



Government Girls' Polytechnic, Bilaspur

Name of the Lab: **Internet & Web Tech. Lab**

Practical : **Internet & web page design Lab**

Class: **5thSemester (Information Technology)**

Teachers Assessment: 40 End Semester Examination: 70

EXPERIMENT NO. 1

Objective: Create Web page and apply some block level tags, text level tags.

Hardware and system software requirement: P-IV Processor, Ram 256mb, HDD 40 GB , Windows.

Software requirement: Windows 2003, windows XP.

Theory: The Web pages or materials in the form of hypermedia documents accessed through the

Internet, can be located anywhere in the world. Hypertext Markup Language (HTML). HTML is powerful authoring language and found in different versions like HTML 4.2, HTML 4.0, HTML 3.2, HTML 3.0 and HTML 2. HTML element can be used to define document structure & format, HTML element is the inclusive region defined by either a single tag or a pair of tags. A tags is a string in the language surrounded by a less than (<) and a greater than (>) sign. A opening tag does not begin with a slash (/). An ending or closing tag is a string that begins with a slash (/).

HTML documents format textual information with embedded markup tags that provide style and structure information. Whole document in HTML is surrounded by <HTML> and </HTML>.

HOW TO CREATE HTML DOCUMENT

HTML document can be created using any HTML editor and text editor like notepad etc.

STEPS FOR CREATING A SIMPLE HTML PROGRAM

1. Go to Start -> Programs->Accessories->Notepad
2. Begin with a document type tag and an <HTML> opening tag. Enter the following line in your doc.
<HTML>
3. Indicate that you are beginning the head element of document by issuing the <HEAD> opening tag. If a <HEAD> element is included, it must appear

within

<HEAD>

4. The <TITLE> element is used to indicate the title of an HTML document. <TITLE> tags are placed within the head component of a document and the title is placed between the opening and closing <TITLE> tags. Add this <TITLE> element to your document.

<TITLE>My First Page</TITLE>

5. To end the head area issue a <HEAD> closing tag
</HEAD>

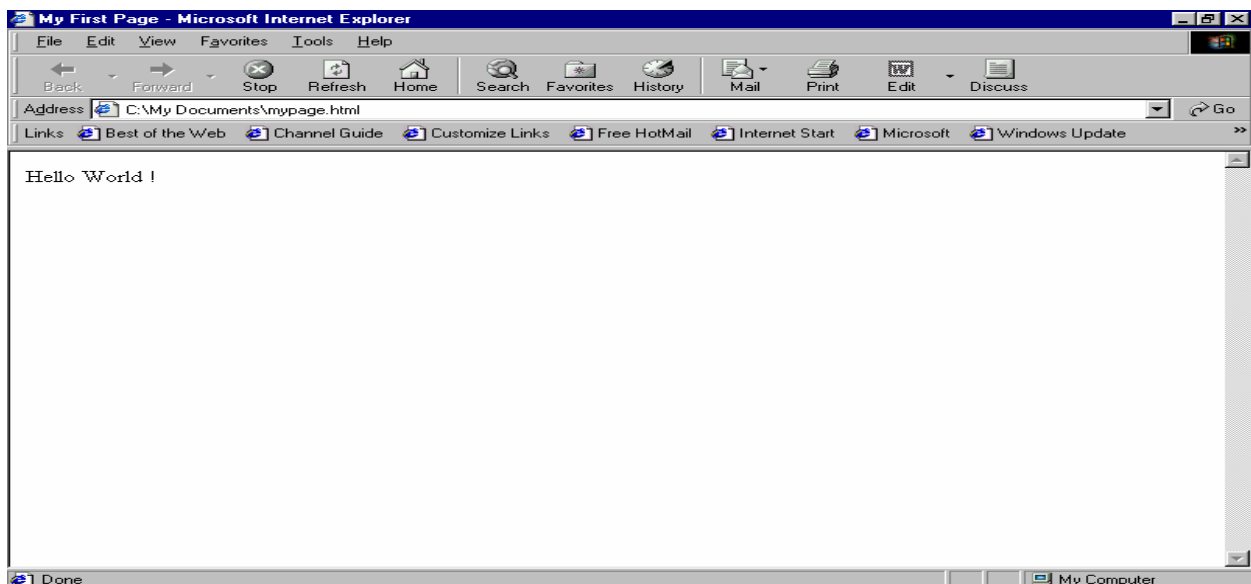
Thus the <HEAD> element is nested within the <HTML> element.

6. At this point the body of the document is developed. A <BODY> opening tag

indicates that this point has been reached. Enter the following line.

<BODY>

7. In this case, the body of document contains a simple text statement for now, add



the following statement in your file.

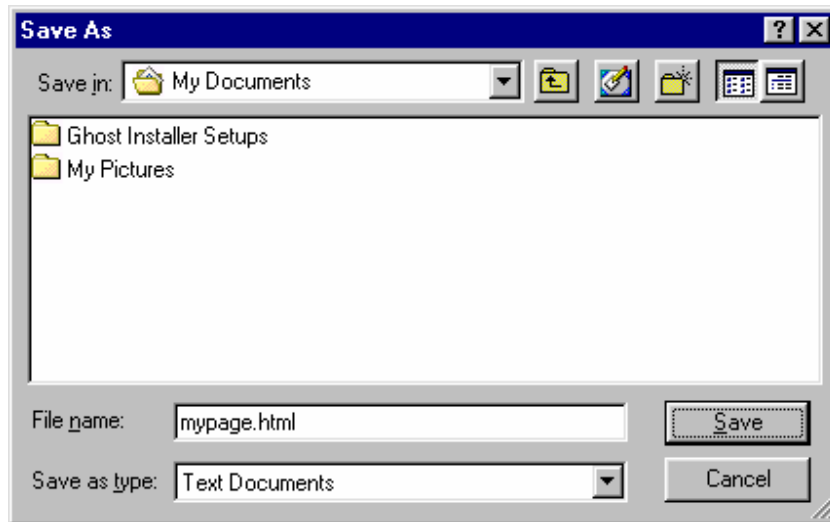
Hello World !

8. A </BODY> closing tag marks the end of the <BODY> element. Similar to the

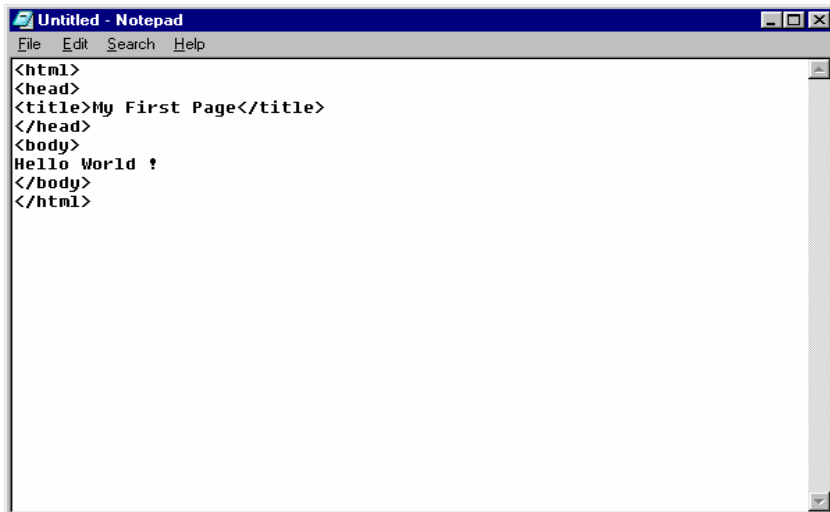
Head element, the <BODY> element is also completely nested within the <HTML> element. To end the <BODY> element, issue the closing tag in your document.

</BODY>

9. Finally, terminate the <HTML> tag with </HTML> as shown below:



10. Save your document as mypage.html



11. To view the document open the .html document in the browser.

Program input and output:

```
<HTML>
<HEAD>
<TITLE> My first webpage.</TITLE>
<BODY>
```

HELLO WORLD !

```
</BODY>
</HTML>
```

Observation: The program is running successfully.

EXPERIMENT NO. 2

Objective: Create Web Page and apply background color, text color, horizontal rules and special character.

Hardware and system software requirement: P-IV Processor, Ram 256mb, HDD 40 GB , Windows.

Software requirement: Windows 2003, windows XP.

Theory: Special character – character entities for special character entities tag one or two from name entities

And numbered entities.

- (i) Named entities:- Named entities begin with an ampersand(&) and end with a semicolon (;) in between is the name of the character.

Named entities
& copy;

- (II) Numbered entities:- The numbered entities also begin with an ampersand (&) and end with a semicolon (;)

But rather than a name , # sign and the number.

Numbered entities
& # 120;

Background color:- It changes the whole background for example < body bgcolor = "green">

It changed the color green.

Text color : - It changes the text color only for example: < text color = "blue"> It changed the color blue.

- (ii) Horizontal Rules:- The <HR> tag which has no closing tag in html and no tags associated with it.

Create a horizontal line on the page rule lines are excellent for visually separating sections of a web page just before heading.

Attributes of the <HR> tag: Attributes of the <Hr> tag that give you greater control over the appearance of the line drawn by <Hr>.

The size attribute indicates the thickness in pixels of the rule line.

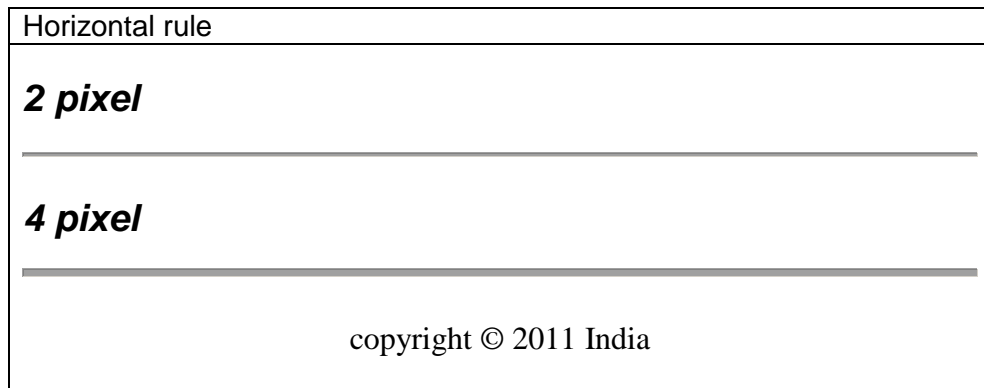
The default is 1 and this also is the smallest thickness that can make the rule line.

Program input and output:

```
<html>
<head>
<title> Horizontal rule </title>
</head>
<body bgcolor = "green" >
<h2> 2 pixel </h2>
<hr size = "2">
<h2> 4 pixel </h2>
<hr size = "4">
<br> <center> copyright © 2011 India </center>
```

```
</body>  
</html>
```

Output



Observation : The program is running successfully.

EXPERIMENT NO. 3

Objective: Create Web Page and include ordered list, unordered list, definite list and nested List.

Hardware and system software requirement: P-IV Processor, Ram 256mb, HDD 40 GB , Windows.

Software requirement: Windows 2003, windows XP.

Theory: A. ordered lists: To display items in a specific order such as a set of instruction or a table of content. Also use various styles while creating a list.

Syntax: ``
`.....`
`.....`
``

Note: OL stand for order list and LI stand for list.

		<p>Numbered</p> <pre> List item 1 List item 2 List item 3 List item 4 </pre> <p>Numbered Special Start</p> <pre><ol start="5"> List item 1 List item 2 List item 3 List item 4 </pre> <p>Lowercase Letters</p> <pre><ol type="a"> List item 1 List item 2 List item 3 List item 4 </pre> <p>Capital Letters</p> <pre><ol type="A"> List item 1 List item 2 List item 3 List item 4 </pre>	<p>Numbered</p> <ol style="list-style-type: none"> 1. List item 1 2. List item 2 3. List item 3 4. List item 4 <p>Numbered Special Start</p> <ol style="list-style-type: none"> 5. List item 1 6. List item 2 7. List item 3 8. List item 4 <p>Lowercase Letters</p> <ol style="list-style-type: none"> a. List item 1 b. List item 2 c. List item 3 d. List item 4 <p>Capital Letters</p> <ol style="list-style-type: none"> A. List item 1 B. List item 2 C. List item 3 D. List item 4 <p>Capital Letters Special Start</p> <ol style="list-style-type: none"> C. List item 1
<code></code>	ordered list		

	<p>Capital Letters Special Start</p> <pre><ol type="A" start="3"> List item 1 List item 2 List item 3 List item 4 </pre> <p>Lowercase Roman Numerals</p> <pre><ol type="i"> List item 1 List item 2 List item 3 List item 4 </pre> <p>Capital Roman Numerals</p> <pre><ol type="I"> List item 1 List item 2 List item 3 List item 4 </pre> <p>Capital Roman Numerals Special Start</p> <pre><ol type="I" start="7"> List item 1 List item 2 List item 3 List item 4 </pre>	<p>D. List item 2 E. List item 3 F. List item 4</p> <p>Lowercase Roman Numerals</p> <p>i. List item 1 ii. List item 2 iii. List item 3 iv. List item 4</p> <p>Capital Roman Numerals</p> <p>I. List item 1 II. List item 2 III. List item 3 IV. List item 4</p> <p>Capital Roman Numerals Special Start</p> <p>VII. List item 1 VIII. List item 2 IX. List item 3 X. List item 4</p>
--	--	--

c: Also customize ordered list by using any ordered value in place of 1,2,3and so on .this can be done by using tag.

Types of attributes are:

1= for Arabic number (1,2,3,.....)

i= for lower case roman no. (i, ii , iii,.....)

I= for upper case roman no.(I, II, III,.....)

a= for lower case English alphabets (a,b,c.....)

A=for upper case English alphabets(A,B,C.....)

The syntax of tag with these attributes:

: <OL type = ".....">, or <OL start =".....">

```

<LI>.....
<LI>.....
</OL>

```

Program input and output:

```

<HTML>
  <HEAD>
    <TITLE> ORDERED LIST</TITLE>
  <BODY>
    <H2> CONTENTS</H2>
    <OL>
      <LI> introduction
      <LI> About Us
      <LI> Catalogue
      <LI> Contact Us
    </OL>
  </BODY>
</HTML>

```

Output

ORDERED LIST
<p>CONTENTS</p> <ol style="list-style-type: none"> 1. introduction 2. About Us 3. Catalogue 4. Contact Us

B. UNORDERED LISTS: An unordered list has bullets placed in front of each items. By default, round bullets(disc) appear in front of each item unless specified.

The container element for ordered list .UL stand for unordered List. Here also each item should start with empty element.

Syntax:

	unordered list	Example 1: 	Example 1: • List item 1
------	----------------	------------------------	---------------------------------

	<pre> List item 1 List item 2
 Example 2:
 <ul type="disc"> List item 1 List item 2 <ul type="circle"> List item 3 List item 4 </pre>	<ul style="list-style-type: none"> • List item 2 <p>Example 2:</p> <ul style="list-style-type: none"> • List item 1 • List item 2 <ul style="list-style-type: none"> ○ List item 3 ○ List item 4
--	--	--

Customizing unordered list: Unordered List can also be customized to replace the round bullets (Disc) with different styles.

The type attributes of unordered list is:

- a. Disc
- b. Circle
- c. Square

Program input and output:

```

<HTML>
<HEAD>
<TITLE> UNORDERED LIST</TITLE>
<BODY>
<H2> CONTENTS</H2>
<UL>
  <LI> introduction
  <LI> About Us
  <LI> Catalogue
  <LI> Contact Us
</UL>
</BODY>
</HTML>

```

Output

UNORDERED LIST
<p>CONTENTS</p> <ul style="list-style-type: none"> • introduction • About Us • Catalogue • Contact Us

- C. DEFINATION LISTS: The DL container element is used to start a definition list DL stands for Definition list <DL> is the opening tag and </DL> is the closing tag. Within these opening and closing tags , the empty element < DT> is used. DT stands for Definition Term This tag tells the browser that this term is to be defined. After <DT> tag, <DD> tag is used. DD stands for Definition Description and is also an empty element DD tells the web Brower the actual definition .Both the tags namely <DT> and < DD> come between the opening and closing tags of the Definition List.

Syntax: <DL>
 <DT>.....
 <DD>.....
 </DL>

<dd>	definition description	<dl> <dt>Definition Term</dt> <dd>Definition of the term</dd> <dt>Definition Term</dt> <dd>Definition of the term</dd> </dl>	Definition Term Definition of the term Definition Term Definition of the term
<dl>	definition list	<dl> <dt>Definition Term</dt> <dd>Definition of the term</dd> <dt>Definition Term</dt> <dd>Definition of the term</dd> </dl>	Definition Term Definition of the term Definition Term Definition of the term
<dt>	definition term	<dl> <dt>Definition Term</dt> <dd>Definition of the term</dd> <dt>Definition Term</dt> <dd>Definition of the term</dd> </dl>	Definition Term Definition of the term Definition Term Definition of the term

<HTML>

<HEAD>
 <TITLE> Microsoft Office</TITLE>

</HEAD>
 <BODY>

<DL>

```

<DT>Microsoft Excel
<DD>A Spreadsheet Program
<DT> Microsoft Word
<DD> A Word Processing Program
</DL>
</BODY>
</HTML>

```

Output

Microsoft Office
Microsoft Excel A Spreadsheet Program Microsoft Word A Word Processing Program

NESTING LISTS: To display additional information about an item in a list, can create another list within that list. This procedure of creating a list within a list called nested list.

Example: Creating a nested list.

```

<HTML>
<HEAD>
<TITLE> NESTED LIST</TITLE>
<BODY>

<H2> CONTENTS</H2>
<UL TYPE =" circle">
<LI> introduction
<LI> About Us
<LI> Catalogue
  <OL TYPE ="a">
    <LI> computer books
    <LI> text book
    <LI> General books
    <LI> Educational charts
  </OL>
</UL>
</BODY>
</HTML>

```

NESTED LIST

CONTENTS

- introduction
- About Us
- Catalogue
 - a. computer books
 - b. text book
 - c. General books
 - d. Educational charts

Observation: The program is running successfully.

EXPERIMENT NO. 4

Objective: To using image tag for inserting image on html page.

Hardware and system software requirement: P-IV Processor, Ram 256mb, HDD 40 GB , Windows.

Software requirement: Windows 2003, windows XP.

Theory: Image formats: when developing image, also consider format option. Basically use GIF ,JPG or PNG formats. depending on the user want .

GIFS: The most common image format is GIF, which is an acronym formed from Graphics Interchange Format developed by CompuServe for online use.

JPG/JPEG: Jpg stand for Joint Photographic Expert Group. This image format is the second most popular for image on the web. As a whole , Jpg image are less flexible than GIF image and the most significant advantage of JPG is that it supports million of color.

PNG: PNG stands for Portable Network Graphics. This new image file format is only supported by the most recent browser version (Microsoft Internet Explorer 4)

The Image Tag and the Src Attribute

In HTML, images are defined with the tag. The tag is empty, which means that it contains attributes only and it has no closing tag.

To display an image on a page, you need to use the src attribute. Src stands for "source". The value of the src attribute is the URL of the image you want to display on your page.

The syntax of defining an image:

```

```

The URL points to the location where the image is stored. An image named "boat.gif" located in the directory "images" on "www.w3schools.com" has the URL:
<http://www.w3schools.com/images/boat.gif>.

The browser puts the image where the image tag occurs in the document. If you put an image tag between two paragraphs, the browser shows the first paragraph, then the image, and then the second paragraph.

Image Tags Inserts an image

 Sets the height of an image

- Sets the width of an image
- Sets the border of an image
- Creates label for image
- <hr> Creates horizontal rule
- <hr size=> Sets height of rule
- <hr width=> Sets width of rule, either in percentage or pixel value
- <hr noshade> Creates shadow less rule

Inserting an image

To insert an image in a Html document, tag is used . IMG stands for

Image element is an empty element and has SRC , align, border, height, width etc.

```

```



Program input and output:

```
<HTML>
<HEAD>
<TITLE> Inserting images</title>
</HEAD>
<BODY>
<H2> EARTH</H2>
<IMG Src="C:\MY DOCUMENT\MY PICTURE\EARTH.BMP">
</BODY>
</HTML>
```

Inserting images

EARTH



Observation: The program is running successfully.

EXPERIMENT NO. 5

Objective: To design a table through html.

Hardware and system software requirement: P-IV Processor, Ram 256mb, HDD 40 GB , Windows.

Software requirement: Windows 2003, windows XP.

Theory: Table: Create the table structure that is enter the table tag <table>. Specifies row and columns and Specifies heading.

Enter the data in table set. Create a table to display information on a web page some time may like to display an information in tabular for mate .

A Table has three parts-

1. Row: - which is horizontal line of data.
2. Header cell :- which contains text that describe the data in a row or column.
3. Data cell :- which contain data or information to display.

Basic table tags:-

Tag	Uses
1. <TABLE>	Marks a table within an html documents.
2. <TR>	Marks a row within a table.
3. <TD>	Marks a cell (table data) within a row.
4. <TH>	Marks a heading cell within a row.

Product code	Product name	Price per unit	quantity	Total prices
Po1	Atlas	40	2	80
Po2	Ocy-html	70	5	350

<table> **table** Example 1:

```
<table border="4" cellpadding="2" cellspacing="2" width="100%">
<tr>
<td>Column 1</td>
<td>Column 2</td>
</tr>
</table>
```

Example 2: (Internet Explorer)

```
<table border="2" bordercolor="#336699" cellpadding="2" cellspacing="2"
width="100%">
<tr>
<td>Column 1</td>
<td>Column 2</td>
```



```
</tr>
</table>
```

Example 3:

```
<table cellpadding="2" cellspacing="2" width="100%">
<tr>
<td bgcolor="#cccccc">Column 1</td>
<td bgcolor="#cccccc">Column 2</td>
</tr>
<tr>
<td>Row 2</td>
<td>Row 2</td>
</tr>
</table>
```

Example 1: [\(Tip\)](#)

Column 1	Column 2
----------	----------

Example 2: [\(Tip\)](#)

Column 1	Column 2
----------	----------

Example 3: [\(Tip\)](#)

Column 1	Column 2
Row 2	Row 2

```
<td> table data <table border="2" cellpadding="2" cellspacing="2" width="100%">
<tr>
<td>Column 1</td>
<td>Column 2</td>
</tr>
</table>
```

Column 1	Column 2
-----------------	-----------------

```
<th> table header <div align="center">
<table>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
<tr>
<td>Row 2</td>
<td>Row 2</td>
<td>Row 2</td>
</tr>
```

```

<tr>
<td>Row 3</td>
<td>Row 3</td>
<td>Row 3</td>
</tr>
<tr>
<td>Row 4</td>
<td>Row 4</td>
<td>Row 4</td>
</tr>
</table>
</div>

```

Column 1 Column 2 Column 3

Row 2 Row 2 Row 2
Row 3 Row 3 Row 3
Row 4 Row 4 Row 4

<title> **document title** <title>Title of your **HTML page**</title> Title of your web page will be viewable in the title bar. [\(Tip\)](#) <tr> **table row** <table border="2" cellpadding="2" cellspacing="2" width="100%">

```

<tr>
<td>Column 1</td>
<td>Column 2</td>
</tr>
</table>

```

Column 1	Column 2
-----------------	-----------------

Program input and output:

```

<HTML>
<HEAD>
<TITLE>Creating Table</Title>
</HEAD>
<BODY>
< h1align = center> Bill</h1>
<TABLE BORDER =5>
<TR>
<TH> Product Code </TH> <TH> Product Name </TH> <TH>
Priceperunit</TH><TH> Quantity </TH><TH>
Total Price</TH>
</TR>
<TR>
<TD>po1</TD><TD>Atlas</td> <TD> 40</TD><TD> 2</TD><TD>80</TD>
</TD>
<TR>
<TD> po2</TD><TD>ocy-html</TD><TD> 70</TD><TD>5</TD> <TD>
350</TD>
</TABLE>
</BODY>
</HTML>

```

Creating Table				
Bill				
Product code	Product name	Price per unit	quantity	Total prices
Po1	Atlas	40	2	80
Po2	Ocy-html	70	5	350

Observation: The program is running successfully.

EXPERIMENT NO 6

Objective : Creating web page using frame.

Hardware and system software requirement: P-IV Processor, Ram 256mb, HDD 40 GB , Windows.

Software requirement: Windows 2003, windows XP.

Theory: The introduction of frames can create web pages that look and feel entirely different from other web pages- pages that have tables of contents , banners, footnotes and sidebars, just to name a few common features that frames can give.

At the same time, frames change what a page means to the browser and to the readers.

Unlike all the preceding example: which use a single html page to display a screen of information .Create web sites using frames a single screen actually consist of a number of separate html document that interact with each other.

The frameset document also includes the names of the html document that will appear in each of the frames .Each of the remaining html document contains normal html tags that define the physical contents of each separate frame area. These documents are referenced by the frameset document.

CREATING FRAMES: 1.Creating a frameset (or layout) document that determines the location and characteristics of the frames.

2. Designate the frames and their contents.

3. Format the frames.

FRAMESET TAGS AND ATTRIBUTES

Tag/Attributes	Use
<Frameset>	Establishes Frames within an html document.
Rows="n1,n2..."	Sets the size for rows horizontal frames-in pixel, as a percentage or as a proportion of the remaining space with "*".
Cols="n1, n2..."	Sets the size for rows Vertical frames-in pixel, as a percentage or as a proportion of the remaining space with "*".
<Frame>	Identifies frame characteries and initial content.
SRC= "URL"	Identifies the source for the frame content as a standard URL.

Name = "....." Labels a frame so that it can be targeted or referred to from other frames or windows.

<No frames> Sets a section of a html to be visible to no framed browsers.

Advantages(Pros) of using Frames :

1. One of the most beneficial feature of frames is it lets the user to have multiple pages in the same browser.
2. Using frames we can keep one part of the page static while changing the other parts of the page.
3. If we create a top frame we can use it as a header i.e, as that page is static it acts like an include page.
4. Frames can be used to reduce server load, as there is no need to reload all the pages when ever a new page is visited.

Disadvantages of using Frames :

1. One of the main disadvantage of frames is search engines will not deal with them properly. i.e, search engines (including most popular ones) will not index pages containing frames as its hard for them to search for a specific content and move backwards to check to which frameset each page belongs to and retrieve all the pages in the frameset.
2. Its hard to navigate through pages in frames when we have more than two or three frames.
3. Its difficult to print the content of all frames when compared to a normal web page.
- 4.. Some browsers doesn't support frames, so we need to place the content seperately for the people who doesn't have frames using <noframes> ... </noframes>
5. We cannot bookmark individual pages using browser's Favourites Menu.

Frames

```
<frameset cols="25%,75%">
  <frame src="page1.htm" />
  <frame src="page2.htm" />
</frameset>
```

Program input and output:

```
<HTML>
<HEAD>
<TITLE> The frame Tag</title>
</HEAD>
<FRAMESET ROWS="*,*,*">
```

```
<FRAME SRC="DOCUMENT1.HTML">  
<FRAME SRC="DOCUMENT2.HTML">  
<FRAME SRC="DOCUMENT3.HTML">
```

```
</FRAMESET>
```

```
</HTML>
```

The frame Tag
Document1
Document2
Document3

Observation: The program is running successfully.