330en24

24

WEB DESIGNING USING HTML

You have learnt about database management system in the previous lesson. Now you will learn about web designing using HTML. You must have used Internet a number of times. When you surf the Internet, you simply enter the address of the desired website in the browser's (Google Chrome, Internet Explorer, Mozilla Firefox etc.) address bar and press Enter key. The desired website opens. If you want to search for some information, you open a search engine, like Google or Bing, and enter the topic about which you want the information. The search engine finds a number of web sites containing relevant information. You can visit any of these websites and find the desired information. Have you ever wondered how is this information created and where is it stored on the Internet? There are lot of tools and devices which are involved in creating, storing, and accessing information on the Internet. In this lesson you are going to learn HTML, which is the basic and a simple language to create web pages.

OBJECTIVES

After reading this lesson, you will be able to:

- recall the components of web pages;
- define HTML;
- identify container elements and empty elements in HTML;
- create web pages containing formatted text.

24.1 COMPONENTS OF WEB PAGE

A webpage has lot of components like text, hyperlinks, form and images etc. You can open websites of ISRO (http://www.isro.gov.in) and Parliament of India

Notes
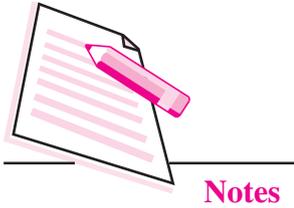
(http://parliamentofindia.nic.in) and through various links given you can see various pages of these sites. Try to understand that web pages contain different types of contents.

When you give the address of a website in a browser, the browser shows a page of the website. This page may contain text, images, audio, video, forms etc. A web site contains a number of such web pages which are linked to each other through hyperlinks. Following is the screen shot of a web page from the IRCTC web site:
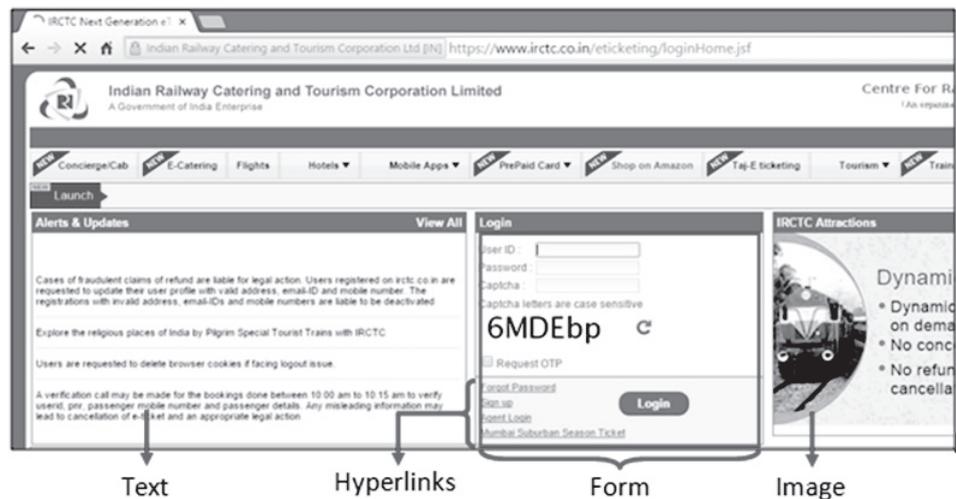

Fig. 24.1: Screen shot of a web page

Let us try to have a bird's eye view of how a web address, website, and web pages are related with each other. Suppose an organization wants to provide its information on the Internet. For this the organization will get all the information categorized into various categories. This information will then be converted into corresponding web pages. All these web pages collectively will form a website. To provide this information on the Internet, the organization has to get a website address and some space on some server where this website can be uploaded. Once this is done, the organization can upload its web site on the server and it will be globally available 24x7 through the website address.

Fig. 24.2: Creating a website

In this lesson we are going to learn how to create web pages with all such components and how to link these pages to create a website.

24.2 WHAT IS HTML?

HTML stands for Hyper Text Markup Language. It is the basic language used to create web pages. An HTML document is a text file and it can be created in any text editor (like Notepad2, Notepad etc.). This text file has to be saved with the extension *.html or .htm*. When an HTML document is opened in a web browser, the browser displays the document in the form of a web page.

An HTML document (a file with extension .html) contains a number of tags. A tag is a special word enclosed within angular brackets (< and >) which conveys some message to the browser. This message may be regarding the structure of the web page or formatting the contents of the web page. Accordingly the tags are called structural tags or formatting tags respectively. Examples of structural tags are <HTML>, <BODY>. <HEAD>. Examples of formatting tags are, <B>, <BR>, <HR>, <IMG>.

In an HTML document some tags appear in pairs. For example <HTML>. . </HTML> and <BODY> . . </BODY>. In such a case the first tag is the opening tag and the second tag is the corresponding closing tag. A closing tag always starts with slash (/). The portion of the html documents from starting tag upto the corresponding closing tag is an **element** and it is called a **Container Element**. Some of the tags do not need corresponding closing tag, like the tag <BR>. In such a case the tag itself is an **element** and it is called an **empty element.**

Sometimes you need to change the default behavior of HTML tags. This is done using tag's attribute(s). For example, <P> tag is used to start a new paragraph. By default, a paragraph is left aligned. If you wish to align a paragraph to the right or center, you use <P> tag with align attribute as follows:
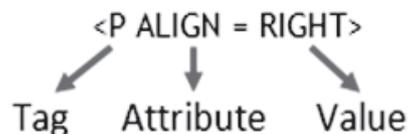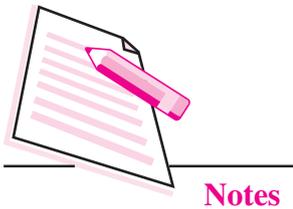
<P ALIGN = RIGHT>

Tag   Attribute   Value

Fig. 24.3: Tags and Attributes

Whenever you use an attribute, it has to be given some value using the = (equal) sign. Most, but not all, of the HTML tags have attributes.

The general structure of any HTML document is as follows:

```
<HTML>
<HEAD>
.
.
</HEAD>      } Head element

<BODY>
.
.
</BODY>      } Body element
</HTML>
```

 Any HTML document starts with <HTML> tag and ends with </HTML> tag and contains two elements: **Head** element (optional) and **Body** element. The Head element (marked by <HEAD> . . </HEAD> tags) contains some information about the document. This information is not displayed in the browser window. The Body element (marked by <BODY> . . </BODY> tags) contains the information to be displayed in the browser window.

To learn this practically (it is always recommended), open a text editor and type the following text:

> <HTML>
>
> <HEAD>
>
> <TITLE> Mello <TITLE>
>
> </HEAD>
>
> <BODY>
>
> Hi! Welcome to my first web page.
>
> I am learning HTML
>
> </BODY>
>
> </HTML>

Save this file with any file name and extension **.html** or **.htm** in any folder. Let us assume that you save it with the name **Page1.html**. The file extension **.html** tells the computer that it is an HTML document and should be opened in the browser. When you open this file in a web browser (say, Google Chrome), it will display the webpage as shwon in Fig 24.4.
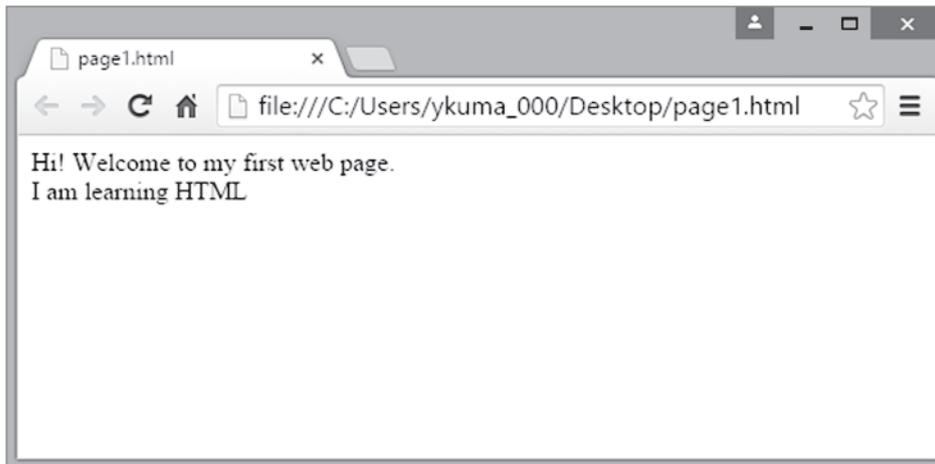
Fig. 24.4: Web page in a browser

Notes

INTEXT QUESTIONS 24.1

1. Answer the following questions briefly:

   a) Give examples of any two web browsers.

   b) What may be the contents of a web page?

   c) What are the two components of an HTML document?

   d) What is the extension of an HTML document?

   e) How do we assign a value to an attribute?

2. State whether the following statements are ture or false:

   a) A web page contains many web-sites.

   b) HTML is used to create web pages.

   c) A closing tag always starts with /.

   d) Behavior of attributes may be changed by using tags.

   e) Each tag in HTML has some attributes

24.3 INSERTING TEXT IN A WEB PAGE

To insert any text in a web page, you simply type that text in the body element of the HTML document. Whatever text you type, is taken as continuous text (without any break) by the browser. To display the formatted text in the web page you have to use various formatting tags in the HTML document. Let us understand this with the help of an example.

Notes

Suppose we want to create the following web page:

Chanakya

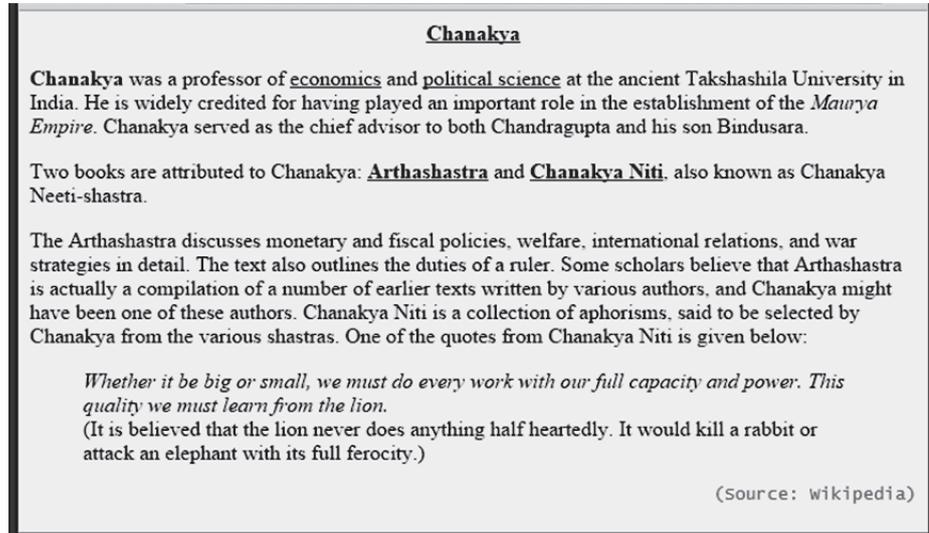**Chanakya** was a professor of economics and political science at the ancient Takshashila University in India. He is widely credited for having played an important role in the establishment of the *Maurya Empire*. Chanakya served as the chief advisor to both Chandragupta and his son Bindusara.

Two books are attributed to Chanakya: **Arthashastra** and **Chanakya Niti**, also known as Chanakya Neeti-shastra.

The Arthashastra discusses monetary and fiscal policies, welfare, international relations, and war strategies in detail. The text also outlines the duties of a ruler. Some scholars believe that Arthashastra is actually a compilation of a number of earlier texts written by various authors, and Chanakya might have been one of these authors. Chanakya Niti is a collection of aphorisms, said to be selected by Chanakya from the various shastras. One of the quotes from Chanakya Niti is given below:

Whether it be big or small, we must do every work with our full capacity and power. This quality we must learn from the lion.
(It is believed that the lion never does anything half heartedly. It would kill a rabbit or attack an elephant with its full ferocity.)

(Source: Wikipedia)

Fig. 24.5: Sample web page 1

To create this web page you open a text editor and type the following:

```
<HTML>
<BODY>
                    Chanakya

Chanakya was a professor of economics and political science at the
ancient Takshashila University in India. He is widely credited for
having played an important role in the establishment of the Maurya
Empire. Chanakya served as the chief advisor to both Chandragupta and
his son Bindusara.

Two books are attributed to Chanakya: Arthashastra and Chanakya Niti,
also known as Chanakya Neeti-shastra.

The Arthashastra discusses monetary and fiscal policies, welfare,
international relations, and war strategies in detail. The text also
outlines the duties of a ruler. Some scholars believe that
Arthashastra is actually a compilation of a number of earlier texts
written by various authors, and Chanakya might have been one of these
authors.

Chanakya Niti is a collection of aphorisms, said to be selected by
Chanakya from the various shastras. One of the quotes from Chanakya
Niti is given below:

Whether it be big or small, we must do every work with our full
capacity and power. This quality we must learn from the lion.
(It is believed that the lion never does anything half heartedly. It
would kill a rabbit or attack an elephant with its full ferocity.)

                                      (Source: Wikipedia)
</BODY>
</HTML>
```

Fig. 24.6: Draft HTML code for the sample web page 1

Web Designing Using HTML

While typing you find that in a text editor you cannot give desired formatting to the text. Somehow, you try to keep the text formatted as much as possible. But when you open the file in a web browser, you find that the whole text is shown as a single paragraph – No centering, no line-breaks, and no different paragraphs! It looks as follows:

Chanakya Chanakya was a professor of economics and political science at the ancient Takshashila University in India. He is widely credited for having played an important role in the establishment of the Maurya Empire. Chanakya served as the chief advisor to both Chandragupta and his son Bindusara. Two books are attributed to Chanakya: Arthashastra and Chanakya Niti, also known as Chanakya Neeti-shastra. The Arthashastra discusses monetary and fiscal policies, welfare, international relations, and war strategies in detail. The text also outlines the duties of a ruler. Some scholars believe that Arthashastra is actually a compilation of a number of earlier texts written by various authors, and Chanakya might have been one of these authors. Chanakya Niti is a collection of aphorisms, said to be selected by Chanakya from the various shastras. One of the quotes from Chanakya Niti is given below: Whether it be big or small, we must do every work with our full capacity and power. This quality we must learn from the lion. (It is believed that the lion never does anything half heartedly. It would kill a rabbit or attack an elephant with its full ferocity.) (Source: Wikipedia)

Fig. 24.7: Web page created by HTML code given in Fig. 25.6

To format the text as desired you have to apply different formatting tags to the text. The formatting tags needed to be used in this document are given in the following table:

Table 24.1: Formatting tags

	Tag(s)	Usage
1.	<CENTER> . . </CENTER>	To center align any part of the text
2.	<P> . . </P>	It starts a new paragraph. The text appearing after <P> appears in a new paragraph in the browser. <P> leaves a blank line before starting a new paragraph.
3.	 	It puts a line break in the text. The text appearing after appears in the next line in the browser. is different from <P>. <P> leaves a blank line before starting a new paragraph, whereas does not.
4.	<B> . . </B>	To make any part of the text **Bold**.
5.	<U> . . </U>	To underline any part of the text.
6.	<I> . .</I>	To *Italicise* any part of the text.
7.	<BLOCKQUOTE>.. </BLOCKQUOTE>	To indent the text (usually some quotations) from both sides – left and right.
8.	<FONT> . . </FONT>	To set specific font (face, color, size) for any part of the text.

Notes

Notes

We shall apply these tags to our document as follows:

<CENTER>..</CENTER> The text heading appears in the center of the page. Therefore, it has to be enclosed in <CENTER>..</CENTER> tags as follows: <div align=center>**<CENTER> Chanakya </CENTER>**</div>
<P> . . </P> First paragraph has to start after leaving one blank line above it. Therefore, we shall use <P> before starting the first paragraph as follows: <div align=center>**<P> Chanakya was a . . .</P>**</div>Similarly, <P> will be applied before starting each paragraph (2nd, 3rd, 4th, and 5th)
   The parenthesized line after the quote is written without leaving a blank line above it. Therefore, we need a line break   (Not <P>) to start it as follows: <div align=center>** (It is believed . . .**</div>
<B>..</B> The word **Chanakya** in the first paragraph appears in bold. Therefore, we have to enclose it in <B>..</B> tags as follows: <div align=center>**<B>Chanakya</B>**</div>Similarly, the words **Arthashastra**, and **Chanakya Niti** in the second paragraph have to be put in <B>..</B> tags.
<U>..</U> The word <u>economics</u> in the first paragraph is underlined. Therefore, we have to enclose it in <U>..</U> tags as follows: <div align=center>**<U>economics</U>**</div>Similarly, the term <u>political science</u> has also to be enclosed in <U>..</U> tags.
<I>..</I> The term *Maurya Empire* in the first paragraph is italicized. Therefore, we have to enclose it in <I>..</I> tags as follows: <div align=center>**<I>Maurya Empire</I>**</div>

<BLOCKQUOTE>..</BLOCKQUOTE>
 	
The quotation in the last paragraph (along with parenthesized explanation) has to be enclosed in <BLOCKQUOTE>..</BLOCKQUOTE> tags as follows:
 	
<BLOCKQUOTE>
    <I>Whether it be . . . lion</I>
    **
(It is believed . . . ferocity)**
</BLOCKQUOTE>.

<FONT>..</FONT> The line at the end appears quite differently from the rest of the text. It has a different font face, size, and color. To apply a specific font to it, we have to enclose it in <FONT> . . </FONT> tags. Soon we shall study how to use <FONT>..</FONT> tags.

Notes

Applying multiple tags

In the above web page you observe that many parts of the text have multiple formatting. This concept is also called nesting of tags. In HTML you can apply multiple tags on the same part of the text, as shown below:

Table 24.2: Example of Multiple Tags

Text	Formatting	How to apply
Text heading **Chanakya**	Bold, Underline, Center aligned	<B><U><CENTER> Chanakya </CENTER> </U></B>
The words **Arthashastra** and **Chanakya Niti** in the second paragraph.	Bold, Underline	<U><B>Arthashastra</B></U> and <B><U>Chanakya Niti</U></B>
The quotation: *Whether . . lion.*	Blockquote, Italics	<Blockquote> <I>Whether . . lion. </I> </Blockquote>

Attributes

By default each paragraph is left aligned. To change the alignment of a paragraph to RIGHT or CENTER, you have to use ALIGN attribute of <P> tag. To have the desired font effects, you have to use <FONT> tag with FACE, SIZE, and COLOR attributes.

These attributes are given in the following table:

Table 24.3: Attributes of <p> and <font> tags

Tag	Attribute	Possible values of the attribute	Example
<P>	ALIGN	LEFT, RIGHT, CENTER, JUSTIFY	<P ALIGN = Right>
<FONT>	FACE	Any valid font name	<P FACE = "Arial">
	SIZE	An integer from 1 to 7	<P SIZE = 3>
	COLOR	Any valid color name or #RRGGBB code	<P COLOR = RED> or <P COLOR = #FF0000>

Following points should be noted while using attributes:

(i)   An attribute is always paired with its valid value.

(ii)   If the value of an attribute is a single word, then this value may be used with or without quotation marks. If the value of an attribute contains multiple words, then it must be used within double quotes.

(iii) If needed, multiple attributes can be used with a tag.

Notes

In our example web page we observed that the last line is right aligned. Therefore, we shall use <P ALIGN = Right> to start this line. This line is also written in some other FONT than the rest of the text. Therefore we shall enclose this line within <FONT> . . </FONT> tags as follows:

<center><FONT FACE="Lucida Console" size = 2 color = red>
(Source: Wikipedia) </FONT></center>

Note that multiple attributes of a tag are separated by spaces. We can also use comma as a separator.

After applying all the suitable tags, final version of our HTML document is:

```
<HTML>
<BODY>
<B><U><CENTER>Chanakya</B></U></CENTER>
<P>
<B>Chanakya</B> was a professor of <U>economics</U> and <U>political science</U> at the ancient
Takshashila University in India. He is widely credited for having played an important role in the
establishment of the <I>Maurya Empire</I>. Chanakya served as the chief advisor to both
Chandragupta and his son Bindusara.
<P>
Two books are attributed to Chanakya: <U><B>Arthashastra</B></U> and <B><U>Chanakya Niti</B></U>,
also known as Chanakya Neeti-shastra.
<P>
The Arthashastra discusses monetary and fiscal policies, welfare, international relations, and
war strategies in detail. The text also outlines the duties of a ruler. Some scholars believe
that Arthashastra is actually a compilation of a number of earlier texts written by various
authors, and Chanakya might have been one of these authors.

Chanakya Niti is a collection of aphorisms, said to be selected by Chanakya from the various
shastras. One of the quotes from Chanakya Niti is given below:
<Blockquote>
<I>Whether it be big or small, we must do every work with our full capacity and power. This
quality we must learn from the lion. </I>
<BR>
(It is believed that the lion never does anything half heartedly. It would kill a rabbit or
attack an elephant with its full ferocity.) </Blockquote>
<P align = right>
<FONT FACE="Lucida Console" size = 2 color = red>
(Source: Wikipedia) </FONT>
</BODY>
</HTML>
```

<center>Fig. 24.8: Final HTML code for the sample web page 1</center>

Edit the document to apply the tags as shown above and open the document in a web browser to see the formatted web page.

INTEXT QUESTIONS 24.2

1. Fill in the blanks:

a. .... tag is used to start a new paragraph.

b. .... tag is used to center align any part of the text.

c. .... tag is used to make any part of the text Bold.

   d.   .... tag is used to italicise any part of the text.

   e.   FACE is an attribute of .... tag.

2. State whether the following statements are ture or false:

   a.   There is no difference between <P> and <BR>.

   b.   Multiple tags may be applied on the same part of the text.

   c.   By default a paragraph is center aligned.

   d.   We can change the color of any part of the text.

   e.   A tag cannot have more than one attributes.

24.4 SOME MORE FORMATTING TAGS

Besides these, there are some other tags which are also used to format text. Let us learn these tags now.

Headings

Heading tags are used to format headings. These tags are used in the form <Hn> . . </Hn>, where n is a natural number in the range 1 to 6.

To view the effect of heading tags type the following code, save it as an HTML file and open it in a web browser.
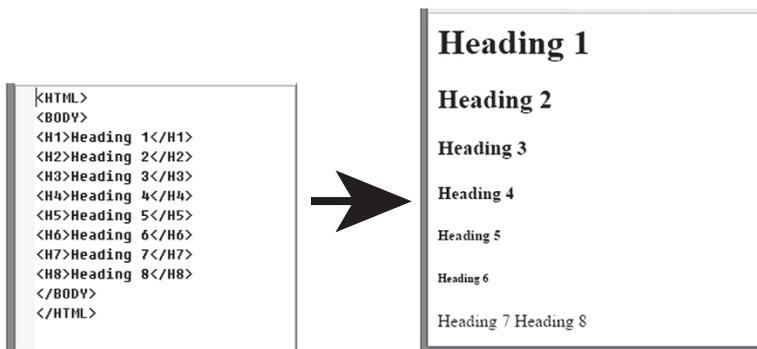

Fig. 24.9(a): HTML document   **Fig. 24.9(b): Web page**

Notice the following points as observed in the above example:

(i)   <H1> gives the largest heading and <H6> gives the smallest. Size of text gradually decreases from <H1> to <H6>

(ii) Each heading starts as a new paragraph (and the text that follows it also starts as a new paragraph).

(iii) <H7> and <H8> are not valid tags, therefore these are totally ignored by the browser. This is true for all other tags also.

In the above page try to put the text heading in various heading tags and see the effect.

<HR>

<HR> tag is used to draw a horizontal line (Horizontal Rule) to separate two sections of a web page. You can define the width, size, color etc. of the horizontal rule by using the relevant attributes which are given below:

Table 24.4: Attributes of <HR> tag

Attribute	Possible values of the attribute	Description
ALIGN	LEFT, RIGHT, CENTER	To specify the alignment of horizontal rule
WIDTH	Any natural number OR n% , where n is a natural number in the range 0 to 100.	If width is a number, it is taken as the width of the horizontal rule in PIXELS.If width is a number%, it is taken as the %age of the browser window width. For example, 50% means half of the window width and 100% means full window width.
SIZE	A natural number	To specify the height/thickness of the horizontal rule in PIXELS.
COLOR	Any valid color name or #RRGGBB# code	To specify the color of the horizontal rule.
NOSHADE	No value	By default <HR> displays a shaded horizontal rule. NOSHADE specifies that it should be a solid, and not shaded, horizontal rule.

You can use <pre> tag to display a predefined text, i.e., the text inside <pre> ... </pre> tag will be displayed in a fixed width font and it preserves both spaces and line breaks.

Let us create an HTML file using the above mentioned attributes.

```
<HTML>
<BODY>
Following is a horizontal rule obtained with HR tag without any attribute
<HR>
Following is a horizontal rule obtained with attribute "WIDTH = 50"
<HR WIDTH = 50>
Following is a horizontal rule obtained with attribute "WIDTH = 50%
<HR WIDTH = 50%>
Following is a horizontal rule obtained with attribute "SIZE = 5"
<HR SIZE = 7>
Following is a horizontal rule obtained with attributes "SIZE = 3 COLOR = RED"
<HR SIZE = 3 COLOR = RED>
Following is a horizontal rule obtained with attributes "SIZE = 5 NOSHADE"
<BR>Observe that the attribute NOSHADE is used without any value
<HR SIZE = 5 NOSHADE>
Following is a horizontal rule obtained with attributes "SIZE = 5 COLOR = RED NOSHADE"
<HR SIZE = 5 COLOR = RED NOSHADE>
</BODY>
</HTML>
```

Fig. 24.10: HTML code to demonstrate the <HR> tag
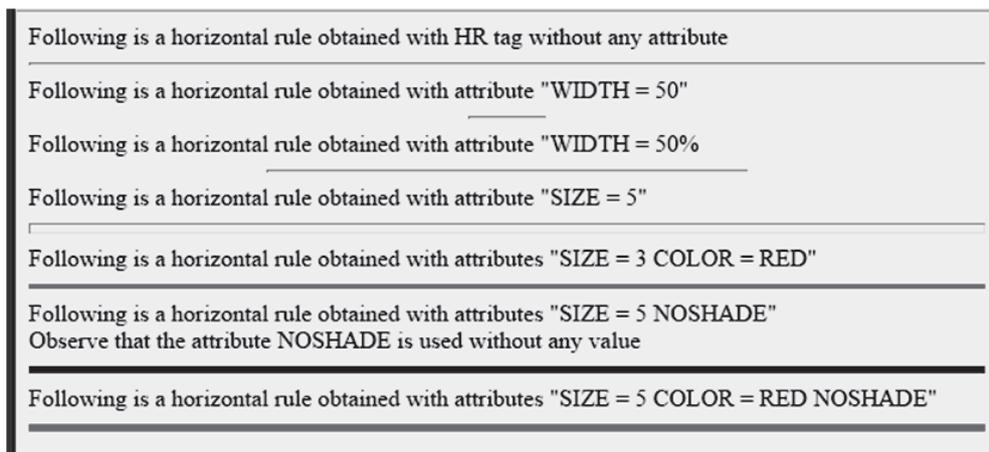
The corresponding web page will be:

Following is a horizontal rule obtained with HR tag without any attribute

Following is a horizontal rule obtained with attribute "WIDTH = 50"

Following is a horizontal rule obtained with attribute "WIDTH = 50%

Following is a horizontal rule obtained with attribute "SIZE = 5"

Following is a horizontal rule obtained with attributes "SIZE = 3 COLOR = RED"

Following is a horizontal rule obtained with attributes "SIZE = 5 NOSHADE"
Observe that the attribute NOSHADE is used without any value

Following is a horizontal rule obtained with attributes "SIZE = 5 COLOR = RED NOSHADE"

Fig. 24.11: Web page generated by code given in Fig. 24.10

24.5 PAGE SETTING

Page setting includes setting of page title and setting of page background color, text color etc. Page title is the text that appears in the title bar of the browser window. If an HTML document does not contain title, then the file name of the HTML document is displayed in the title bar. We can see in Fig. 24.4 that the file name Page1.html is written in the title bar of the browser window. Title of a page is set by TITLE element in the HTML document. The TITLE element is placed in HEAD element.

Syntax: **<TITLE>. . .</TITLE>**

Notes

Example:

<TITLE>Ancient India</TITLE>

Page background color and text color etc. are set by using various attributes of <BODY> tag. These attributes are:

(i)   **BACKGROUND:** It is used to specify the image to be shown in the background of the web page. If the referenced image is smaller than the browser window, it will be tiled to fit and will scroll with the text on the page.

Examples:

a. <BODY BACKGROUND = logo.jpg>

b. <BODY BACKGROUND = "D:\HTML\Slate.jpg>

(ii)   **BGCOLOR:** It is used to specify the background colour of the web page. Most of the browsers recognize most of the popular colour names like RED, GREEN, YELLOW, GREY, AQUA, etc. If we want to specify a colour which does not have a specific name but we know its RRGGBB composition, then you can specify this RRGGBB composition in the BGCOLOR attribute.

Examples:

a. <BODY BGCOLOR = CYAN>   -specifying color name

b. <BODY BGCOLOR = #FF10AB>   -specifying color code

(iii)   **TEXT:** It sets the colour of the normal text in the document. Colour values can be given in the same way as that for the BGCOLOR attribute. The default text colour is black (with RRGGBB composition "#000000").

Examples:

a. <BODY TEXT = BLUE>   -specifying color name

b. <BODY TEXT = #0010FF>   -specifying color code

Let us now create another web page as shown in the Fig 24.12.

Notes

Fig. 24.12: Sample web page 2

Following is the HTML code to create this page:

```
<HTML>
<HEAD>
<TITLE>CDAC</TITLE>
</HEAD>
<BODY BGCOLOR = CYAN TEXT = BLUE>
<FONT FACE = "Trebuchet MS" COLOR = RED>
<CENTER><H1>CDAC - Centre for Development of Advanced Computing</H1>
<H5>(From Wikipedia, the free encyclopedia)</H5></CENTER>
</FONT>
<FONT FACE = "Trebuchet MS">
The Centre for Development of Advanced Computing (<B>C-DAC</B>) is a research and development
organization under the <U>Department of Electronics and Information Technology</U>, Govt of India. The
National Centre for Software Technology (NCST), ER&DCI and CEDTI were merged into C-DAC in 2003.
<HR NOSHADE>
<H3 ALIGN = CENTER>History</H3>
<P ALIGN = JUSTIFY>
After being denied <I>Cray</I> supercomputers as a result of a technology embargo, India started a
program to develop an <B>indigenous supercomputer</B> in collaboration with <I>Russia</I>.
Supercomputers were considered a double edged weapon capable of assisting in the development of nuclear
weapons. For the purpose of achieving self-sufficiency in the field, C-DAC was established by the
Department of Electronics in 1988. <U><B>Vijay Bhatkar</B></U> was hired as the Director of C-DAC. The
project was given an initial run of 3 years and an initial funding of INR30,00,00,000 as the same amount
of money and time was usually expended to secure the purchase of a supercomputer from the US.
<BR>
In 1990, a prototype was produced and was benchmarked at the 1990 Zurich Supercomputering Show. <B>It
surpassed most other systems, placing second after US</B>.
<BR>
The final result of the effort was the PARAM 8000, which was installed in 1991. It is considered India's
first supercomputer.
<HR WIDTH = 75% COLOR = BLUE>
<H3 ALIGN = CENTER>Research activities</H3>
Originally established to research and assemble High Performance Computers, the research of C-DAC has
spread to High Performance Computers, Grid Computing, Electronics, Speech and Natural Language
Processing, Information and Cyber Security, Ubiquitous Computing, Bioinformatics, and Geomatics
<HR>
```

Fig. 24.13: Code to create sample web page 2

WHAT YOU HAVE LEARNT

1. WWW (World Wide Web) is a collection of documents and services, distributed across the Internet and linked together by hyperlinks.

2. A website is a collection of interlinked web pages.

3. A web page may contain many components like text, hyperlinks, forms, images etc.

4. HTML (Hyper Text Markup Language) is the basic language used to create web pages.

5. An HTML document is a text file with the extension .html

6. A browser is a software which is used to surf the Internet.

7. When an HTML document is opened in a web browser, it is opened as a web page.

8. Contents of a web page are formatted by using various formatting tags in the corresponding HTML document.

9. HTML tags may be structural tags or formatting tags.

10. A container element starts with an opening tag and ends with a closing tag.

11. An empty element contains only the starting tag.

12. Attributes are used to modify the default behavior of tags.

13. Tags used in this lesson are: <HTML>. .</HTML>, <HEAD>. .</HEAD>, <TITLE>. .</TITLE>, <BODY>. .</BODY>, <CENTER> . . </CENTER>, <P> .. </P>, <BR>, <B>. .</B>, <U>. .</U>, <I>. .</I>, <BLOCKQUOTE>. .</BLOCKQUOTE>, <FONT>. .</FONT>, <HR>, <Hn>. .</Hn>

14. Multiple tags may be applied simultaneously on any part of the text as required.

TERMINAL EXERCISE

1. Define the following terms:

   WWW, HTML, Browser, Tag, Element

2. Differentiate between container elements and empty elements in HTML with an example of each.

3. Differentiate between structural tags and formatting tags in HTML with an example of each.

4. Give examples of two structural tags and two formatting tags in HTML.

5. What is the use of attributes? Explain with the help of an example.

6. Give the general structure of an HTML document.

7. Differentiate between <P> and <BR> tags in HTML.

8. What is the default alignment of a paragraph?

9. What is the use of <BLOCKQUOTE> tag? Explain with the help of an example.

10. What are the different attributes of FONT tag? Write the use of them.

11. What is the use of heading tags? Which tags will you use to generate the largest heading and the smallest heading?

12. What is the use of <HR> tag? What are its attributes?

13. What is the use of <TITLE> tag? In which element is it used?

14. Differentiate between BGCOLOR and TEXT attributes of <BODY> tag.

15. Write an HTML code to create the following web page:

Notes

Amazing Facts

Human nose can remember up to **50000** different types of scents.

If human eye was a digital camera, it would have 576 Mega Pixels.

You have no sense of smell when you're *sleeping*.

50% of human DNA is same as in banana.

Following points should be considered while writing the code:

1. Title of the page is: "Human Body Facts".

2. Background color is "lightcyan" and the text color is set to "red".

3.   The heading is written using <H1> and is center aligned.

4.   The Horizontal Rules are 50% wide with respect to the browser window.

ANSWERS TO INTEXT QUESTIONS

24.1

1   a) Google Chrome, Internet Explorer

 b) Text, Images, Hyperlinks, Forms etc.

c) Head and Body   d) .html   e) Using = (equal) sign

2   a) False   b) True   c) True   d) False   e) False

24.2

1   a) <P>   b) <CENTER>   c) <B>   d) <I>   e) <FONT>

2   a) False   b) True   c) False   d) True   e) False