



WEB

Developments

Front-End Web

Eman Fathi
Professional Developer Department
Information Technology Institute

HTML



CSS



JS



jQuery



JSON



AJAX



Bootstrap



Contents

- ✓ *Day1: HTML*
- ✓ *Day2: HTML*
- ✓ *Day3: JS core*
- ✓ *Day4: JS core*
- ✓ *Day5: DOM*
- ✓ *Day6: Events*
- ✓ *Day7: DHTML*
- ✓ *Day8: Object Oriented*
- ✓ *Day9: Ajax*
- ✓ *Day10: JQuery*
- ✓ *Day11: JQuery*
- ✓ *Day12: HTML5*
- ✓ *Day13: HTML5*
- ✓ *Day14: Bootstrap*
- ✓ *Day15: Bootstrap*
- ✓ *Day16: Angular*
- ✓ *Day17: Angular*
- ✓ *Day18: Angular*

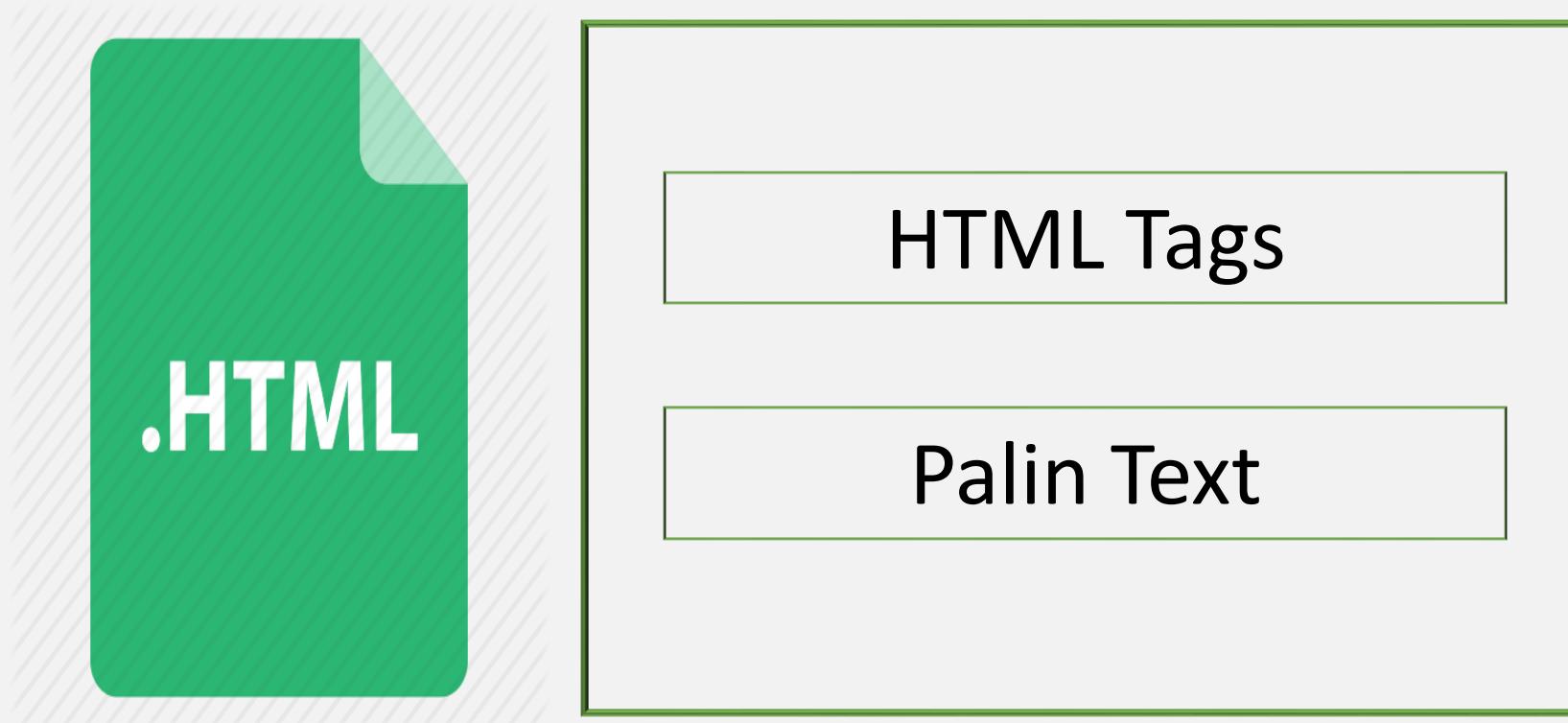


We need to turn them into developers who think of applications like this.

*HTML is the foundation language for building web
pages*

Markup Language , not a programming language

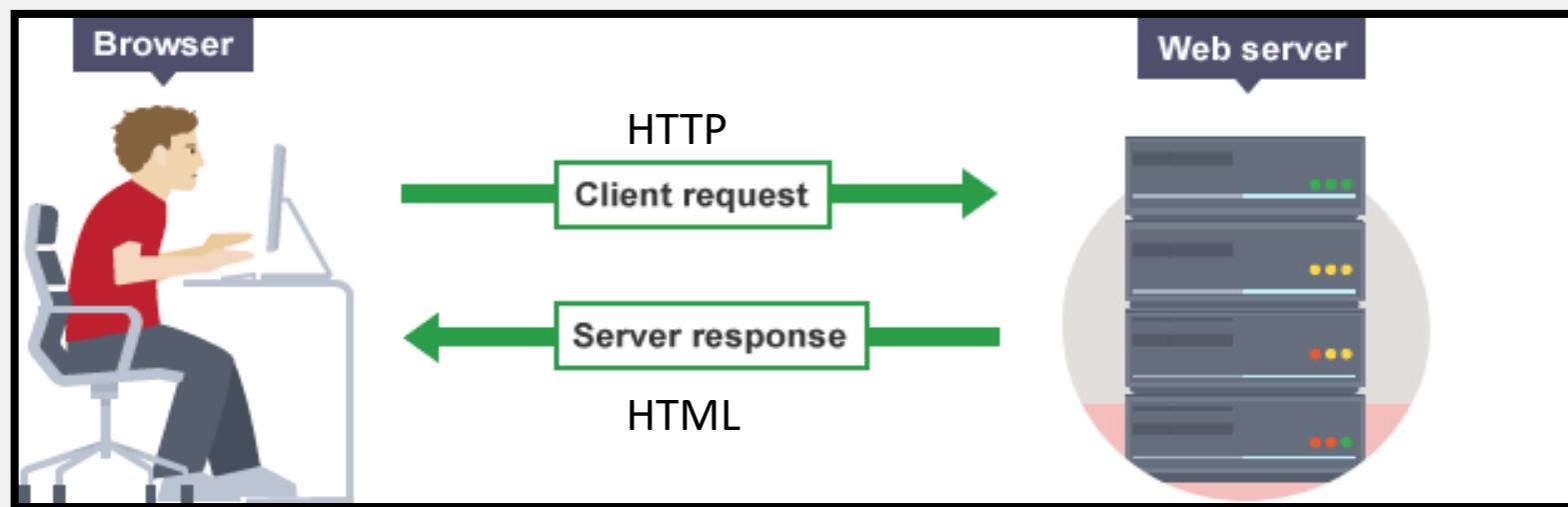
Hyper Text Markup language



Web site combined of many HTML files

How does web work?

Every time you visit a website, the site's web server sends HTML to your browser, which then renders it as the web page you see on your screen.



HTML Versions

- ✓ HTML 1.0
- ✓ HTML 2.0
- ✓ HTML 3.2
- ✓ HTML 4.0
- ✓ HTML 4.1
- ✓ HTML 5

What do we need to start

✓ Web browser

- Google Chrome
- Mozilla Firefox
- Safari
- IE

✓ Text Editor

- Notepad++
- Visual Studio Code
- Brackets
- Sublime Text

HTML Elements

<tagname> content</tagname>

<h1>Contact Us</h1>

<p>This is a paragraph</p>

 (self closing)

- ✓ Elements name are surrounded by angle brackets
- ✓ Come in pairs(start and end tag)
- ✓ End tag is the same as start tag but with a forward slash
- ✓ Some tags are self closing
- ✓ Tags are not visible to the user

Tag Attributes

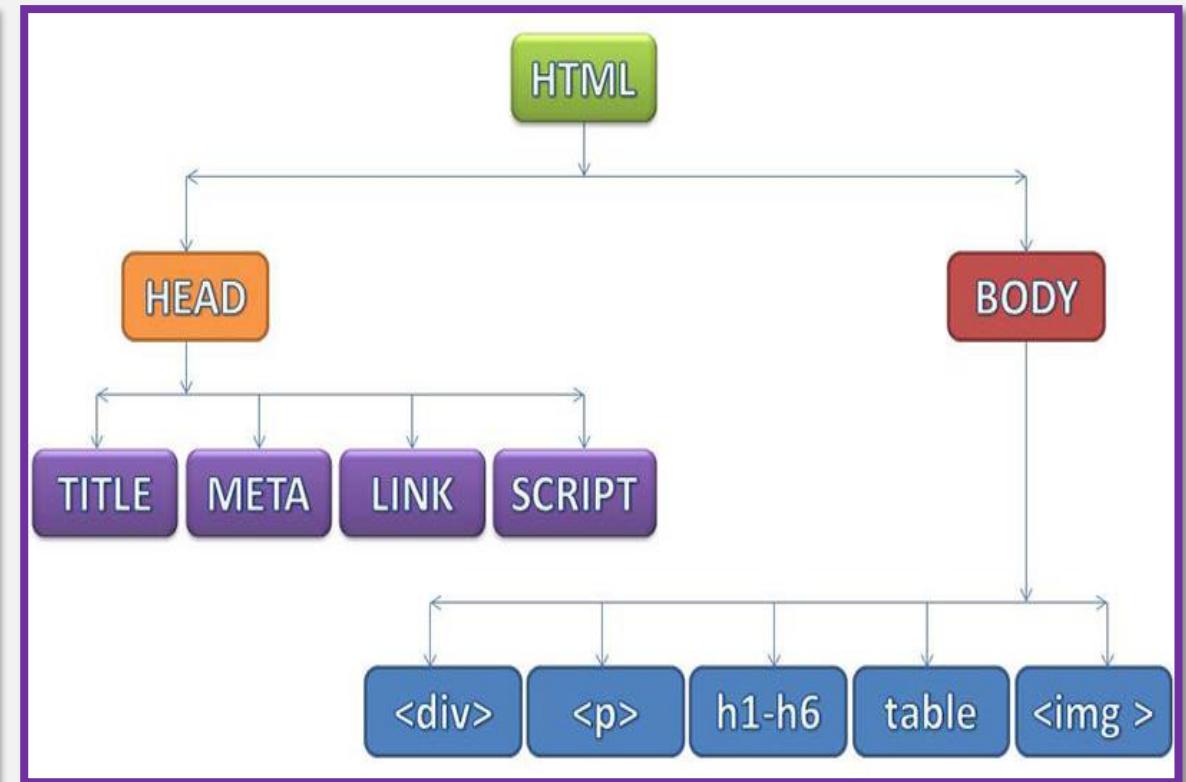
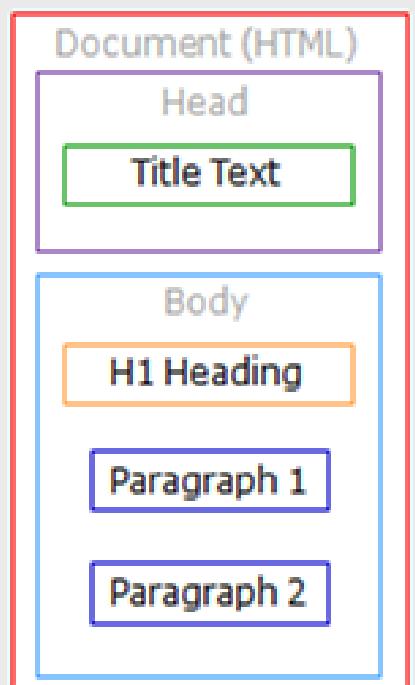
```
<tagname  
attributename="value">content</tagname>
```

```
<a href="http://www.iti.gov.eg">iti</a>
```

- ✓ All tags can have attributes
- ✓ Provide information about element
- ✓ Placed within the start tag
- ✓ Key/value Paris (id="3")
- ✓ Each tag can has many attributes

HTML Page Structure

```
<HTML>  
  
<HEAD>  
  <TITLE>Title Text</TITLE>  
</HEAD>  
  
<BODY>  
  <H1>H1 Heading</H1>  
  <P>Paragraph 1</P>  
  <P>Paragraph 2</P>  
</BODY>  
  
</HTML>
```



Inline and block Elements

✓ Inline Elements

- Do not start at new line
- Take only the necessary width

✓ Block Elements

- Start on a new line
- Take full width available

✓ Block Level: div , h , p ,form

✓ Inline Level: span , img, a

Working with Text

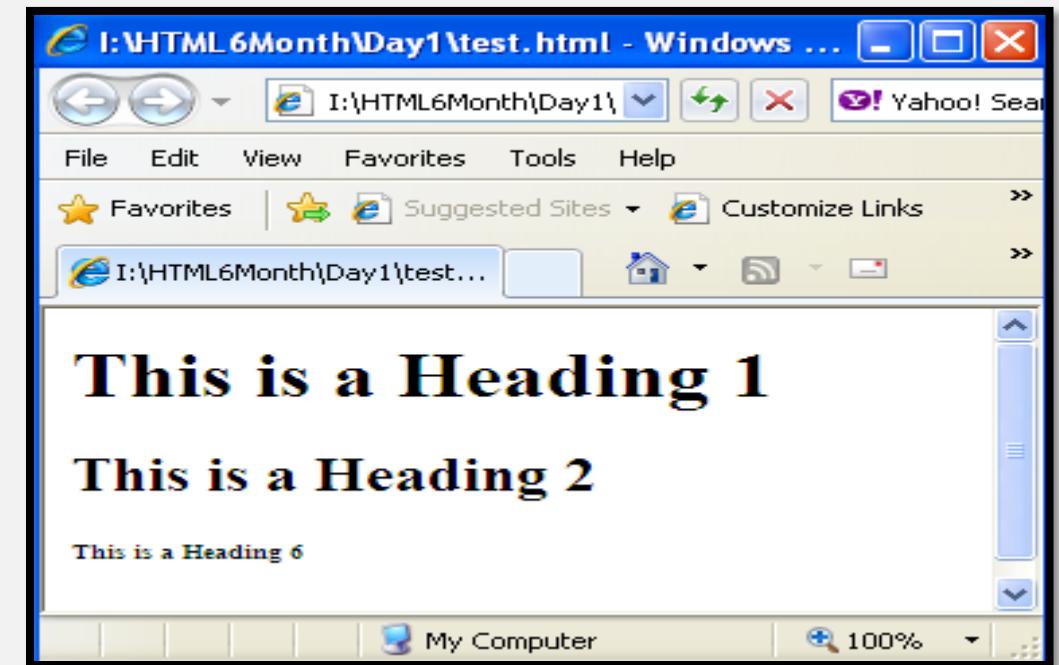
Working With Text

- ✓ Headings
- ✓ Paragraphs
- ✓ Fonts
- ✓ Physical styles
- ✓ Preformated Text Element
- ✓ Ordered List
- ✓ Unordered list

Headings

- There are six levels of headings, ranging from a heading 1 (**the largest**) to a heading 6 (**the smallest**).
- Browsers automatically add an empty line before and after headings

```
<h1>This is a Heading 1</h1>
<h2>This is a Heading 2</h2>
<h3>This is a Heading 3</h3>
<h4>This is a Heading 4</h4>
<h5>This is a Heading 5</h5>
<h6>This is a Heading 6</h6>
```



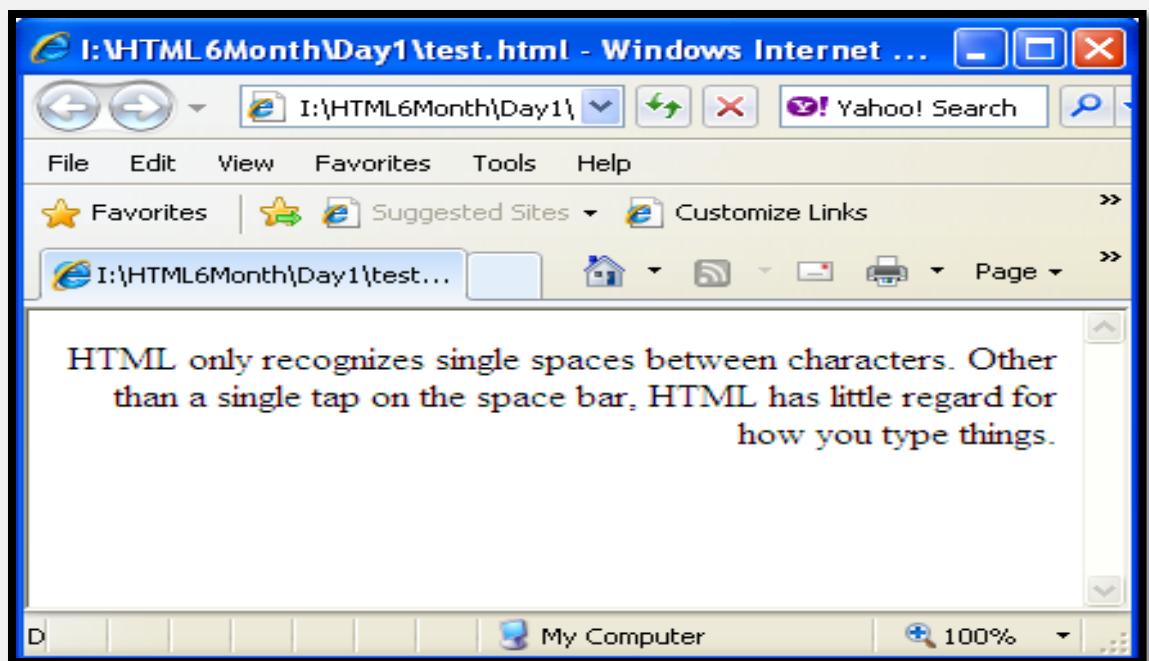
Paragraph

HTML only recognizes single spaces between characters. Other than a single tap on the Spacebar, HTML has little regard for how you physically type your paragraphs. What HTML does recognize is tags to format paragraphs.

<p align="right">

HTML only recognizes single spaces between characters. Other than a single tap on the space bar, HTML has little regard for how you type things.

</p>



Font

The tag determines which font is applied to your text.

```
<font>  
    Applying specific font name to my text  
</font>
```

Font Tag Has Many Attributes:

- Face
- Size
- Color

Font

- **Face** : Font tag by itself, this tag has no effect on text. You specify the fonts as a value of the face attribute. So we must use face attribute to apply specific font name

```
<font face="Arial">  
    Applying specific font name to my text  
</font>
```

- **Size** : The size attribute accepts a numeric value .

```
<font face="Arial" size="4">  
    Applying specific font name to my text  
</font>
```

Font

FF FF FF
00 00 00
66 99 CC
RR GG BB

Orchid #DA70D6	Orangered #FF4500	Orange #FFA500
Paleturquoise #AFEEEE	Palegreen #98FB98	Palegoldenrod #EEE8AA
Peachpuff #FFDAB9	Papayawhip #FFEFD5	Palevioletred #D87093
Plum #DDA0DD	Pink #FFC0CB	Peru #CD853F
Red #FF0000	Purple #800080	Powderblue #B0E0E6
Saddlebrown #8B4513	Royalblue #4169E1	Rosybrown #BC8F8F
Seagreen #2E8B57	Sandybrown #F4A460	Salmon #FA8072
Silver #C0C0C0	Sienna #A0522D	Seashell #FFF5EE
Slategray #708090	Slateblue #6A5ACD	Skyblue #87CEEB

Font

- **Color:** colors can be defined using hexadecimal notation (a six-character code for expressing the combined red, green, and blue values of affected pixels) or a number of predefined English equivalents.

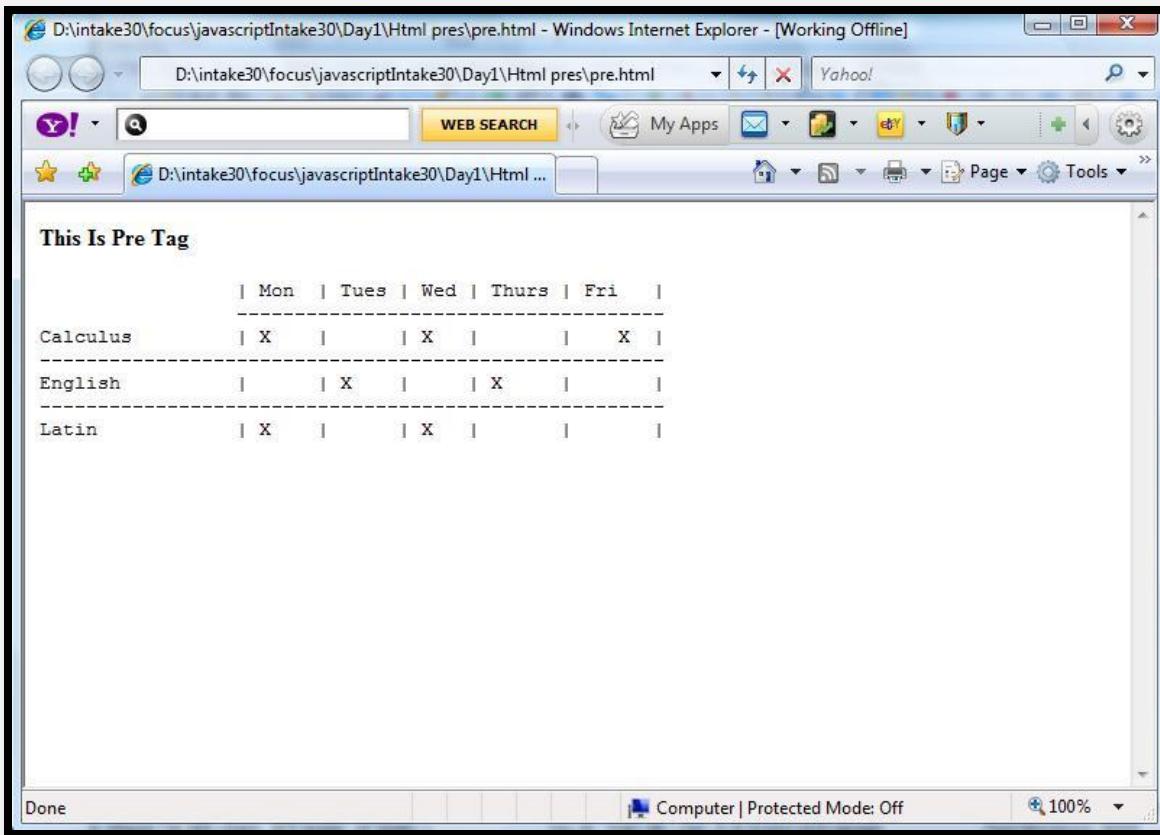
```
<font size="2" color="#0000FF">
```

This text has been turned blue using hexadecimal notation, which uses six characters preceded by a pound sign (#).

```
<font size="2" color="purple">
```

This text is making use of the word "Purple" one of the 16 recognized colors in the HTML standard.

Preformatted Text



Preformatted Text

The `<pre>` tag tells the browser that text is preformatted, which means it should leave all white space as entered.

```
<pre>
    | Mon | Tues | Wed | Thurs | Fri   |
    -----
Calculus | X   |       | X   |       | X   |
    -----
English  |       | X   |       | X   |       |
    -----
Latin    | X   |       | X   |       |
</pre>
```

Styles

To apply physical styles on text in HTML ,we will use a Collection of tags, those tags could change the appearance of HTML text.

- ✓ To create bold text : ** Bold Text **
- ✓ To Create italic text :*<i> Italic Text </i>*
- ✓ To underline text: <u> Underline </u>
- ✓ To strike through text: ~~<s>Strikethrough </s>~~
- ✓ To superscript text: ^a²
- ✓ To subscript text : _{H2}

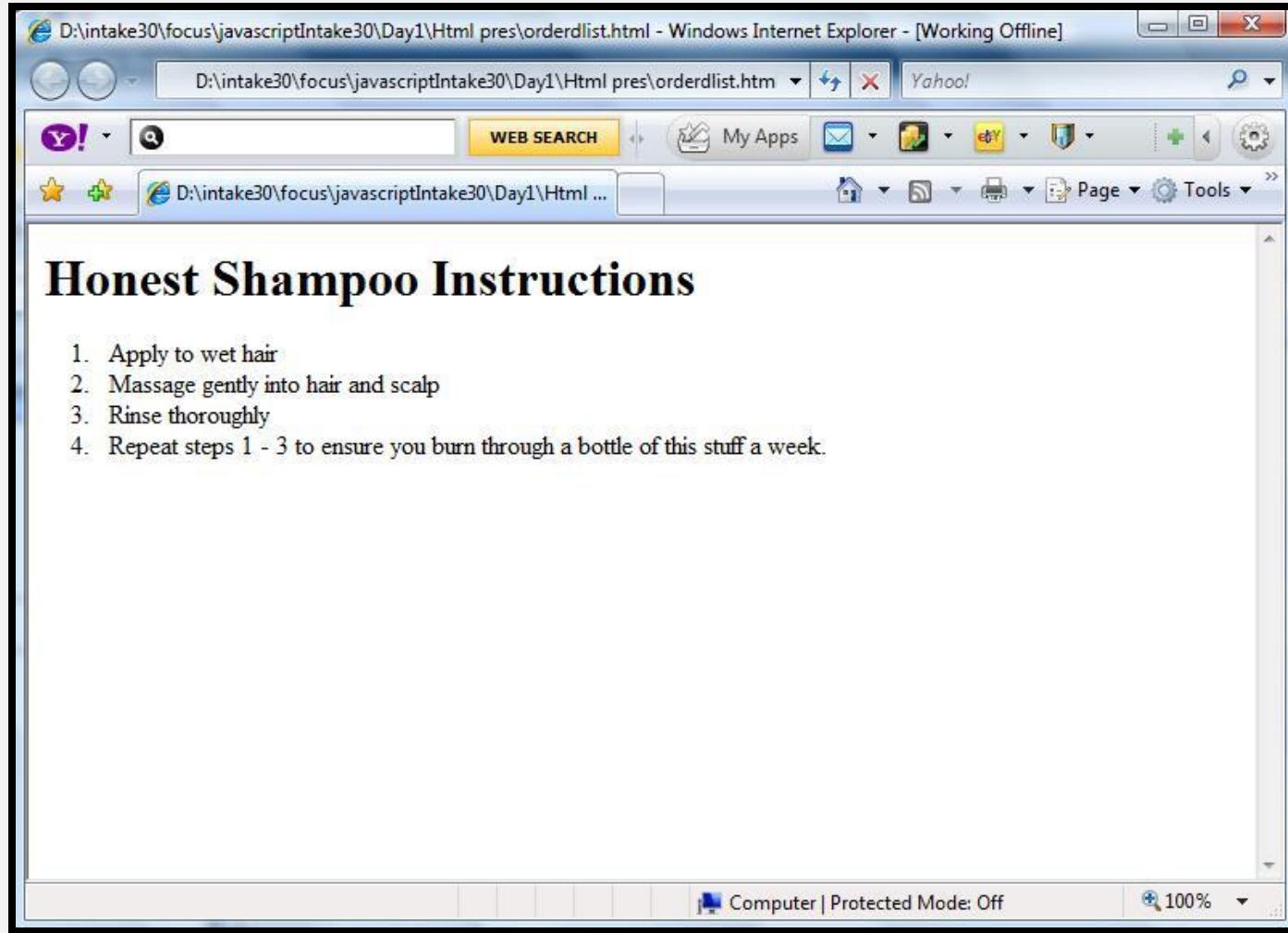
List in HTML

Ordered list

Ordered list is used to make a numbered list of items. Use the **** (ordered list) and **** (list item) tags

```
<font face="Verdana" size="2">
<ol>
    <li> Apply to wet hair </li>
    <li> Massage gently into hair and scalp </li>
    <li> Rinse thoroughly </li>
    <li> Repeat steps 1 - 3 to ensure you burn through
        a bottle of this stuff a week. </li>
</ol>
</font>
```

Ordered list



Ordered list

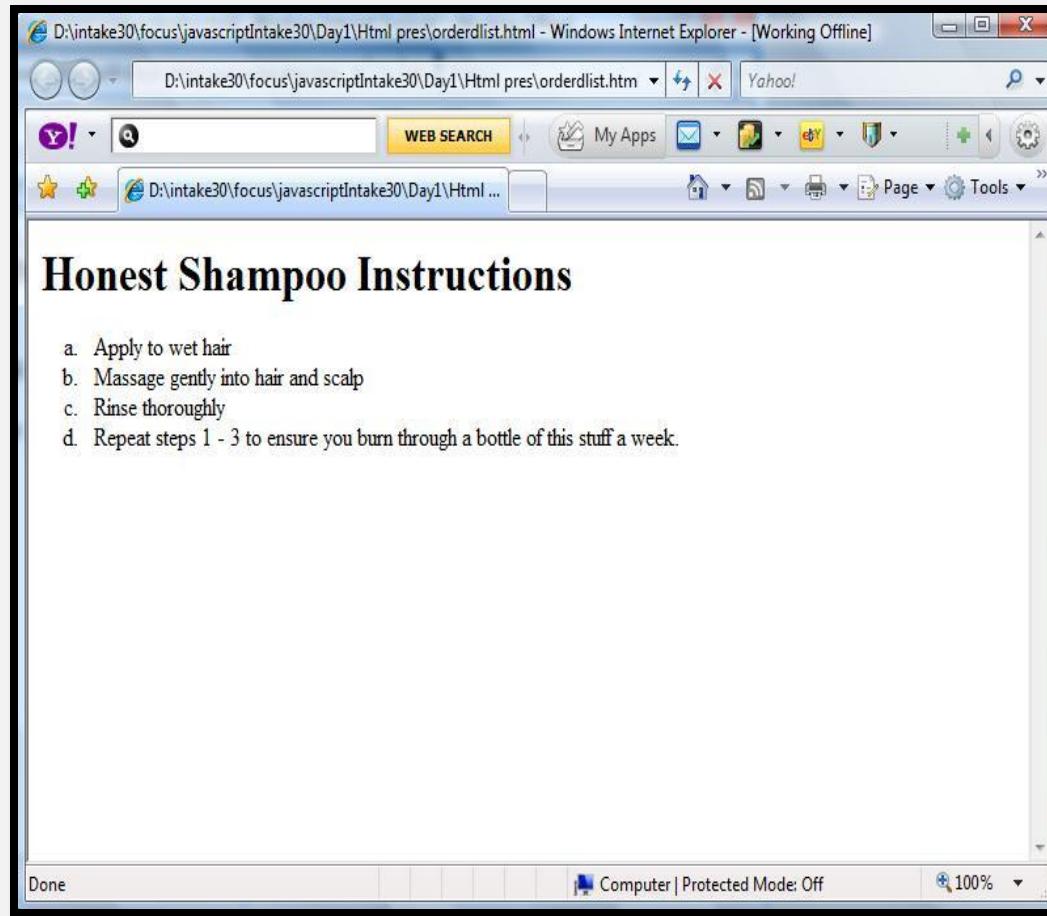
- To Modify ordered list :

Use Type Attribute

- Type="1" default
- Type="A"
- Type="a"
- Type="I"
- Type="i"

```
<font face="Verdana" size="2" >
<ol type="a">
    <li> Apply to wet hair </li>
    <li> Massage gently in hair</li>
    <li> Rinse thoroughly </li>
    <li> Repeat steps 1 - 3</li>
</ol>
</font>
```

Ordered list



UnOrdered list

UnOrdered list is used to make a non numbered list of items. Use the **** (unordered list) and **** (list item) tag

```
<font face="Verdana" size="2">
<ul>
    <li> Apply to wet hair </li>
    <li> Massage gently into hair and scalp </li>
    <li> Rinse thoroughly </li>
    <li> Repeat steps 1 - 3 to ensure you burn
        through
        a bottle of this stuff a week. </li>
</ul>
</font>
```

UnOrdered list

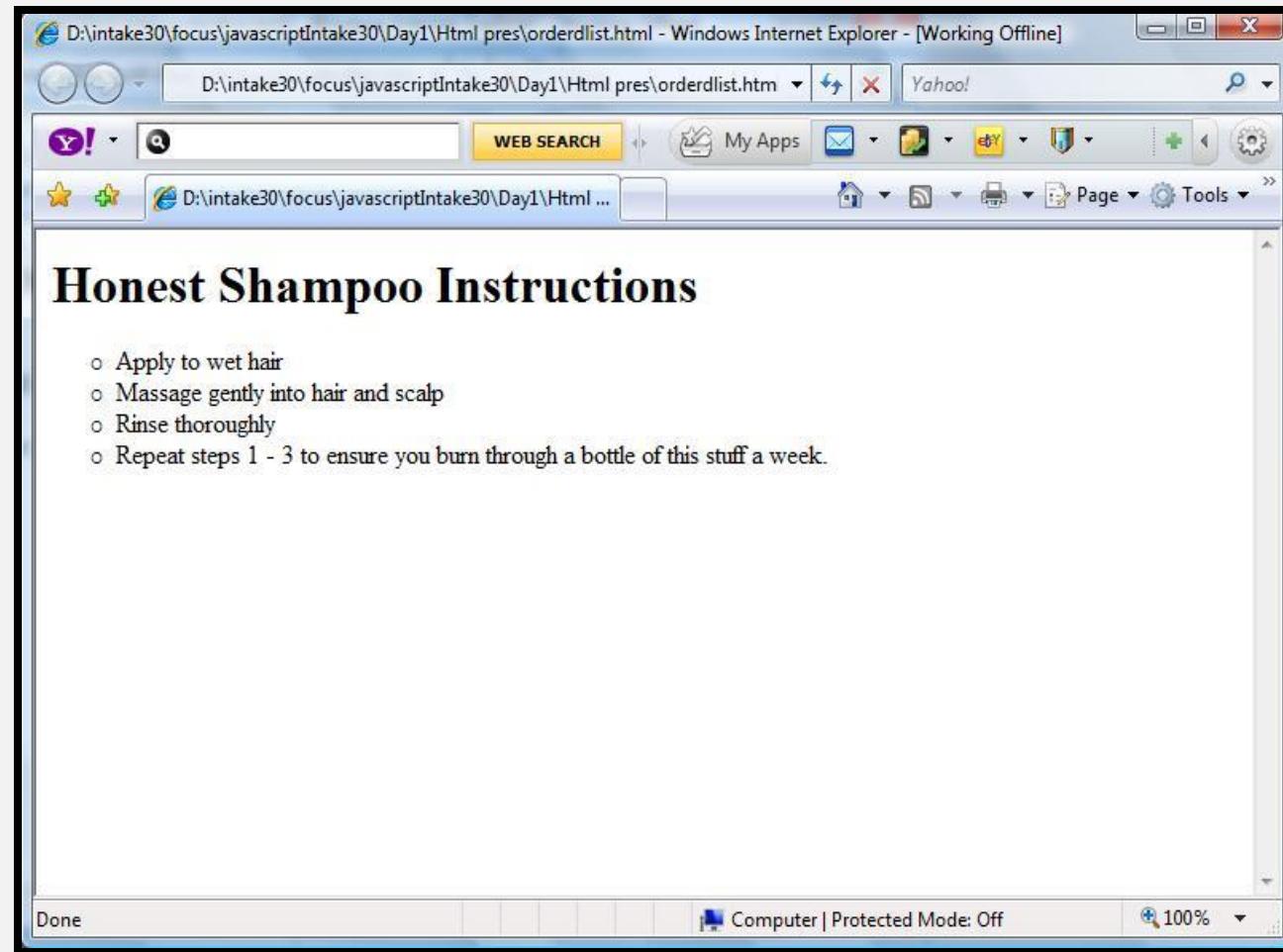
- To Modify unordered list :

Use Type Attribute

- Type="disc" default
- Type="square"
- Type="circle"

```
<font face="Verdana" size="2" >
<ul type="circle">
    <li> Apply to wet hair </li>
    <li> Massage gently in hair</li>
    <li> Rinse thoroughly </li>
    <li> Repeat steps 1 - 3</li>
</ul>
</font>
```

UnOrdered list

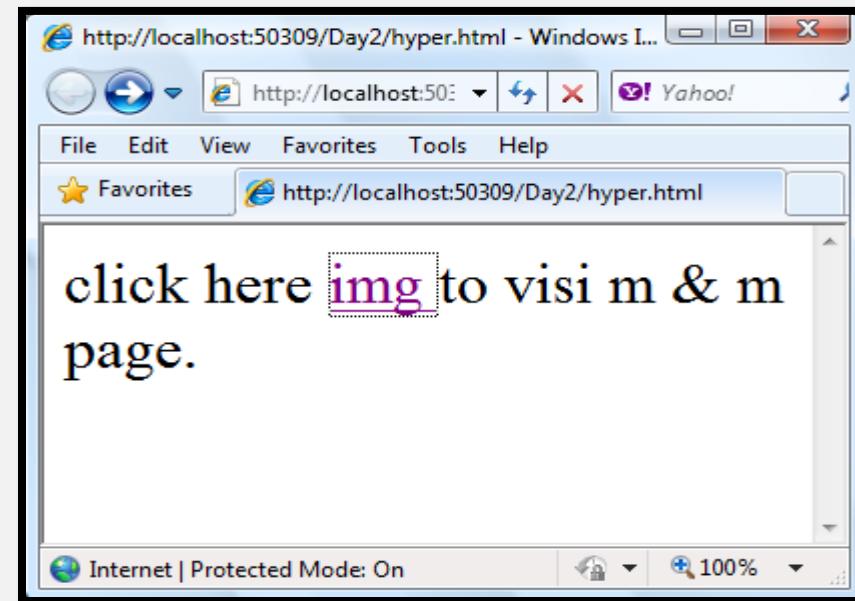


Working with Hyperlinks

Hyperlinks

- Hyperlinks are essential for the Web. You create them with the anchor tag<a>.
- Place an opening anchor tag in front of that text or image tag and define an href attribute, setting it equal to the pathname of the file you want to open when the link is clicked.

```
<font size="6">  
click here  
<a href="img.html" > img </a>  
to visi m & m page.  
</font>
```



Hyperlinks

To format a link so that the document it points to opens in a new browser window, define a target attribute and set it equal to "_blank"

```
<a href="bingo.html" target="_blank"> text-link </a>
```

To control the color of text links, define the three following attributes for the <body> tag, setting them equal to hexadecimal or predefined color name values:

- ✓ **link** specifies the color of links that haven't been visited.
- ✓ **vlink** specifies the color of links that have been visited.
- ✓ **alink** specifies the color of links that are currently active.

```
<body link="#0000FF" vlink="#990099" alink="#FF0000">  
<a href="bingo.html" target="_blank">text-link</a>
```

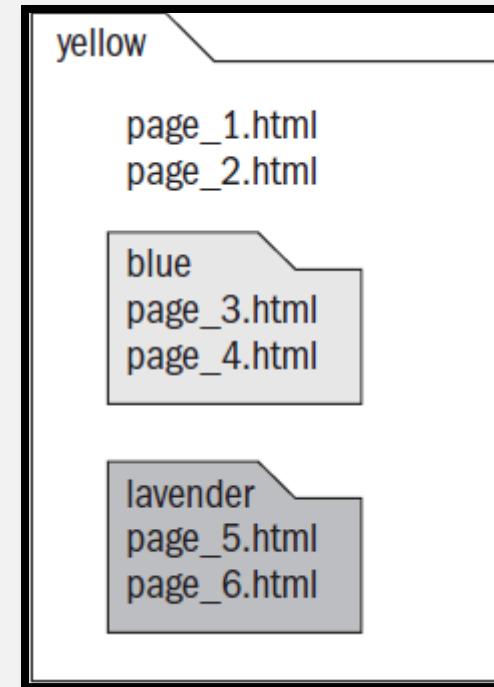
Hyperlinks

- Defining Pathnames

A pathname is simply a way to describe the file structure of your site – how files and folders (also called directories) are laid out on your computer, and ultimately the Web server.

In the following picture :

The Yellow directory containing two files (`page_1.html` and `page_2.html`) plus two additional subdirectories (Blue and Lavender), each of which contain two files



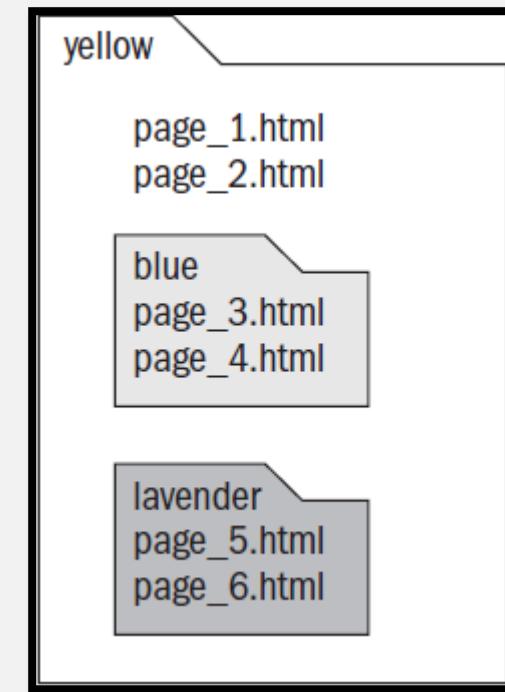
Hyperlinks

To reference a document in the same directory as the current file:

```
<a href="page_2.html"> Link </a>
```

To reference a document inside a directory that's next to the current file :

```
<a href="blue/page_3.html"> Link </a>
```



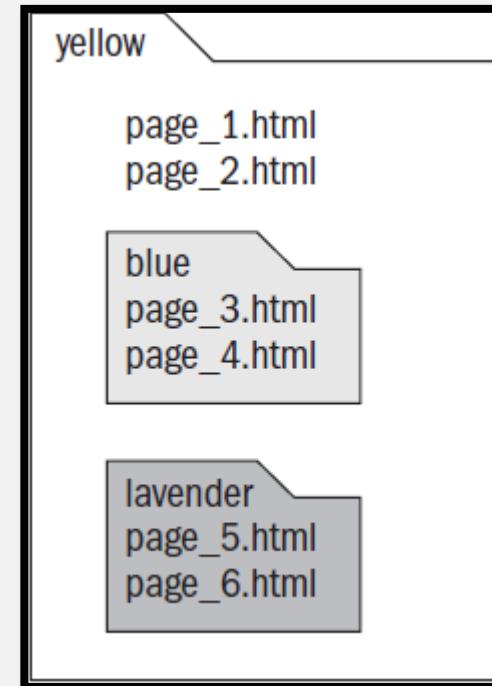
Hyperlinks

To move up one directory in the file structure, referencing a document outside the directory of the current file:

```
<a href="../page_1.html"> Link </a>
```

To reference a document inside a directory that is outside the current file's directory :

```
<a href="..../blue/page_3.html"> Link  
</a>
```



Hyperlinks

- Linking to Named Anchors

You can do more than just link to documents and images. If you name an anchor tag at a specific place within a document you can specify that exact location in a hyperlink.

```
<a name="answer_2">  
<p>A: Push the green Power  
button on the remote. If that  
fails, check the surge  
strip.</p></a>
```

```
<a href="#"#answer_2">  
Q: How do I turn on the TV?  
</a>
```

Working with Images

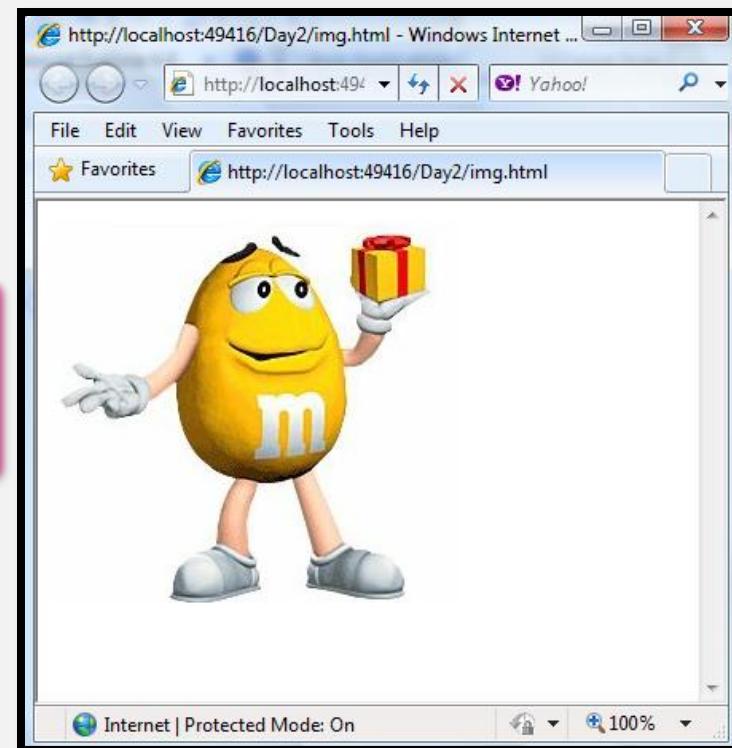
Images

**** tag is responsible of Inserting image to web page . When you place the **** tag in your document's code, the browser embeds the image file you reference in the document.

For Example:

```

```



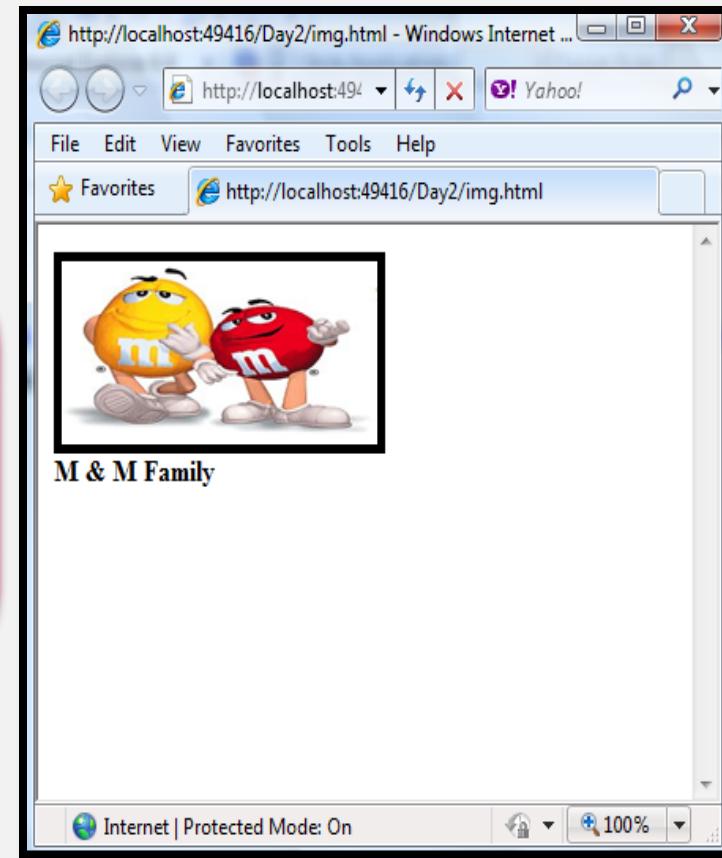
Images

Set some image's properties

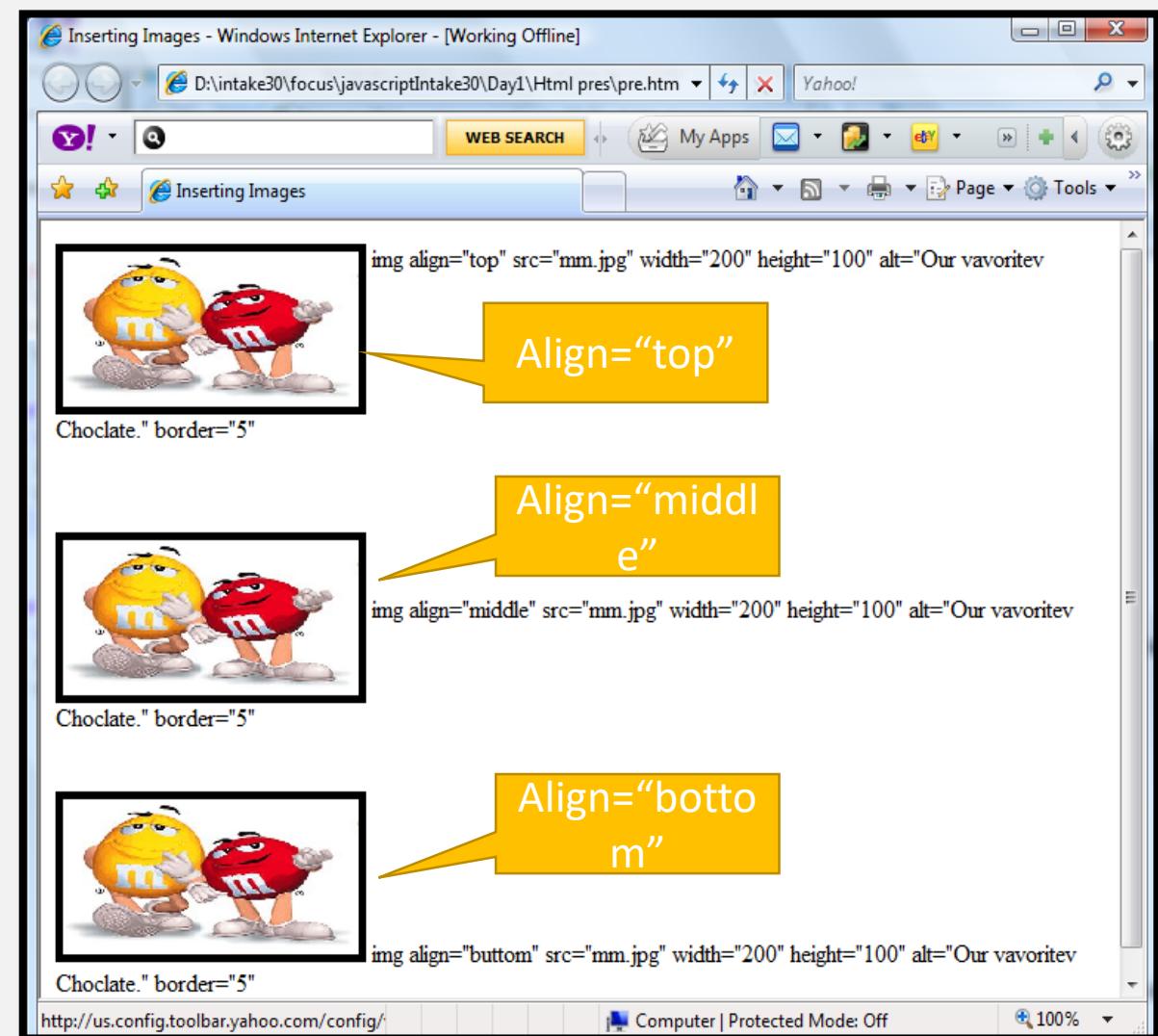
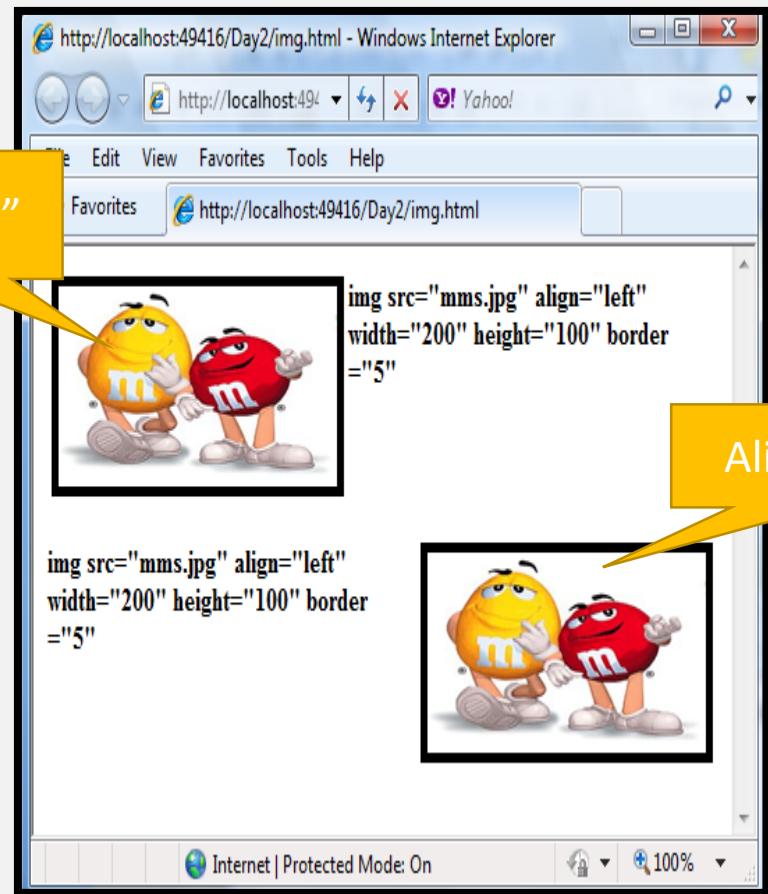
```

```

```
<font face="Arial" size="2">  
<b> M& M Family.</b></font>
```



Images

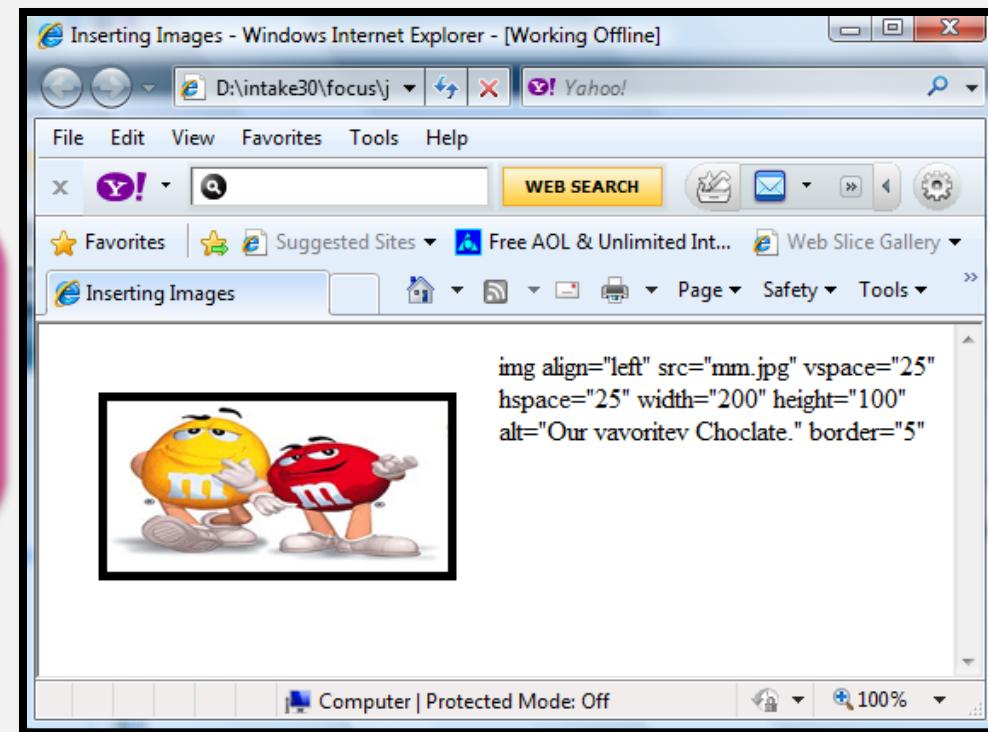


Images

To increase the amount of white space around an image,
add the **hspace** and **vspace** attributes

```

```



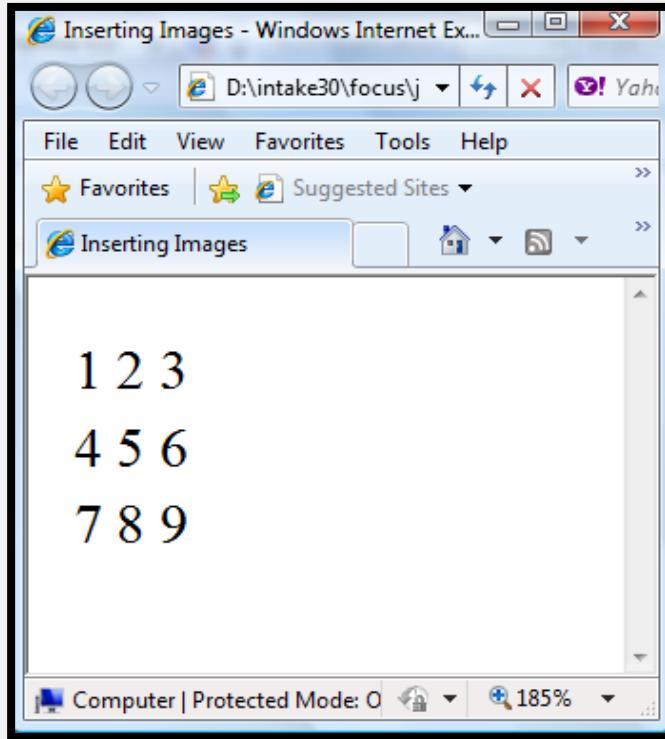
Working with Tables

Tables

- ✓ A table is a structured element that consists of rows and columns of cells. You can place any kind of content you like in these cells: text, images, and even other tables.
- ✓ There are three sets of container tags required to build any table. The `<table>` and `</table>` tags define where the table begins and ends, the `<tr>` and `</tr>` tags define where each row begins and ends, and the `<td>` and `</td>` tags define the individual cells within each row.
- ✓ There are no tags specifically defining columns; they result when multiple rows of cells are stacked on top of each other.

Tables

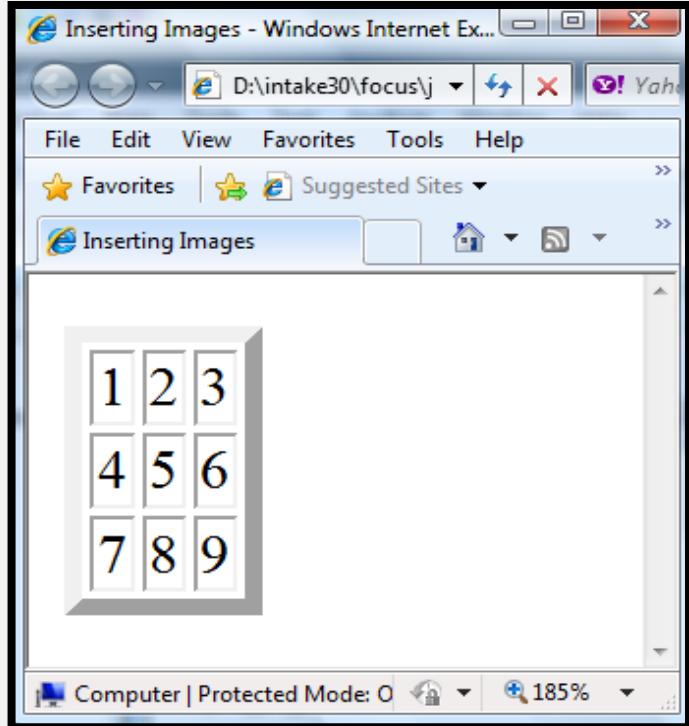
Simple Table Structure



```
<table>
<tr>
<td> 1 </td> <td> 2 </td> <td> 3 </td>
</tr>
<tr>
<td> 4 </td> <td> 5 </td> <td> 6 </td>
</tr>
<tr>
<td> 7 </td> <td> 8 </td> <td> 9 </td>
</tr>
</table>
```

Tables

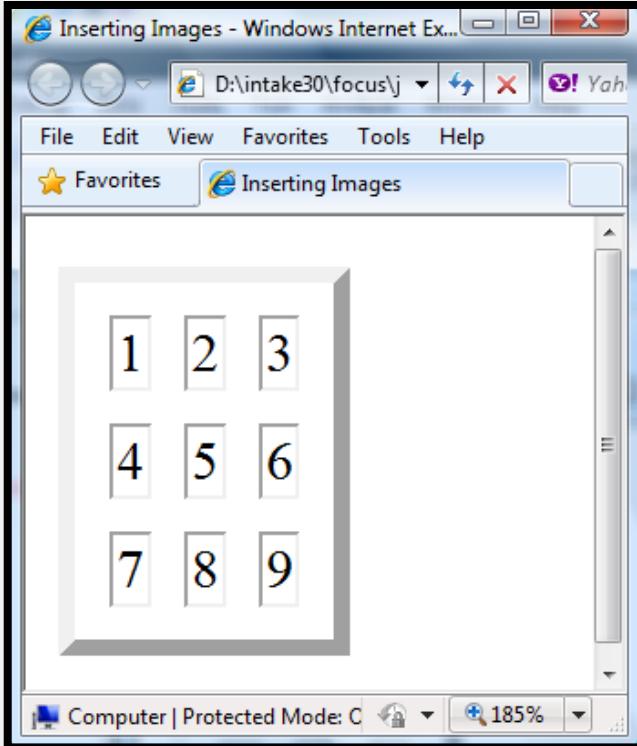
Table Borders



```
<table border="5">
<tr>
<td> 1 </td> <td> 2 </td> <td> 3 </td>
</tr>
<tr>
<td> 4 </td> <td> 5 </td> <td> 6 </td>
</tr>
<tr>
<td> 7 </td> <td> 8 </td> <td> 9 </td>
</tr>
</table>
```

Tables

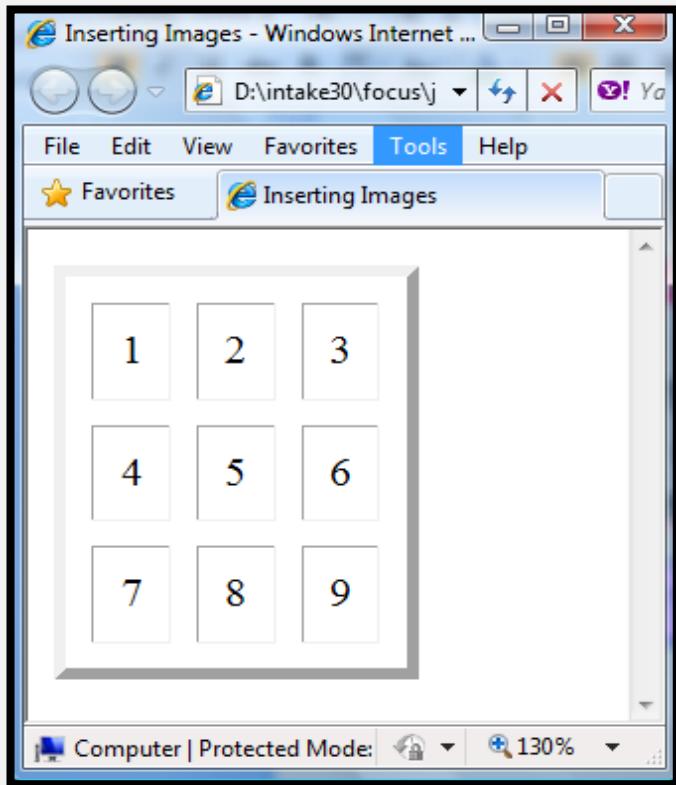
To control the thickness of internal borders between cells, define cellspacing attribute.



```
<table border="5" cellspacing="10">
<tr>
<td> 1 </td> <td> 2 </td> <td> 3 </td>
</tr>
<tr>
<td> 4 </td> <td> 5 </td> <td> 6 </td>
</tr>
<tr>
<td> 7 </td> <td> 8 </td> <td> 9 </td>
</tr>
</table>
```

Tables

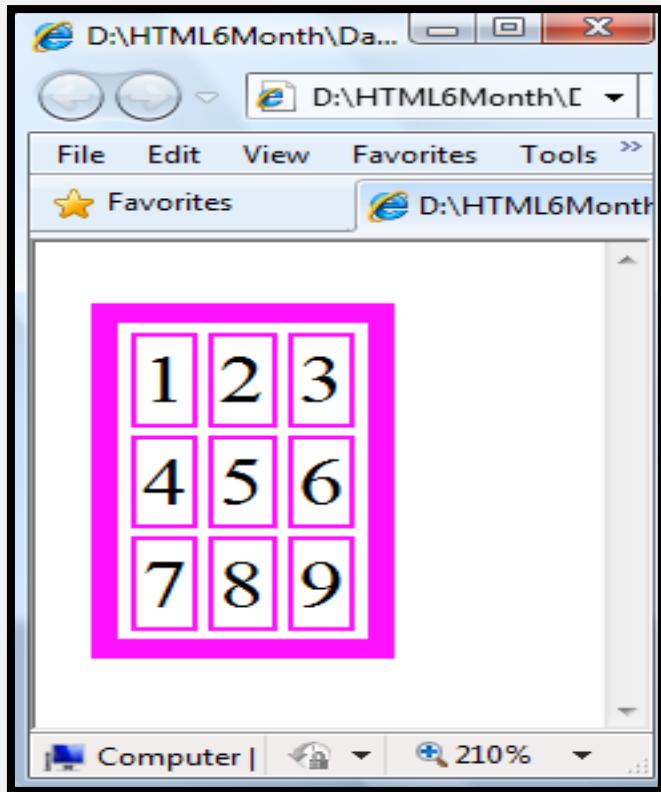
To control the amount of empty space between the border of a cell and the content inside it, define cellpadding attribute.



```
<table border="5" cellpadding="10">
<tr>
<td> 1 </td> <td> 2 </td> <td> 3 </td>
</tr>
<tr>
<td> 4 </td> <td> 5 </td> <td> 6 </td>
</tr>
<tr>
<td> 7 </td> <td> 8 </td> <td> 9 </td>
</tr>
</table>
```

Tables

To specify a border color, define a bordercolor attribute.



```
<table border="5" bordercolor="#FF11FF">
<tr>
  <td> 1 </td> <td> 2 </td> <td> 3 </td>
</tr>
<tr>
  <td> 4 </td> <td> 5 </td> <td> 6 </td>
</tr>
<tr>
  <td> 7 </td> <td> 8 </td> <td> 9 </td>
</tr>
</table>
```

Tables

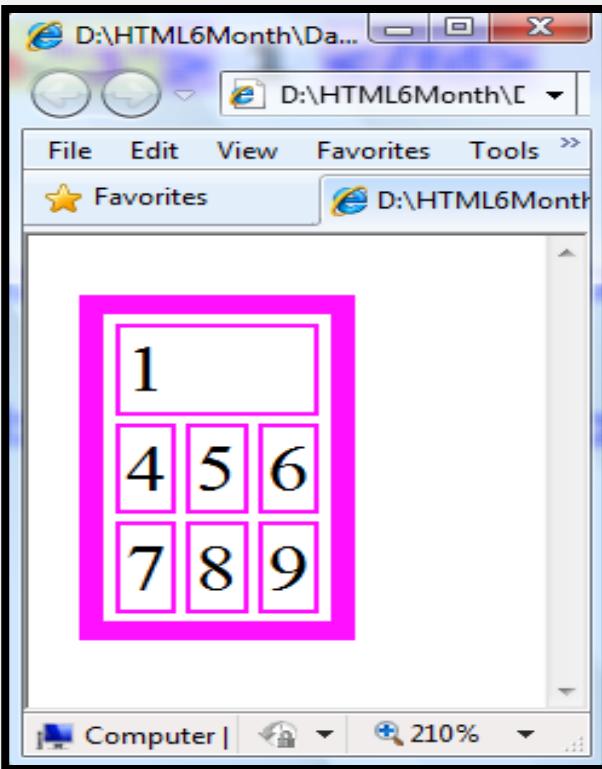
- **Spanning Cells**

A single cell can span multiple columns or rows. The number of columns or rows a cell spans is defined using the `colspan` and `rowspan` attributes.

To span a cell across a number of columns, add the `colspan` attribute to the `<td>` tag and set it equal to the number of columns you want to span.

Tables

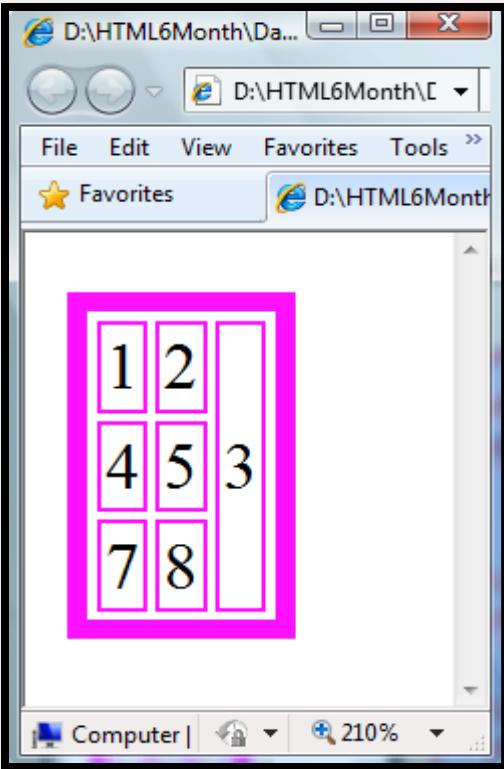
To span a cell across a number of columns.



```
<table border="5" cellspacing="10">
<tr>
  <td colspan="3">1</td>
</tr>
<tr>
  <td>4</td> <td>5</td> <td>6</td>
</tr>
<tr>
  <td>7</td> <td>8</td> <td>9</td>
</tr>
</table>
```

Tables

- To span a cell across a number of rows .



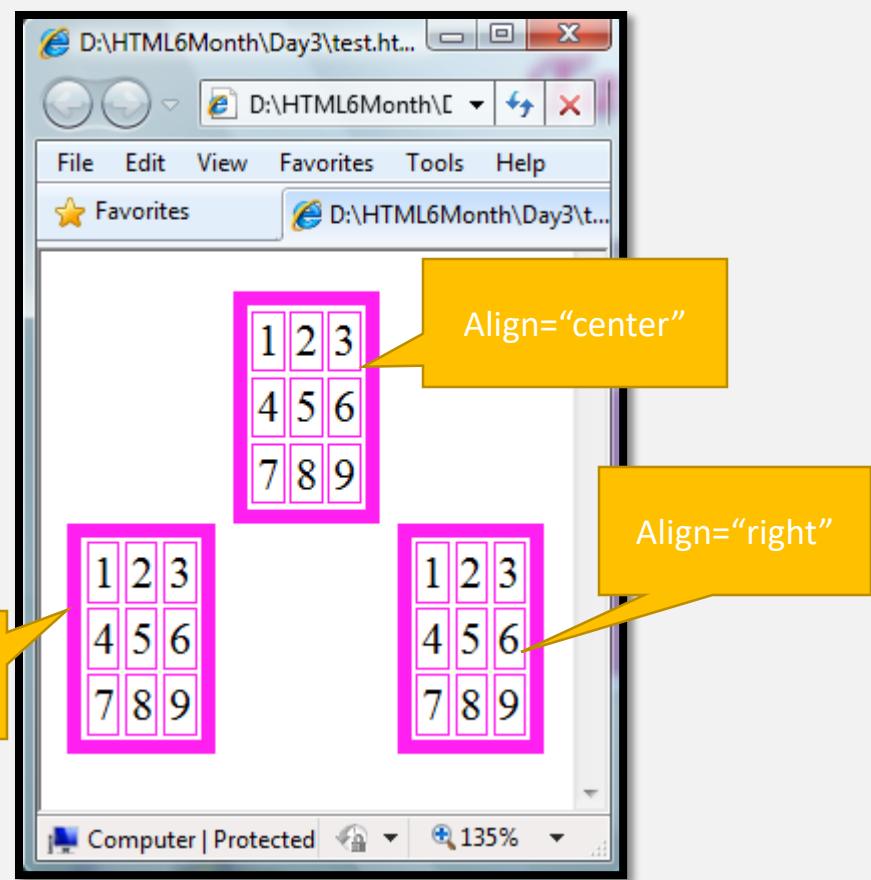
```
<table border="5" cellspacing="10">
<tr>
    <td>1</td> <td>2</td>
    <td rowspan="3">3</td>
</tr>
<tr>
    <td>4</td> <td>5</td>
</tr>
<tr>
    <td>7</td> <td>8</td>
</tr>
</table>
```

Tables

Table alignment.

To specify a table's alignment, define an align attribute of the `<table>` tag and set it equal to **left**, **right**, or **center**.

Align="left"



Tables

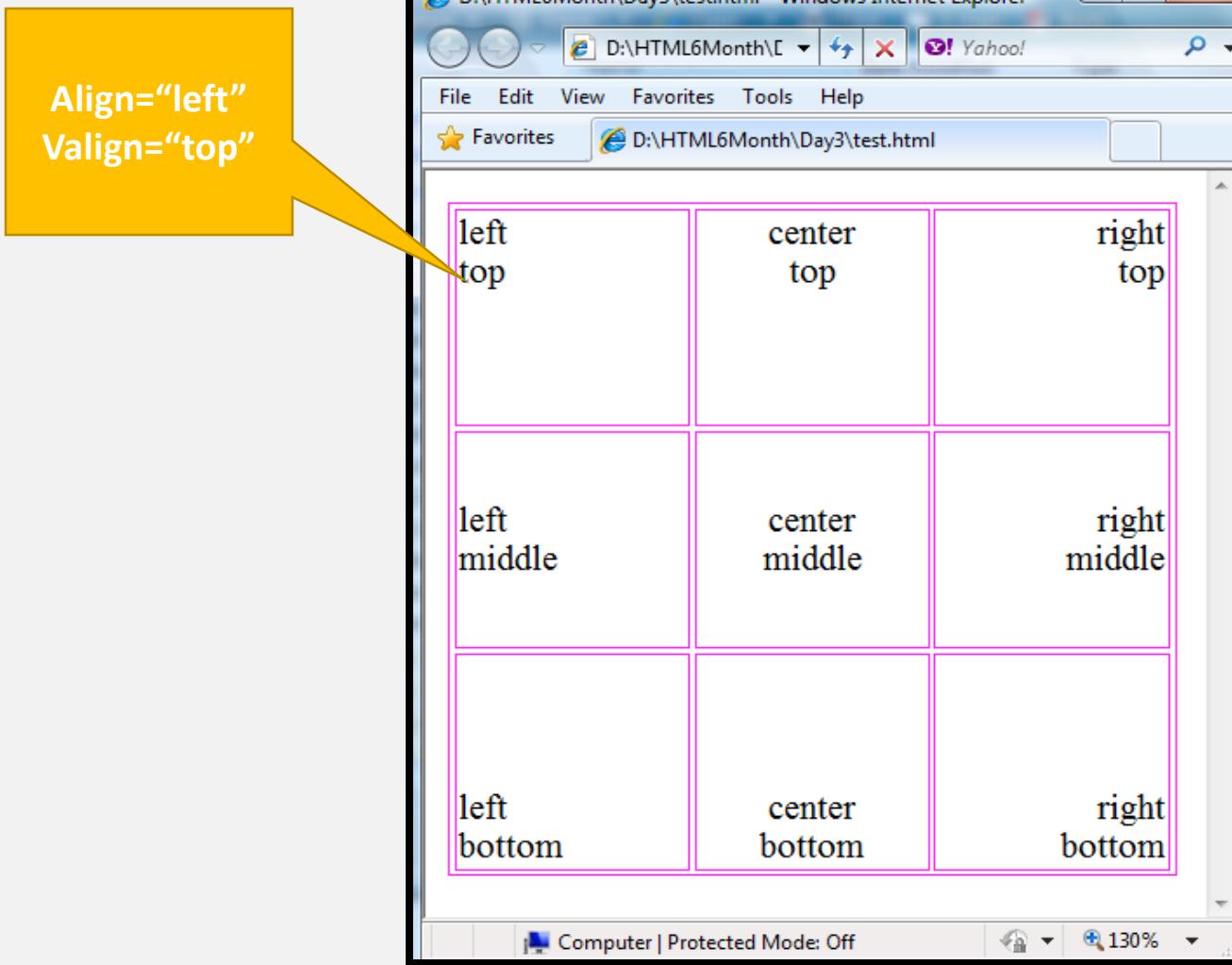
Aligning Table Elements

To align the content within a cell horizontally, define an align attribute for the `<td>` tag and set it equal to **left**, **right**, or **center**.

To align the content within a cell vertically, define a valign attribute for the `<td>` tag and set it equal to **top**, **middle**, **bottom**.

To set the horizontal or vertical alignment for an entire row, define the **align** or **valign** attributes of the `<tr>` tag.

Tables

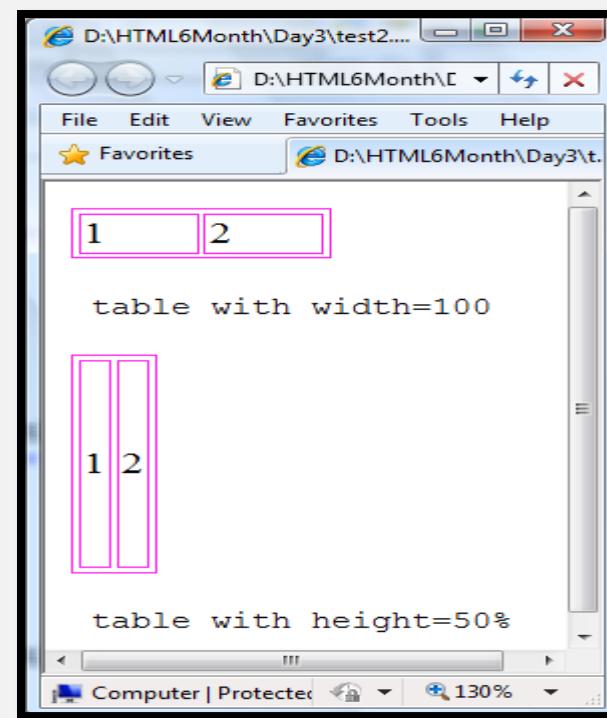


Tables

Defining Dimensions for Table Elements

the dimensional attributes **width** and **height** can be applied to the **<table>**, **<tr>**, and **<td>** or **<th>** tags with more or less similar results.

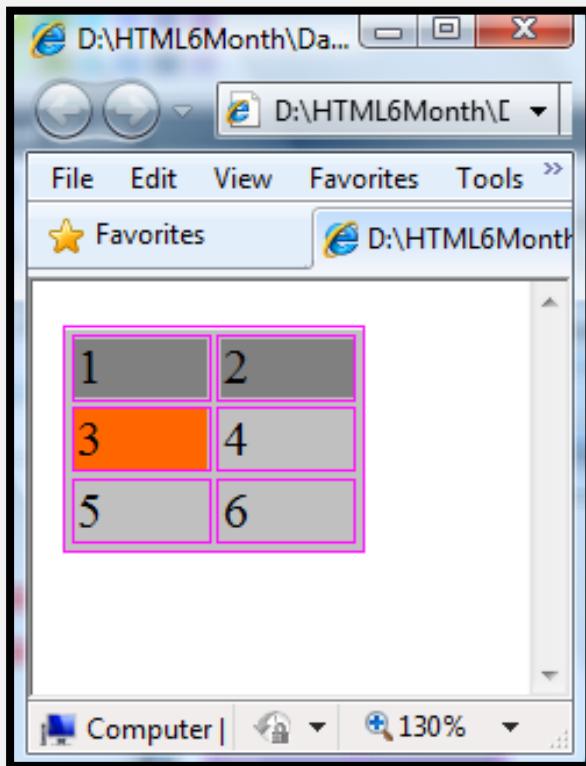
we can set this value equal to pixel value or percentage value according to the page width and height.



Tables

Cont.

Table bgcolor properties .



```
<table bgcolor="silver">
<tr bgcolor="gray">
<td> 1 </td> <td> 2 </td>
</tr>
<tr>
<td bgcolor="#ff6600"> 3 </td> <td> 4 </td>
</tr>
<tr>
<td> 5 </td> <td> 6 </td>
</tr>
</table>
```

Working with Forms

Forms

- Forms allow people to sign up for newsletters, purchase goods, and send e-mail.
- Users fill in “**the form**” by entering information into text fields, making selections from menus, and clicking check boxes and radio buttons. Clicking the “**submit**” button sends the data they dutifully entered to a Web server, which sends the collected form data to a processing script

```
<form action="page url" method="post or get">  
  <!-- The elements that create the physical form the user  
  sees are placed between these opening and closing form  
  tags. -->  
</form>
```

Forms

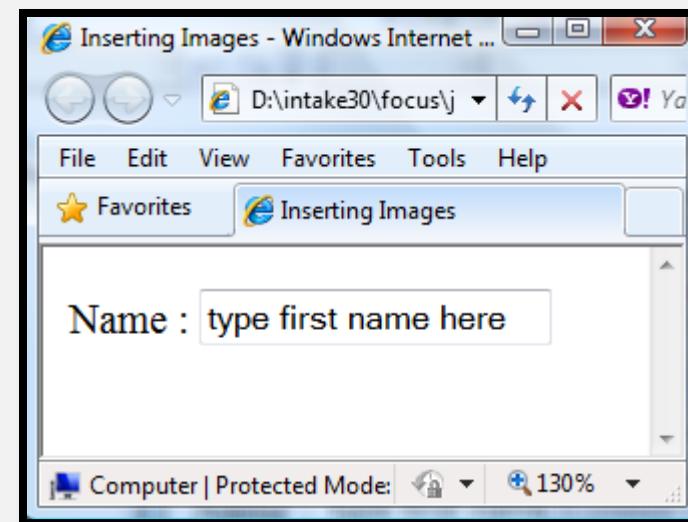
- ✓ Text Fields
- ✓ Password Fields
- ✓ Text Areas
- ✓ Check Boxes
- ✓ Radio Buttons
- ✓ Selection Menues
- ✓ Selection lists
- ✓ Submit & Reset Buttons

Forms

Text Fields

If you've ever filled out a Web-based form, you've noticed that more often than not the information you're providing is textual — names, addresses, passwords, and comments — as well as numeric values like ZIP codes and phone and credit card numbers. Form controls that accept this data are generically referred to as *text boxes*.

```
<input type="text" name="first_name"  
size="20"  
maxlength="20" value="Type First Name  
Here" />
```

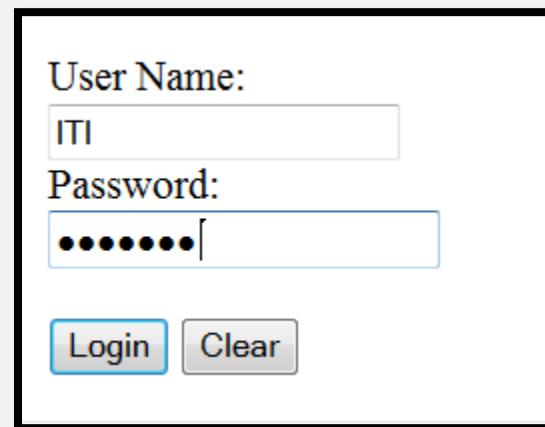


Forms

Password Fields

Password fields, logically enough, accept passwords. They respond to the `size`, `maxlength`, and `value` attributes as the text field but require the `type` attribute to equal `password` so that any text entered into the password field appears onscreen as asterisks (Windows) or bullet points (Macintosh).

```
<input type="password"  
name="first_name"  
size="20"  
maxlength="20"  
/>>
```



The image shows a user interface for a login application. It features two input fields: one for "User Name" containing the text "ITI", and another for "Password" containing six bullet points ("••••••"). Below these fields are two buttons: "Login" and "Clear".

Forms

Text Areas

A text area is a large, scrollable, multiline text window. It is most commonly used for collecting extended written comments. Unlike text and password fields, the text area is not created with the `<input>` tag. Instead, it has its own set of opening and closing `<textarea>` tags.

```
<textarea name="comments"  
cols="50"  
rows="10">  
Place Your Comments Here...  
</textarea>
```



The image shows a user interface for a comment section. At the top, there is a text input field labeled "User Name:". Below it is a larger text area labeled "Enter Your Comments Here:" with a vertical scrollbar on the right. At the bottom of the form are two buttons: "Login" and "Clear".

Forms

Check Boxes

The check box form control acts as a switch that the user can toggle on or off (check or uncheck).

```
<input type="checkbox"  
name="fav_flavor"  
value="chocolate"  
checked="checked"/>Choclate
```

What are your preferred ice cream flavors?

- Chocolate
- Strawberry
- Vanilla

Forms

Radio Buttons

Whereas check boxes supply users with multiple-choice options in a form, radio buttons supply either/or choices. You create radio buttons by setting the `<input>` tag's type attribute equal to radio. Radio buttons require the same attributes as check boxes (type, name, and value) but when multiple radio buttons share identical name attribute values, users can select only one at a time.

```
<input type="radio"  
name="fav_flavor"  
value="chocolate"  
checked="checked" /> Choclate
```

What are your preferred ice cream flavors?

- Chocolate
- Strawberry
- Vanilla

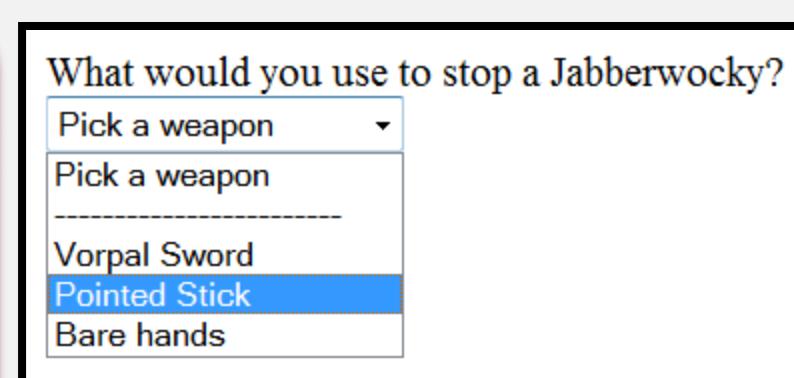
Forms

Selection Menu

Selection menus allow users to select one of several items in a pop-up list. You define a selection menu with the `<select>` tag. Each menu option is laid out in much the same way as you would create a list, using opening and closing `<option>` tags to define each menu choice.

```
<select name="weaponry">
<option value="good">Vorpal
Sword</option>
<option value="bad">Pointed
Stick</option>
</select>
```

What would you use to stop a Jabberwocky?



Pick a weapon

Pick a weapon

Vorpal Sword

Pointed Stick

Bare hands

Forms

Selection Lists

When you format a selection menu as a list, the form control becomes a box from which a visitor can make one or more selections.

```
<select name="pets" size="4"  
multiple="multiple">  
<option value="k9"  
selected="selected">  
Dogs</option>  
</select>
```

What kinds of pets do you have?



To make multiple selections, hold down your Ctrl key (Win) or your Command key (Mac)

Forms

Submit and Reset Buttons

Site visitors click buttons either to send the completed form to the server (the Submit button) or to clear the form if they've made a mistake (the Reset button).

```
<input type="submit" value="Login">  
<input type="reset" value="Clear" >
```

User Name:
ITI

Password:
.....

Login Clear

Forms

Hidden Fields

HTML provides a mechanism by which you can include values in your form to be sent to the script that visitors never see. These values are defined using *hidden fields*.

```
<input type="Hidden"  
name="ID"  
value="27"  
/>
```

Thank you