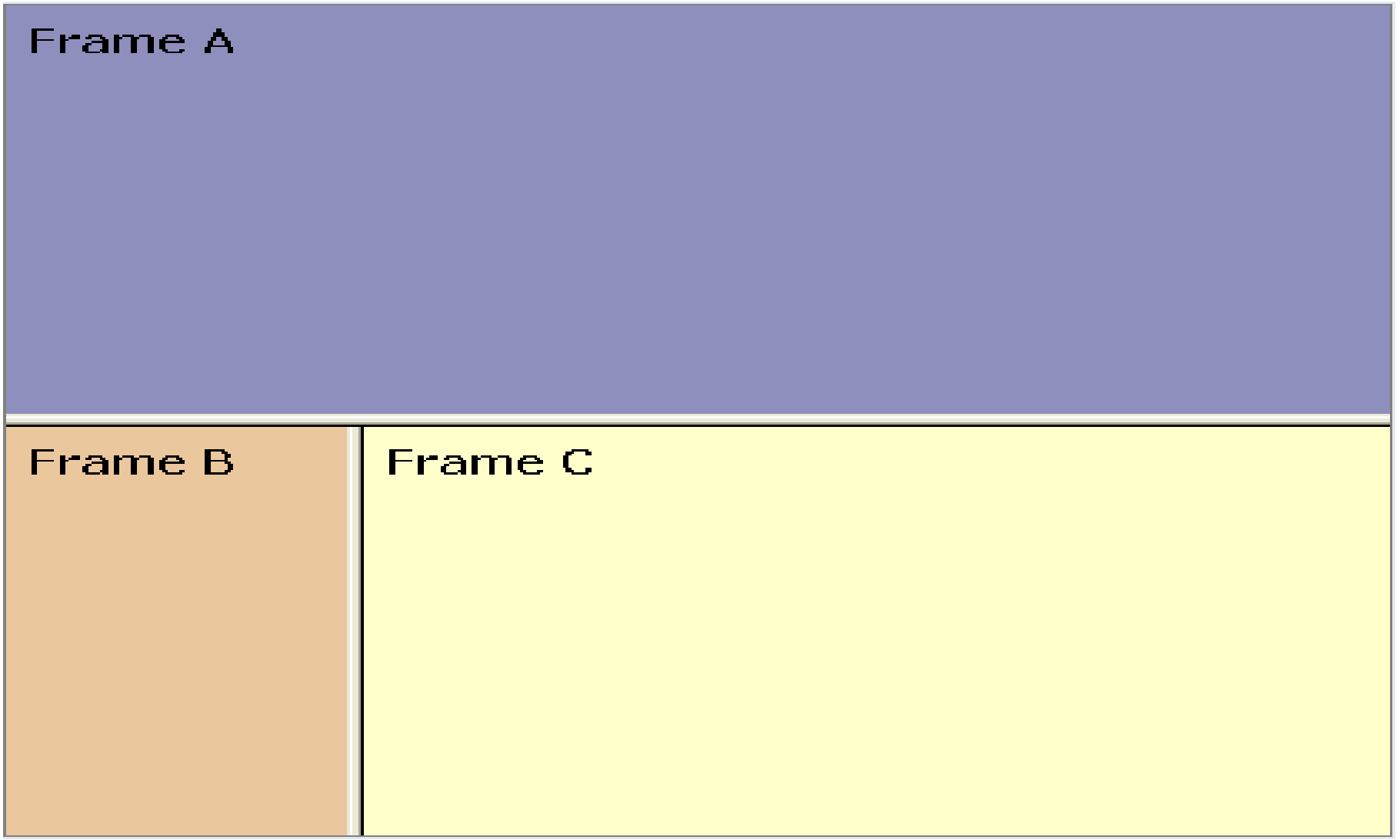
OUTPUT



MIXED FRAMESET

```
<html>

<frameset rows="50%,50%">

<frame src="frame_a.htm">

<frameset cols="25%,75%">
<frame src="frame_b.htm">
<frame src="frame_c.htm">
</frameset>

</frameset>

</html>
```

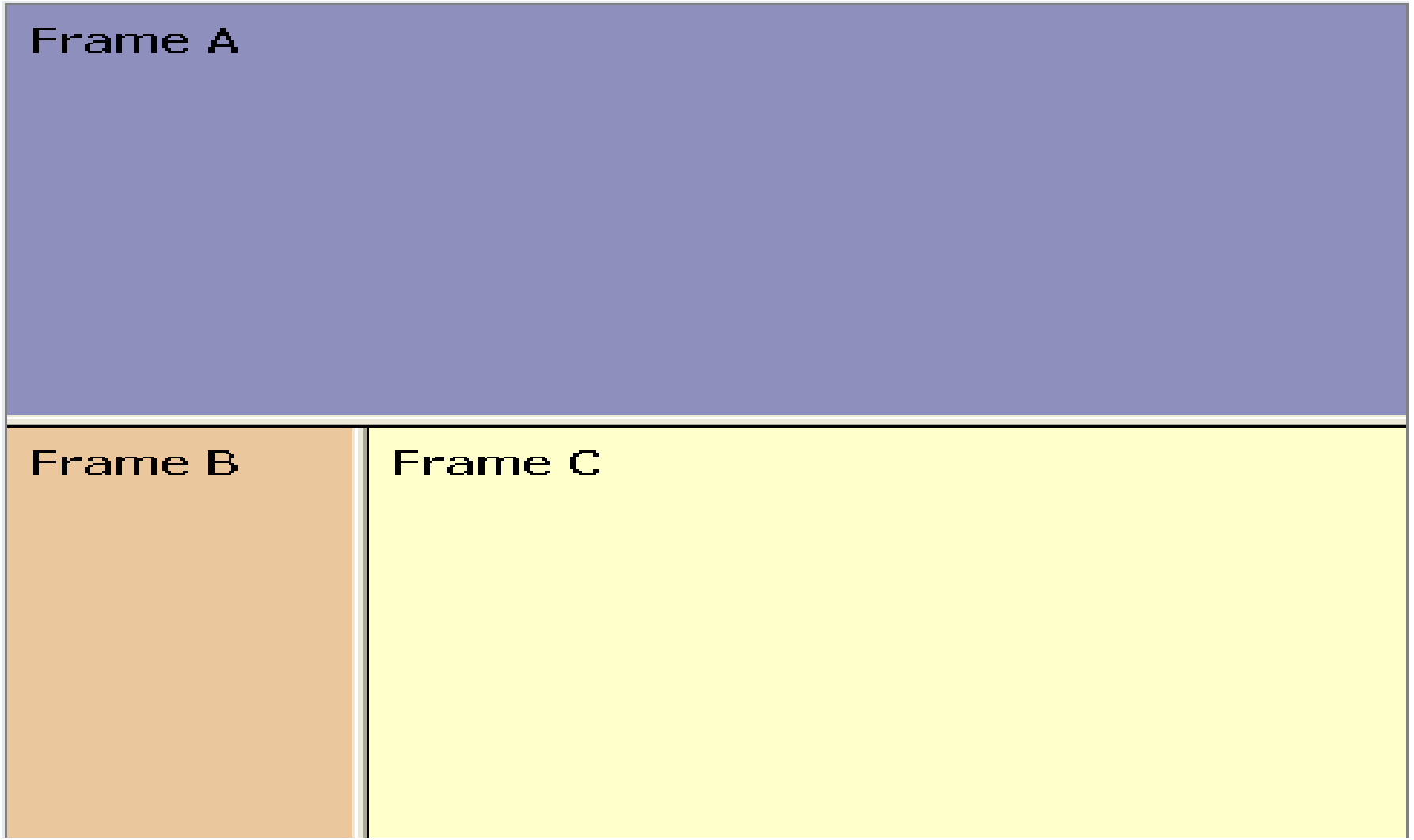
OUTPUT



FRAMESET WITH NORESIZE="NORESIZE'

```
<html>

<frameset rows="50%,50%">

<frame noresize="noresize" src="frame_a.htm">

<frameset cols="25%,75%">
<frame noresize="noresize" src="frame_b.htm">
<frame noresize="noresize" src="frame_c.htm">
</frameset>

</frameset>

</html>
```

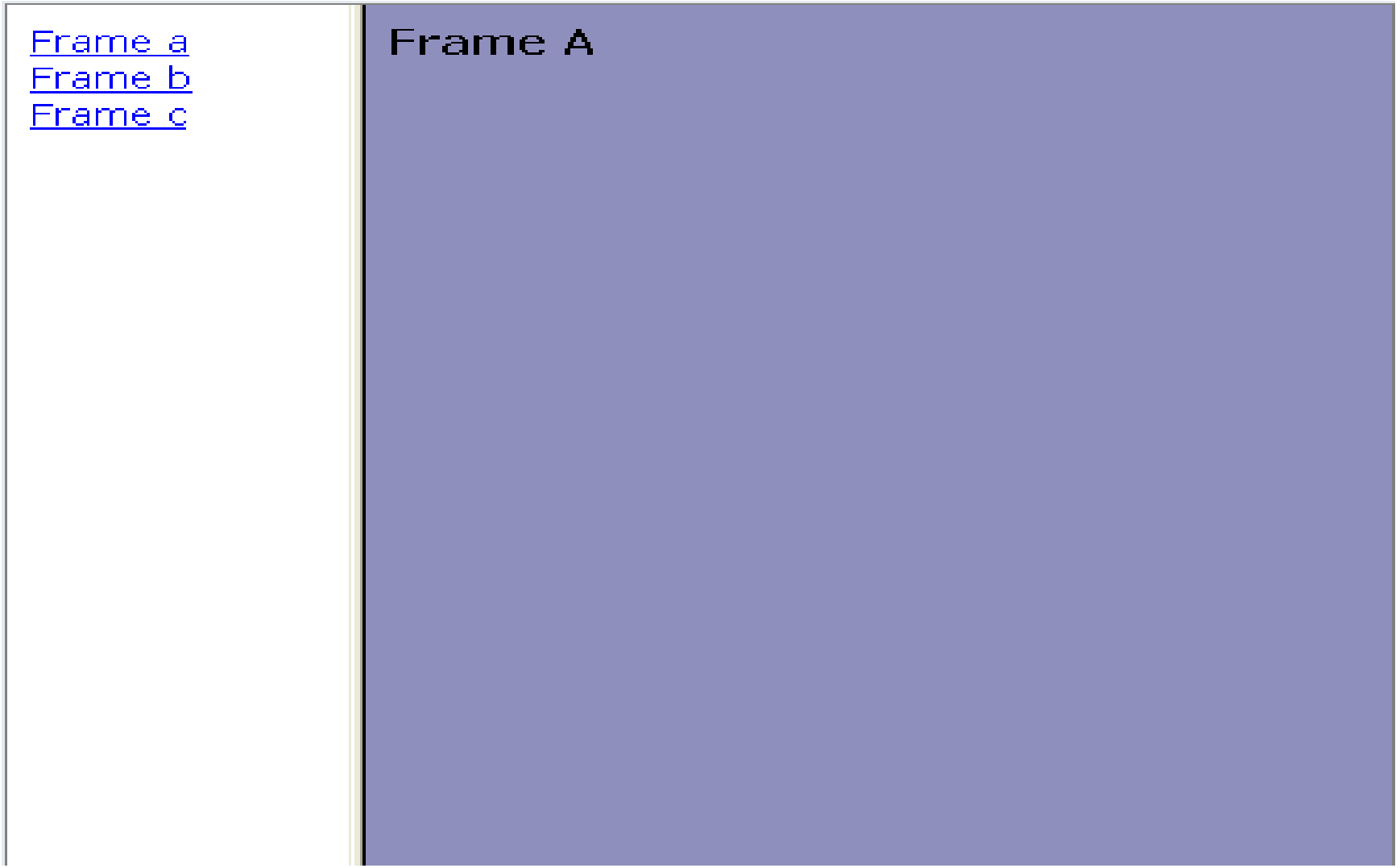
OUTPUT



NAVIGATION FRAME

```
<html>

<frameset cols="120,*">

<frame src="tryhtml_contents.htm">
<frame src="frame_a.htm"
name="showframe">

</frameset>

</html>
```

OUTPUT



JUMP TO A SPECIFIED SECTION WITHIN A FRAME

```
<html>

<frameset cols="20%,80%">

<frame src="frame_a.htm">
<frame src="link.htm#C10">

</frameset>

</html>
```

OUTPUT

Frame A

Chapter 1

This chapter explains ba bla bla

Chapter 2

This chapter explains ba bla bla

Chapter 3

This chapter explains ba bla bla

Chapter 4

This chapter explains ba bla bla

Chapter 5

This chapter explains ba bla bla

JUMP TO A SPECIFIED SECTION WITH FRAME NAVIGATION

```
<html>

<frameset cols="180,*">

<frame src="content.htm">
<frame src="link.htm" name="showframe">

</frameset>

</html>
```

OUTPUT

Link without Anchor
Link with Anchor

Chapter 1

This chapter explains ba bla bla

Chapter 2

This chapter explains ba bla bla

Chapter 3

This chapter explains ba bla bla

Chapter 4

This chapter explains ba bla bla

Chapter 5

This chapter explains ba bla bla

FRAME TAGS

Tag	Description
<frameset>	Defines a set of frames
<frame>	Defines a sub window (a frame
<noframes>	Defines a noframe section for browsers that do not handle frames

HTML TABLES

With HTML you can create tables.

Examples

Tables

This example demonstrates how to create tables in an HTML document.

Table borders

This example demonstrates different table borders. (You can find more examples at the bottom of this page)

EXAMPLE: TABLES

```
<html>
<body>

<p>
Each table starts with a table tag.
Each table row starts with a tr tag.
Each table data starts with a td tag.
</p>

<h4>One column:</h4>
<table border="1">
<tr>
 <td>100</td>
</tr>
</table>

<h4>One row and three columns:</h4>
<table border="1">
<tr>
 <td>100</td>
 <td>200</td>
```

EXAMPLE:TABLES

```
<td>300</td>
</tr>
</table>

<h4>Two rows and three columns:</h4>
<table border="1">
<tr>
 <td>100</td>
 <td>200</td>
 <td>300</td>
</tr>
<tr>
  <td>400</td>
 <td>500</td>
 <td>600</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

Each table starts with a table tag. Each table row starts with a tr tag. Each table data starts with a td tag.

One column:

100

One row and three columns:

100	200	300

Two rows and three columns:

100	200	300
400	500	600

TABLE BORDERS

```
<html>
<body>

<h4>With a normal border:</h4>
<table border="1">
<tr>
 <td>First</td>
 <td>Row</td>
</tr>
<tr>
<td>Second</td>
  <td>Row</td>
</tr>
</table>

<h4>With a thick border:</h4>
<table border="8">
```

TABLE BORDERS

```
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
 <td>Second</td>
<td>Row</td>
</tr>
</table>

<h4>With a very thick border:</h4>
<table border="15">
<tr>
<td>First</td>
 <td>Row</td>
</tr>
<tr>
 <td>Second</td>
 <td>Row</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

With a normal border:

First	Row
Second	Row

With a thick border:

First	Row
Second	Row

With a very thick border:

First	Row
Second	Row

TABLES

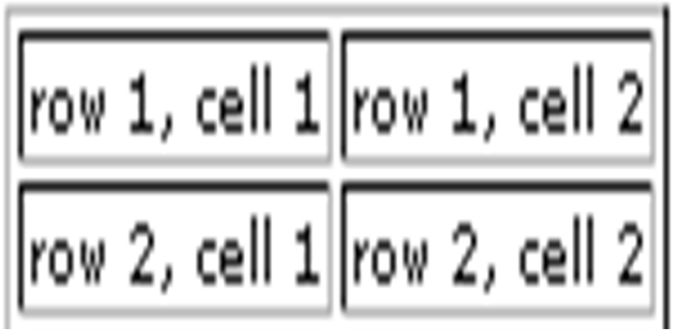
Tables are defined with the <table> tag. A table is divided into rows (with the <tr> tag), and each row is divided into data cells (with the <td> tag). The letters td stands for "table data," which is the content of a data cell. A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables, etc.

TABLES

```
<table border="1">
<tr>
<td>row 1, cell 1</td>
<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td>row 2, cell 2</td>
</tr>
</table>
```

TABLES

How it looks in a browser:



TABLES AND THE BORDER ATTRIBUTE

If you do not specify a border attribute the table will be displayed without any borders. Sometimes this can be useful, but most of the time, you want the borders to show. To display a table with borders, you will have to use the border attribute:

```
<table border="1">
<tr>
<td>Row 1, cell 1
</td>
<td>Row 1, cell 2</td>
</tr>
</table>
```

HEADINGS IN A TABLE

Headings in a table are defined with the

<th> tag.

```
<table border="1">
<tr>
<th>Heading
</th>
<th>Another Heading </th>
</tr>
<tr>
<td>row 1, cell 1
</td>
<td>row 1, cell 2 </td>
</tr>
<tr>
<td>row 2, cell 1</td>
 <td>row 2, cell 2</td>
</tr>
</table>
```

HEADINGS IN A TABLE

How it looks in a browser:

Heading	Another Heading
row 1, cell 1	row 1, cell 2
row 2, cell 1	row 2, cell 2

TABLE WITH NO BORDER

This example demonstrates a table with no borders.

```
<html>
<body>

<h4>This table has no borders:</h4>
<table>
<tr>
 <td>100</td>
  <td>200</td>
  <td>300</td>
</tr>
<tr>
  <td>400</td>
 <td>500</td>
  <td>600</td>
</tr>
</table>
```

TABLE WITH NO BORDER

```
<h4>And this table has no borders:</h4>
<table border="0">
<tr>
 <td>100</td>
 <td>200</td>
 <td>300</td>
</tr>
<tr>
<td>400</td>
 <td>500</td>
<td>600</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

This table has no borders:

100 200 300
400 500 600

And this table has no borders:

100 200 300
400 500 600

To do….

Table headers:

Name	Telephone	Telephone
Bill Gates	555 77 854	555 77 855

Vertical headers:

First Name:	Bill Gates
Telephone:	555 77 854
Telephone:	555 77 855

TABLE WITH CAPTION

This example demonstrates a table with a caption.

```
<html>
<body>

<h4>
This table has a caption,
and a thick border:
</h4>

<table border="6">
<caption>My Caption</caption>
<tr>
  <td>100</td>
 <td>200</td>
<td>300</td>
</tr>
<tr>
 <td>400</td
<td>500</td>
<td>600</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

This table has a caption, and a thick border:

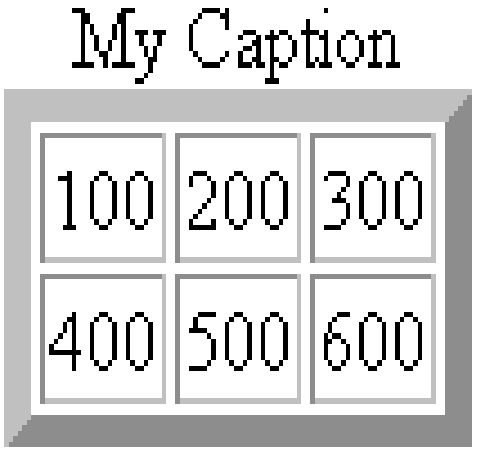


TABLE CELLS THAT SPAN MORE THAN ONE ROW/COLUMN

This example demonstrates how to define table cells that span more than one row or one column.

```
<html>
<body>

<h4>Cell that spans two columns:</h4>
<table border="1">
<tr>
 <th>Name</th>
<th colspan="2">Telephone</th>
</tr>
<tr>
<td>Bill Gates</td>
 <td>555 77 854</td>
 <td>555 77 855</td>
</tr>
</table>
```

- `

TABLE CELLS THAT SPAN MORE THAN ONE ROW/COLUMN

```
<h4>Cell that spans two rows:</h4>
<table border="1">

<tr>
 <th>First Name:</th>
 <td>Bill Gates</td>
</tr>
<tr>
 <th rowspan="2">Telephone:</th>
  <td>555 77 854</td>
</tr>
<tr>
  <td>555 77 855</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

Cell that spans two columns:

Name	Telephone	
Bill Gates	555 77 854	555 77 855

Cell that spans two rows:

First Name:	Bill Gates
Telephone:	555 77 854
	555 77 855

CELL PADDING

This example demonstrates how to use cell padding to create more white space between the cell content and its borders.

```
<html>
<body>

<h4>Without cellpadding:</h4>
<table border="1">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
```

EXAMPLE: CELL PADDING

```
<h4>With cellpadding:</h4>
<table border="1"
cellpadding="10">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

Without cellpadding:

First	Row
Second	Row

With cellpadding:

First	Row
Second	Row

EXAMPLE: CELL SPACING

This example demonstrates how to use cellspacing to increase the distance between the cells.

```
<html>
<body>

<h4>Without cellspacing:</h4>
<table border="1">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
```

EXAMPLE: CELL SPACING

```
<h4>With cellspacing:</h4>
<table border="1"
cellspacing="10">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

Without cellspacing:

First	Row
Second	Row

With cellspacing:

First	Row
Second	Row

ADD A BACKGROUND COLOR OR A BACKGROUND IMAGE TO A TABLE

This example demonstrates how to add a background to a table.

```
<html>
<body>

<h4>A background color:</h4>
<table border="1"
bgcolor="red">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>
```

ADD A BACKGROUND COLOR OR A BACKGROUND IMAGE TO A TABLE

```
<h4>A background image:</h4>
<table border="1"
background="bgdesert.jpg">
<tr>
  <td>First</td>
  <td>Row</td>
</tr>
<tr>
  <td>Second</td>
  <td>Row</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

A background color:

First	Row
Second	Row

A background image:

First	Row
Second	Row

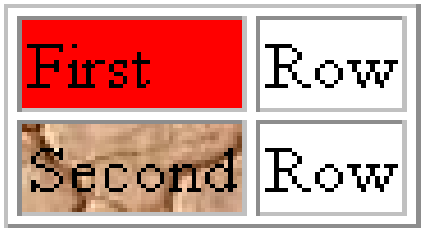
ADD A BACKGROUND COLOR OR A BACKGROUND IMAGE TO A TABLE CELL

This example demonstrates how to add a background to one or more table cells.

```
<html>
<body>

<h4>Cell backgrounds:</h4>
<table border="1">
<tr>
 <td bgcolor="red">First</td>
 <td>Row</td>
</tr>
<tr>
 <td
 background="bgdesert.jpg">
 Second</td>
 <td>Row</td>
</tr>
</table>

</body>
</html>
```

OUTPUT

Cell backgrounds:



ALIGN THE CONTENT IN A TABLE CELL

This example demonstrates how to use the "align" attribute to align the content of cells, to create a "nice-looking" table.

```
<html>
<body>

<table width="400" border="1">
 <tr>
  <th align="left">Money spent on....</th>
  <th align="right">January</th>
  <th align="right">February</th>
 </tr>
 <tr>
  <td align="left">Clothes</td>
  <td align="right">$241.10</td>
  <td align="right">$50.20</td>
 </tr>
```

ALIGN THE CONTENT IN A TABLE CELL

```
 <tr>
  <td align="left">Make-Up</td>
  <td align="right">$30.00</td>
  <td align="right">$44.45</td>
 </tr>
 <tr>
  <td align="left">Food</td>
  <td align="right">$730.40</td>
  <td align="right">$650.00</td>
 </tr>
 <tr>
  <th align="left">Sum</th>
  <th align="right">$1001.50</th>
  <th align="right">$744.65</th>
 </tr>
</table>

</body>
</html>
```

To Do..

Money spent on....	January	February
Clothes	$241.10	$50.20
Make-Up	$30.00	$44.45
Food	$730.40	$650.00
Sun	**$1001.50**	**$744.65**

HTML LIST

HTML supports

An unordered list

An ordered list

An defination list

AN UNORDERED LIST

```
<html>
<body>

<h4>An Unordered List:</h4>
<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

</body>
</html>
```

OUTPUT

An Unordered List:

- Coffee
- Tea
- Milk

AN ORDERED LIST

```
<html>
<body>

<h4>An Ordered List:</h4>
<ol>
 <li>Coffee</li>
 <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

OUTPUT

An Ordered List:

1. Coffee
2. Tea
3. Milk

DEFINITION LISTS

A definition list is **not** a list of items. This is a list of terms and explanation of the terms.
A definition list starts with the <dl> tag. Each definition-list term starts with the <dt> tag.
Each definition-list definition starts with the <dd> tag.

```
<dl>
<dt>Coffee</dt>
<dd>Black hot drink</dd>
<dt>Milk</dt>
 <dd>White cold drink</dd>
</dl>
```

DEFINITION LISTS

Here is how it looks in a browser:

Coffee

: Black hot drink

Milk

: White cold drink

DIFFERENT TYPES OF ORDERED LISTS

This example demonstrates different types of ordered lists.

```
<html>
<body>

<h4>Numbered list:</h4>
<ol>
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>
```

OUTPUT

Numbered list:

1. Apples
2. Bananas
3. Lemons
4. Oranges

DIFFERENT TYPES OF ORDERED LISTS

```
<h4>Letters list:</h4>
<ol type="A">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>
```

OUTPUT

Letters list:

A. Apples
B. Bananas
C. Lemons
D. Oranges

DIFFERENT TYPES OF ORDERED LISTS

```
<h4>Lowercase letters list:</h4>
<ol type="a">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>
```

OUTPUT

Lowercase letters list:

a. Apples
b. Bananas
c. Lemons
c. Oranges

DIFFERENT TYPES OF ORDERED LISTS

```
<h4>Roman numbers list:</h4>
<ol type="I">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>
```

OUTPUT

Roman numbers list:

I. Apples
II. Bananas
III. Lemons
IV. Oranges

DIFFERENT TYPES OF ORDERED LISTS

```
<h4>Lowercase Roman numbers list:</h4>
<ol type="i">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ol>

</body>
</html>
```

OUTPUT

Lowercase Roman numbers list:

i. Apples
ii. Bananas
iii. Lemons
iv. Oranges

DIFFERENT TYPES OF UNORDERED LISTS

This example demonstrates different types of unordered lists.

```
<html>
<body>

<h4>Disc bullets list:</h4>
<ul type="disc">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ul>
```

OUTPUT

Disc bullets list:

- Apples
- Bananas
- Lemons
- Oranges

DIFFERENT TYPES OF UNORDERED LISTS

```
<h4>Circle bullets list:</h4>
<ul type="circle">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ul>
```

OUTPUT

Circle bullets list:

- Apples
- Bananas
- Lemons
- Oranges

DIFFERENT TYPES OF UNORDERED LISTS

```
<h4>Square bullets list:</h4>
<ul type="square">
 <li>Apples</li>
 <li>Bananas</li>
 <li>Lemons</li>
 <li>Oranges</li>
</ul>

</body>
</html>
```

OUTPUT

Square bullets list:

- Apples
- Bananas
- Lemons
- Oranges

To do..

A nested List:

- Coffee
- Tea
  - Black tea
  - Green tea
- Milk

To do…

A nested List:

- Coffee
- Tea
  - Black tea
  - Green tea
    - China
    - Africa
- Milk

Revision

Tag	Description
	Defines an ordered list
	Defines an unordered list
	Defines a list item
<dl>	Defines a definition list

LIST TAGS

Tag	Description
<dt>	Defines a definition term
<dd>	Defines a definition description

HTML FORMS AND INPUT

HTML Forms are used to select different kinds of user input.

Examples

Text fields

This example demonstrates how to create text fields on an HTML page. A user can write text in a text field.

Password fields

This example demonstrates how to create a password field on an HTML page.

EXAMPLE: TEXT FIELDS

```
<html>
<body>

<form action="">
First name:
<input type="text" name="firstname">
<br>
Last name:
<input type="text" name="lastname">
</form>

</body>
</html>
```

OUTPUT

PASSWORD FIELDS

```
<html>
<body>

<form action="">
Username:
<input type="text" name="user">
<br>
Password:
<input type="password" name="password">
</form>
<p>
Note that when you type characters in a password field, the
browser displays asterisks or bullets instead of the
characters.
</p>
</body>
</html>
```

OUTPUT

Note that when you type characters in a password field, the browser displays asterisks or bullets instead of the characters.

FORMS

A form is an area that can contain form elements.

Form elements are elements that allow the user to enter information (like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.) in a form.

A form is defined with the <form> tag.

```
<form>
 <input>
</input>
</form>
```

INPUT

The most used form tag is the <input> tag. The type of input is specified with the type attribute. The most commonly used input types are explained below.

TEXT FIELDS

Text fields are used when you want the user to type letters, numbers, etc. in a form.

```
<form>
 First name:
<input type="text" name="firstname">
 <br>
 Last name:
<input type="text" name="lastname">
</form>
```

TEXT FIELDS

How it looks in a browser:

First name:

Last name:

Note that the form itself is not visible. Also note that in most browsers, the width of the text field is 20 characters by default.

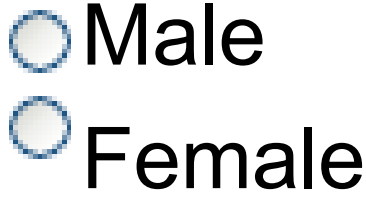
RADIO BUTTONS

Radio Buttons are used when you want the user to select one of a limited number of choices.

```
<form>
<input type="radio" name="sex" value="male"> Male
<br>
<input type="radio" name="sex" value="female">Female
</form>
```

RADIO BUTTONS

How it looks in a browser:



Note that only one option can be chosen.

CHECKBOXES

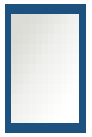
Checkboxes are used when you want the user to select one or more options of a limited number of choices.

```
<form>
 I have a bike:
<input type="checkbox" name="vehicle" value="Bike">
<br>
I have a car:
<input type="checkbox" name="vehicle" value="Car">
<br>
 I have an airplane:
<input type="checkbox" name="vehicle" value="Airplane">
</form>
```

CHECKBOXES

How it looks in a browser:

I have a bike: 

I have a car: 

I have an airplane: 

THE FORM'S ACTION ATTRIBUT AND THE SUBMIT BUTTON

When the user clicks on the "Submit" button, the content of the form is sent to the server. The form's action attribute defines the name of the file to send the content to. The file defined in the action attribute usually does something with the received input.

```
<form name="input" action="html_form_submit.jsp"
method="get">
Username:
<input type="text" name="user">
<input type="submit" value="Submit">
</form>
```

THE FORM'S ACTION ATTRIBUT AND THE SUBMIT BUTTON

How it looks in a browser:

Username: 

If you type some characters in the text field above, and click the "Submit" button, the browser will send your input to a page called "html_form_submit.jsp". The page will show you the received input.

SIMPLE DROP DOWN BOX

This example demonstrates how to create a simple drop-down box on an HTML page. A drop-down box is a selectable list.

```
<html>
<body>

<form action="">
<select name="cars">
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
<option value="fiat">Fiat</option>
<option value="audi">Audi</option>
</select>
</form>

</body>
</html>
```

OUTPUT

ANOTHER DROP DOWN BOX

This example demonstrates how to create a simple drop-down box with a pre-selected value.

```
<html>
<body>

<form action="">
<select name="cars">
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
<option value="fiat" selected="selected">Fiat</option>
<option value="audi">Audi</option>
</select>
</form>

</body>
</html>
```

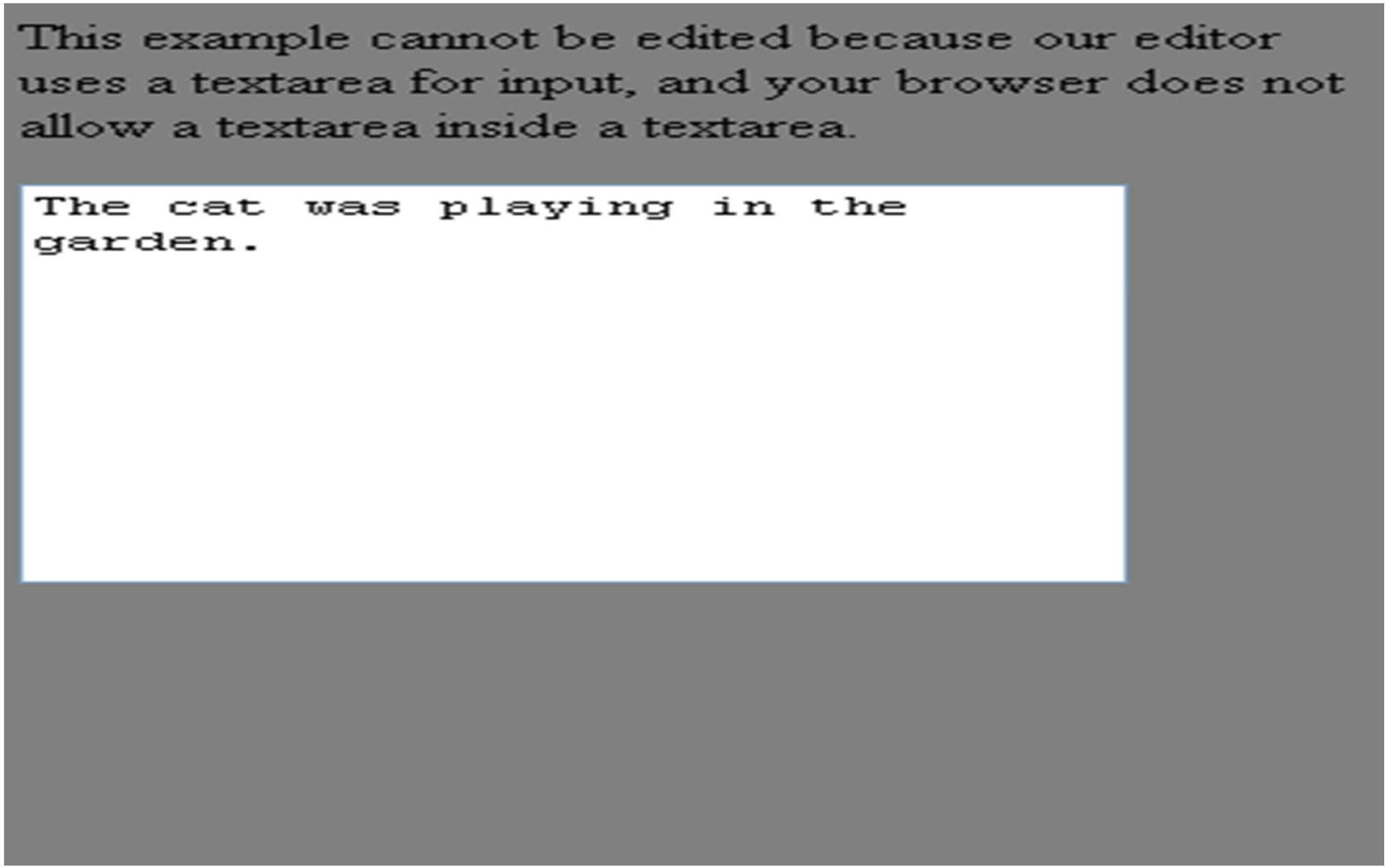
OUTPUT

EXAMPLE: TEXTAREA

This example demonstrates how to create a text-area (a multi-line text input control). A user can write text in the text-area. In a text-area you can write an unlimited number of characters.

```
<html>
<body>

<p>
This example cannot be edited
because our editor uses a textarea
for input,
and your browser does not allow
a textarea inside a textarea.
</p>

<textarea rows="10" cols="30">
The cat was playing in the garden.
</textarea>

</body>
</html>
```

OUTPUT


This example cannot be edited because our editor uses a textarea for input, and your browser does not allow a textarea inside a textarea.
The cat was playing in the garden.

CREAT A BUTTON

This example demonstrates how to create a button. On the button you can define your own text.

```
<html>
<body>

<form action="">
<input type="button" value="Hello world!">
</form>

</body>
</html>
```

OUTPUT

EXAMPLE: INSERT IMAGES

```
<html>
<body>

<p>
An image:
<img src="constr4.gif"
width="144" height="50">
</p>

<p>
A moving image:
<img src="hackanm.gif"
width="48" height="48">
</p>

<p>
Note that the syntax of inserting a moving image is no
different from that of a non-moving image.
</p>

</body>
</html>
```

OUTPUT

An image: 

A moving image: 

Note that the syntax of inserting a moving image is no different from that of a non-moving image.

THE ALT ATTRIBUTE

The alt attribute is used to define an "alternate text" for an image. The value of the alt attribute is an author-defined text:

<img src="boat.gif" alt="Big Boat">

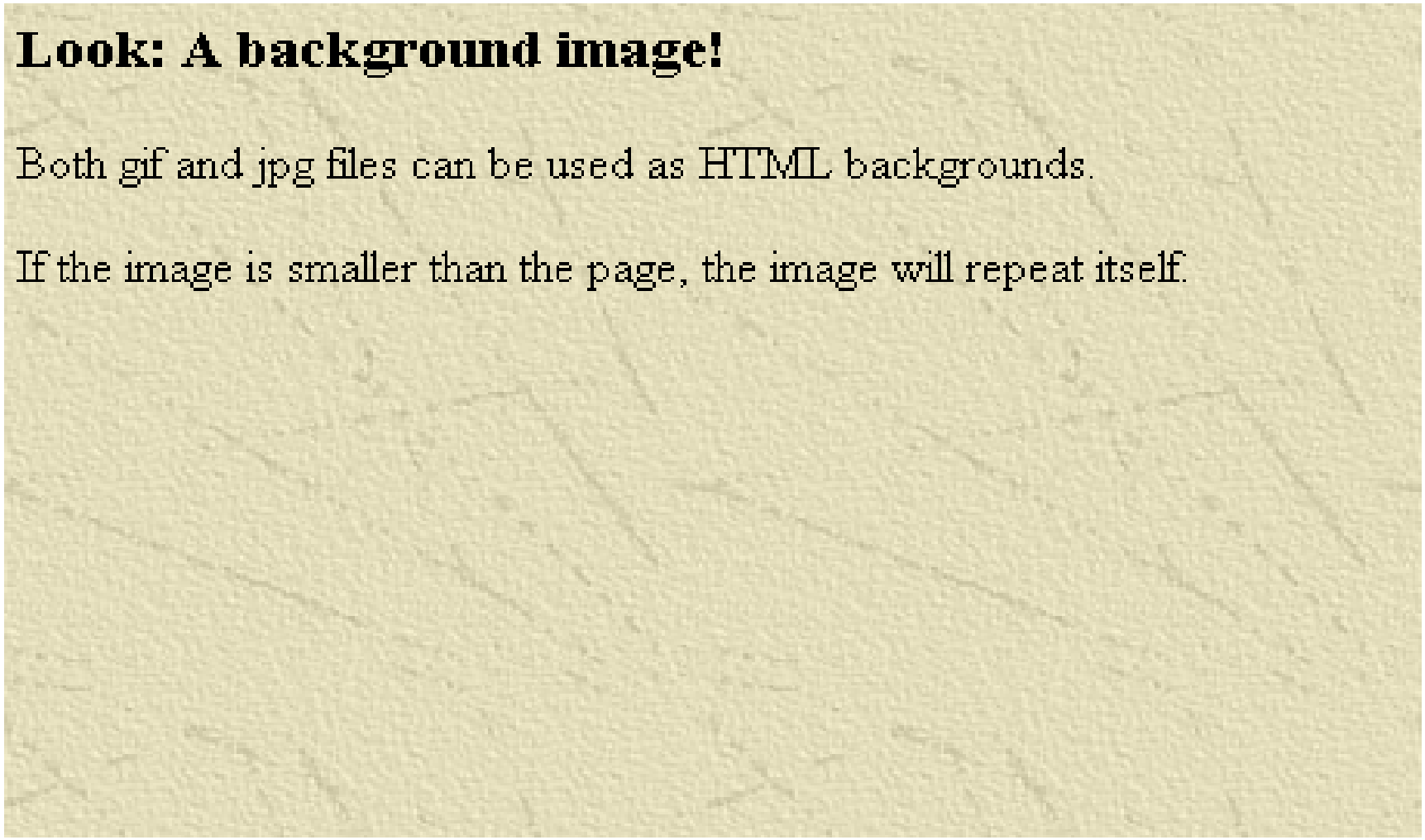
The "alt" attribute tells the reader what he or she is missing on a page if the browser can't load images. The browser will then display the alternate text instead of the image. It is a good practice to include the "alt" attribute for each image on a page, to improve the display and usefulness of your document for people who have text-only browsers.

BACKGROUND MAGE

This example demonstrates how to add a background image to an HTML page.

```
<html>
<body background="background.jpg">

<h3>Look: A background image!</h3>

<p>Both gif and jpg files can be used as HTML
backgrounds.</p>

<p>If the image is smaller than the page, the image will
repeat itself.</p>

</body>
</html>
```

OUTPUT


Look: A background image!
Both gif and jpg files can be used as HTML backgrounds.
If the image is smaller than the page, the image will repeat itself.

ALIGNING IMAGES

This example demonstrates how to align an image within the text.

```
<html>
<body>

<p>
An image
<img src="hackanm.gif"
align="bottom" width="48" height="48">
in the text
</p>

<p>
An image
<img src ="hackanm.gif"
align="middle" width="48" height="48">
in the text
</p>

<p>
An image
<img src ="hackanm.gif"
align="top" width="48" height="48">
in the text
</p>
```

OUTPUT

An image  in the text

An image  in the text

An image  in the text

ALIGNING IMAGES

```
<p>Note that bottom alignment is the default alignment</p>

<p>
An image
<img src ="hackanm.gif"
width="48" height="48">
in the text
</p>

<p>
<img src ="hackanm.gif"
width="48" height="48">
An image before the text
</p>

<p>
An image after the text
<img src ="hackanm.gif"
width="48" height="48">
</p>

</body>
</html>
```

OUTPUT

Note that bottom alignment is the default alignment

An image  in the text

 An image before the text

An image after the text 

LET THE IMAGE FLOAT

This example demonstrates how to let an image float to the left or right of a paragraph.

```
<html>
<body>

<p>
<img src ="hackanm.gif"
align ="left" width="48" height="48">
A paragraph with an image. The align attribute of the image
is set to "left". The image will float to the left of this
text.
</p>

<p>
<img src ="hackanm.gif"
align ="right" width="48" height="48">
A paragraph with an image. The align attribute of the image
is set to "right". The image will float to the right of
this text.
</p>

</body>
</html>
```

OUTPUT

A paragraph with an image. The align attribute of the image is set to "left". The image will float to the left of this text.

A paragraph with an image. The align attribute of the image is set to "right". The image will float to the right of this text.

ADJUST IMAGE TO DIFFERENT SIZES

This example demonstrates how to adjust images to different sizes.

```
<html>
<body>

<p>
<img src="hackanm.gif"
width="20" height="20">
</p>

<p>
<img src="hackanm.gif"
width="45" height="45">
</p>

<p>
<img src="hackanm.gif"
width="70" height="70">
</p>

<p>
You can make a picture larger or smaller changing the
values in the "height" and "width" attributes of the
img tag.
</p>

</body>
</html>
```

OUTPUT

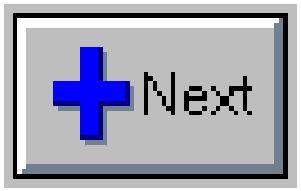
You can make a picture larger or smaller changing the values in the "height" and "width" attributes of the img tag.

MAKE A HYPERLINK OF AN IMAGE

This example demonstrates how to use an image as a link.

```
<html>
<body>
<p>
You can also use an image as a link:
<a href="lastpage.htm">
<img border="0" src="buttonnext.gif" width="65" height="38">
</a>
</p>

</body>
</html>
```

OUTPUT

You can also use an image as a link: 

HTML META

Document description

Information inside a meta element describes the document.

Document keywords

Information inside a meta element describes the document's keywords.

Redirect a user

This example demonstrates how to redirect a user if your site address has changed.

DOCUMENT DESCRIPTION

```
<html>

<head>

<meta name="author"
content="Jan Egil Refsnes">

<meta name="revised"
content="Jan Egil Refsnes,6/10/99">

<meta name="generator"
content="Microsoft FrontPage 4.0">

</head>

<body>
<p>
The meta attributes of this document identify the author
and the editor software.
</p>
</body>

</html>
```

OUTPUT

The meta attributes of this document identify the author and the editor software.

DOCUMENT KEYWORDS

```
<html>

<head>

<meta name="description"
content="HTML examples">

<meta name="keywords"
content="HTML, DHTML, CSS, XML, XHTML, JavaScript,
VBScript">

</head>

<body>
<p>
The meta attributes of this document describe the document
and its keywords.
</p>
</body>

</html>
```

OUTPUT

The meta attributes of this document describe the document and its keywords.

KEYWORDS FOR SEARCH ENGINES

Some search engines on the WWW will use the name and content attributes of the meta tag to index your pages.

This meta element defines a description of your page:

<meta name="description" content="Free Web tutorials on HTML, CSS, XML, and XHTML">

This meta element defines keywords for your page:

<meta name="keywords" content="HTML, DHTML, CSS, XML, XHTML, JavaScript, VBScript">

Thank you