

EXERCISE

Q1. Select the best answers for the following MCQs.

- i. What is an Internet address called that identifies a website?**
 - A. Web page
 - B. Website
 - C. Web server
 - D. URL

- ii. What is a collection of Web pages hosted on a Web server called?**
 - A. Web address
 - B. Website
 - C. Home page
 - D. Web browser

- iii. Which language is used for creating Web pages?**
 - A. HTML
 - B. C language
 - C. URL
 - D. Web browser

- iv. What is text or image in a Web page called that links it to another web page when user clicks on it?**
 - A. Web link
 - B. Browser link
 - C. Hyperlink
 - D. Search link

- v. Which of the following refers to uploading of Web pages to Web server so that others can access it?
- A. Configuring web pages
 - B. Web surfing
 - C. Installing website
 - D. Web hosting
- vi. How many types of lists are commonly used in HTML pages?
- A. 2
 - B. 3
 - C. 4
 - D. 5
- vii. Anything typed inside which tags is displayed in the browser window?
- A. <body></body>
 - B. <html></html>
 - C. <head></head>
 - D. <title></title>
- viii. Which of the following tags does not have a closing tag?
- A. <tr>
 - B.

 - C. <center>
 - D.

Answers

i. D	ii. B	iii. A	iv. C
v. D	vi. C	vii. A	viii. B

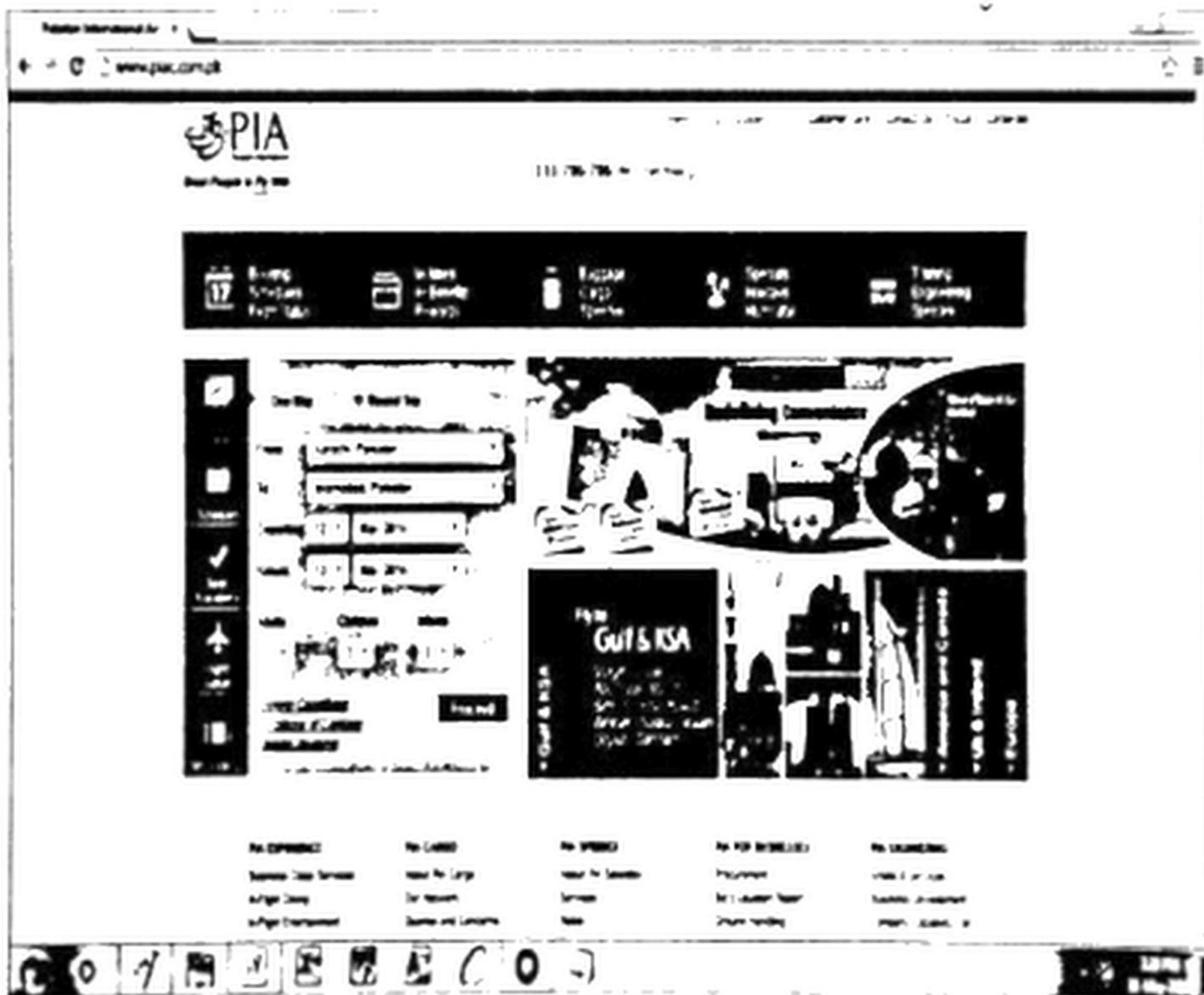
SHORT QUESTIONS

Q1. Give short answers to the following questions.

- i. Differentiate between website and Web server.

Ans: Website:

A website is a collection of related web pages hosted on a web server. It is accessible through an Internet address known as Uniform Resource Locator (URL). A URL is what the user types in Web browser such as Internet Explorer to display a particular website. A website for air ticket reservation is shown in Fig. A.



A – Website for air ticket reservation

Federal board (FBISE) Urdu website is shown in Fig. B

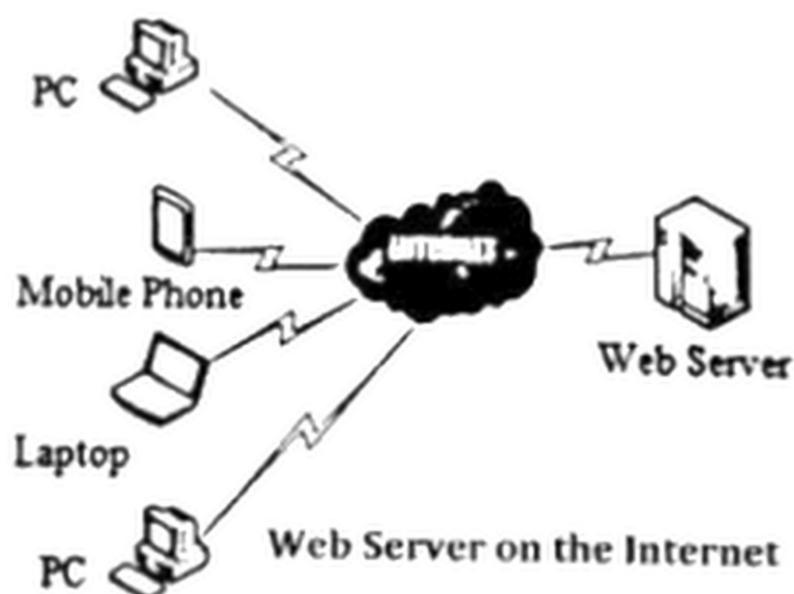


B - Federal Board website in Urdu language

Web Server:

A web Server is a computer that makes Web pages available through the Internet as shown in Fig. Web servers are used to host websites, data storage and also for running application. Web servers deliver HTML documents when an Internet user types a URL of a website in the browser.

Any computer can be turned into a Web server by installing server software and connecting the computer to the internet.



- ii. Describe how a search engine is used for searching information on the Internet.

Ans: Search Engine:

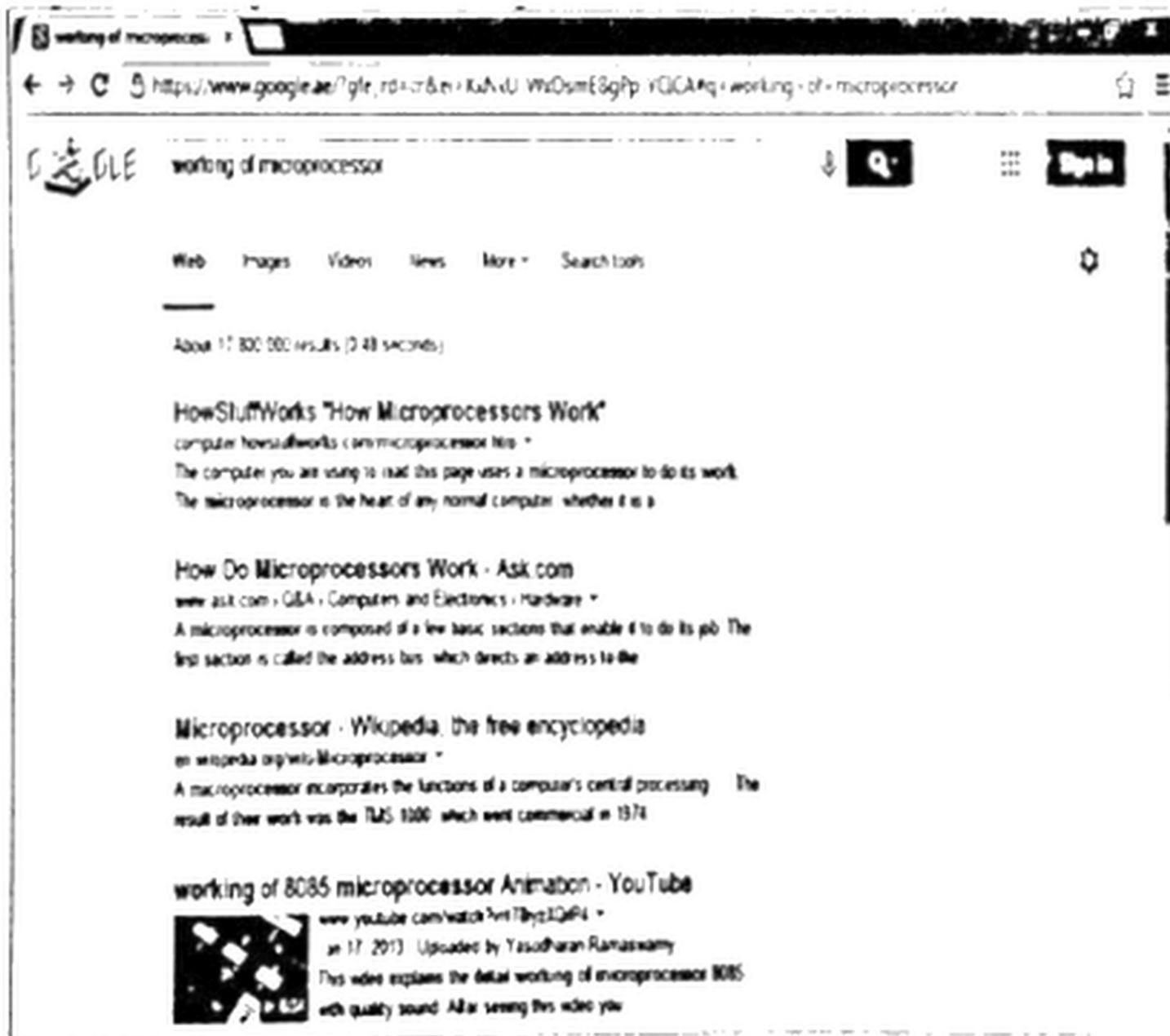
A search engine is a website or software that allows people to find information on the World Wide Web.

Use of Search Engine:

Finding exactly what the user is looking for. Therefore, search engines have been designed to help users find specific information on the Web.

Users type in one or more keywords in a search engine. The search engine will look for matching websites from all over the Web. User will see the total number of matches found and then the first ten sites that most closely match the keywords. The information shown for each website includes a title and a brief description.

Most popular search engines are **Yahoo! And Google**. Finding information using search engine as shown in Fig



Finding information using a search engine

iii. Define URL and Web hosting.

Ans: Uniform Resource Locator (URL):

Uniform Resource Locator (URL) is an Internet address that identifies a website.

Web Hosting:

Web Hosting is a service that uploads a website on a Web server and makes it available for computer users.

iv. Describe HTML.

Ans: Introduction to HTML.

HTML is a mark-up language used to create Web pages. A browser such as Internet Explorer or Google chrome is used to read HTML document and display it on the screen as Web pages.

Hypertext Mark-up Language:

HTML stands for Hypertext Mark-up Language. It is called mark-up language because it uses mark-up tags that tell the Web browser how to display the Web page. It is the language of Internet's World Wide Web. Websites and Web pages are written in HTML.

It is used to create hypertext documents that bring together text, pictures, sounds, video clips and links all in one place. HTML files are plain text files, so they can be created using a simple editor such as Notepad or Wordpad.

EXTENSIVE QUESTIONS

Q3. Describe any four types of websites.**Ans: Types of Websites:**

There are a large variety of websites on the Web each providing a particular type of service.

i. Web Portals:

Web portal is a website that offers a large variety of services. These include online shopping malls, news, stock prices, e-mail, search engines etc. Web portals function as a point of access to information on the Web.

For example, a school Web portal delivers information about the school's historical background, admission requirement, school curriculum, tuition

fees structure, school news, students results etc, in a unified way. Web portal of NUST is shown in fig.



Web portal of National University of Sciences and Technology

ii. News Websites:

News websites provide information about current events and opinions. These sites publish news stories and let their visitors voice be heard. These sites provide their visitors a way to get their thoughts and views published. Very often at the end of news stories, visitors are asked to share their experience or knowledge about the topic. Therefore, a link for the readers comment is provided for feedback.

Examples:

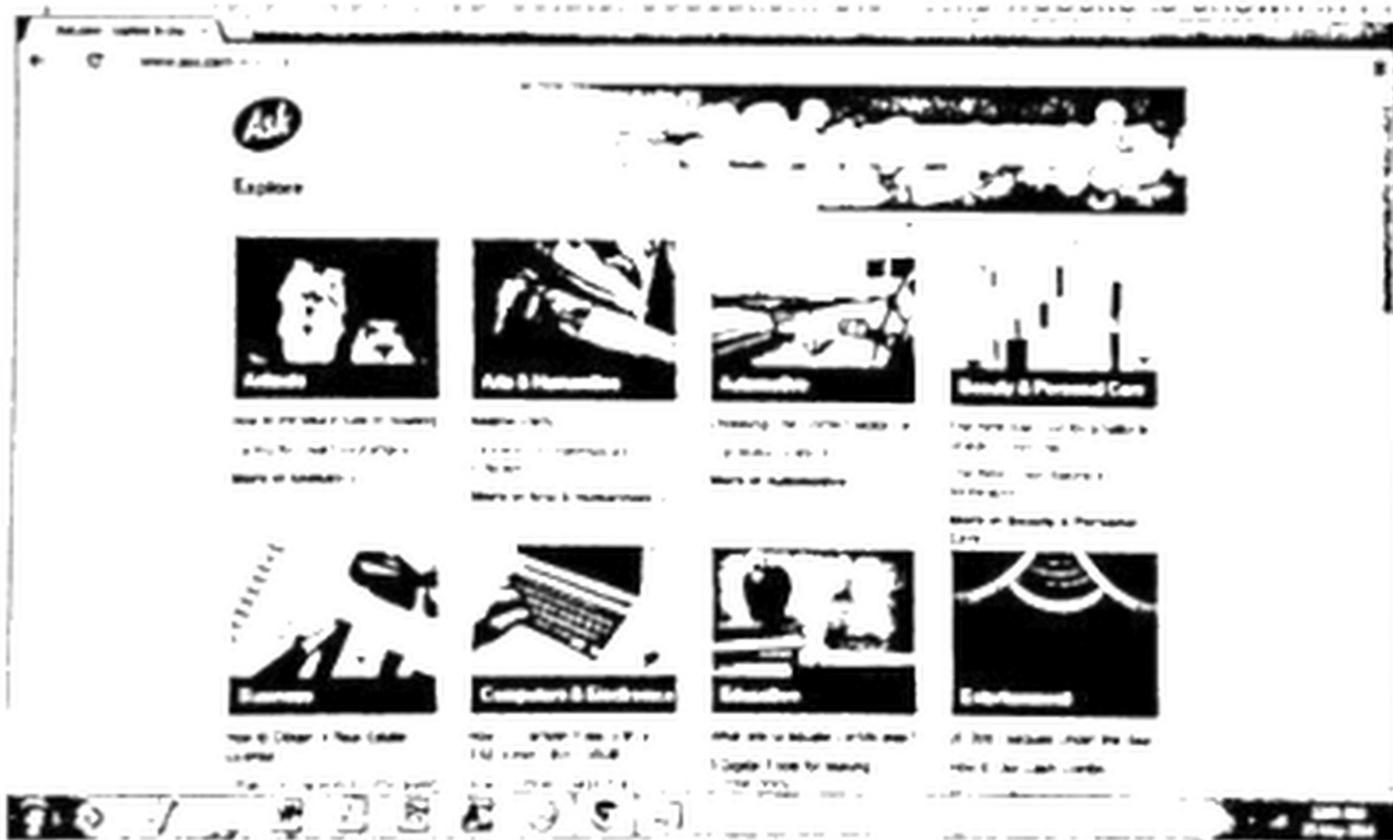
Some examples of news websites are www.paktribune.com, www.dailytimes.com, www.nation.com.pk . The news websites is shown in Fig.



The News website

iii. Information Websites:

Information websites provide information on any topic in the form of text, graphics, sound and videos. For example www.wikipedia.org is an informational website that provides information on thousand of articles. It allows users to contribute and edit articles as well. As another example www.ask.com is another informational website that provides information on a large variety of topics including arts and humanities, automotive, animals, business, computer and literature. This website is shown in Fig.



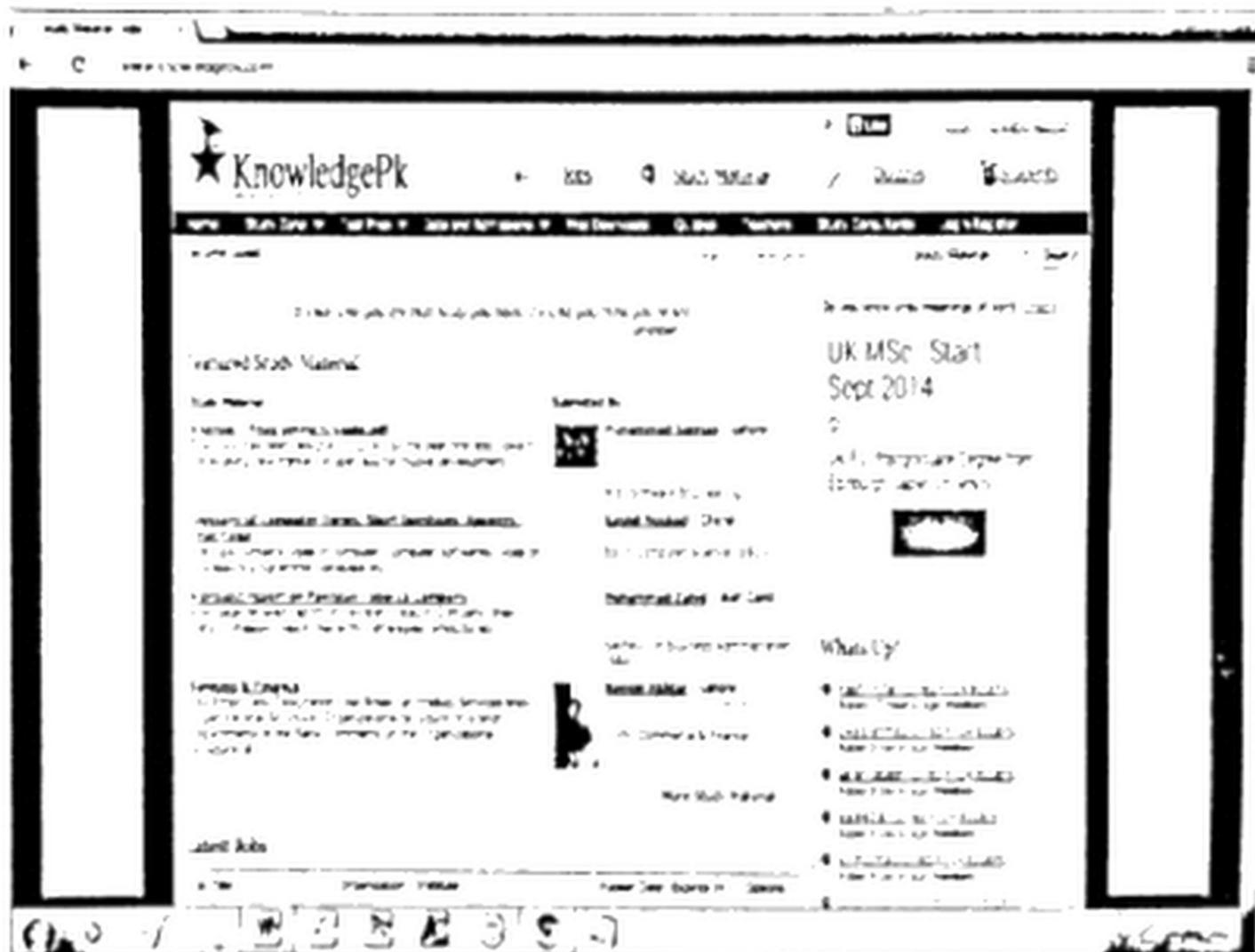
The www ask com informational website

iv. Educational Websites:

Educational websites are created for educational purpose. These sites contain animation, slide presentations and tutorials to educate people on various topics. Information is presented in a very well-organized way. The purpose of any education website is to impart knowledge to people who are looking for better understanding of a topic and pursue knowledge.

Some examples of Pakistani educational websites are www.ilmkiduniya.com , www.knowledgepk.com and www.sabaq.pk

The home page of educational website www.knowledgepk.com is shown in fig.



The www.knowledgepk.com website

Q4. Write the HTML tags for the following?

- i) Paragraph
- ii) Heading
- iii) Bold
- iv) Underline
- v) Italic
- vi) Inserting line breaks
- vii) Paragraph
- viii) Center out
- ix) Strike out
- x) Superscript
- xi) Subscript

xii) Font size, color and typeface

xiii) Inserting space

Ans: i) Paragraph:

The `<p></p>` tags are used to define paragraph. HTML automatically adds an extra blank line before and after a paragraph.

ii) Heading:

There are six heading tags, `<h1></h1>` to `<h6></h6>`. The `<h1></h1>` tags are used to specify the largest heading and `<h6></h6>` tags specify the smallest.

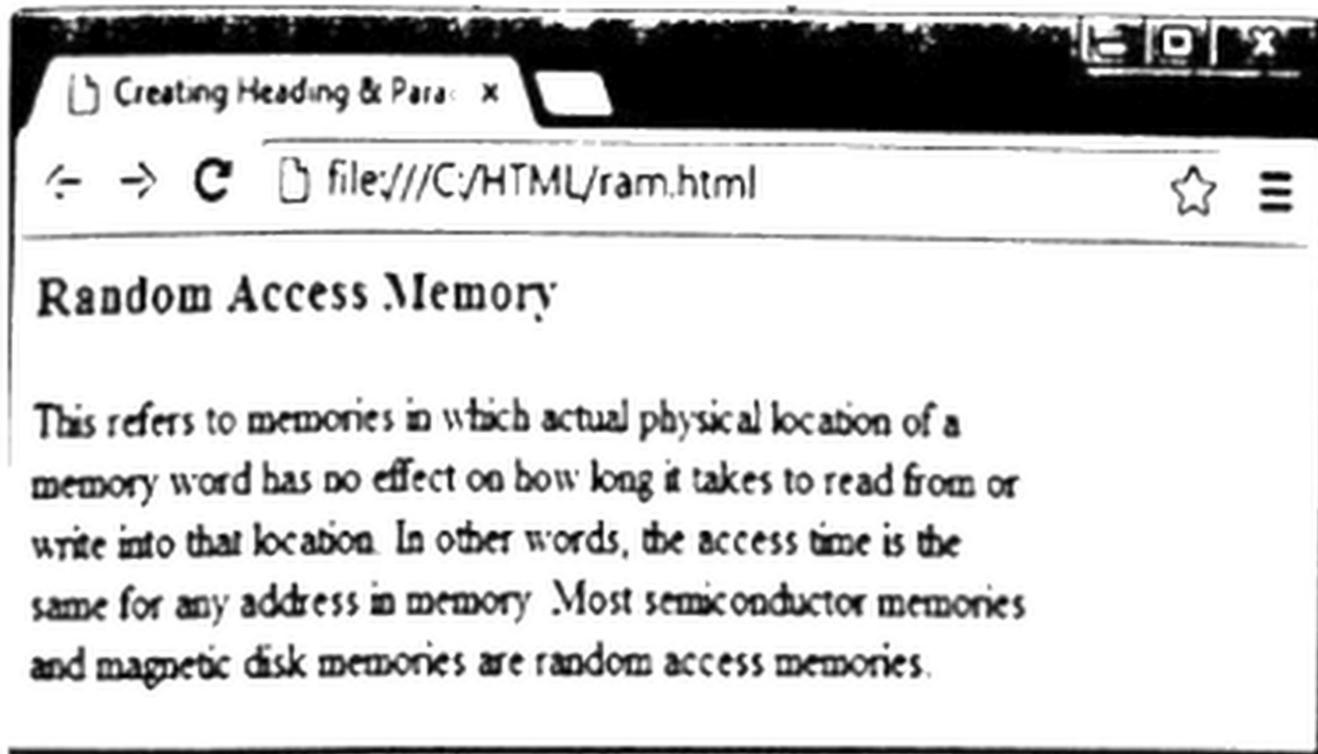
The HTML document in Fig, demonstrates how to use the above mentioned tags in a Web page.

```

1 <html>
2 <head>
3   <title>Creating Heading & Paragraph</title>
4 </head>
5 <body>
6   <h3>Random Access Memory</h3>
7   <p>This refers to memories in which actual physical location of a<br>
8     memory word has no effect on how long it takes to read from or<br>
9     write into that location. In other words, the access time is the<br>
10    same for any address in memory. Most semiconductor memories<br>
11    and magnetic disk memories are random access memories.</p>
12 </body>
13 </html>
14
15
16
length: 483 lines: 11 Ln: 14 Col: 1 Sel: 0|0 Dos/Windows UTF-8 w/o BOM BNS
  
```

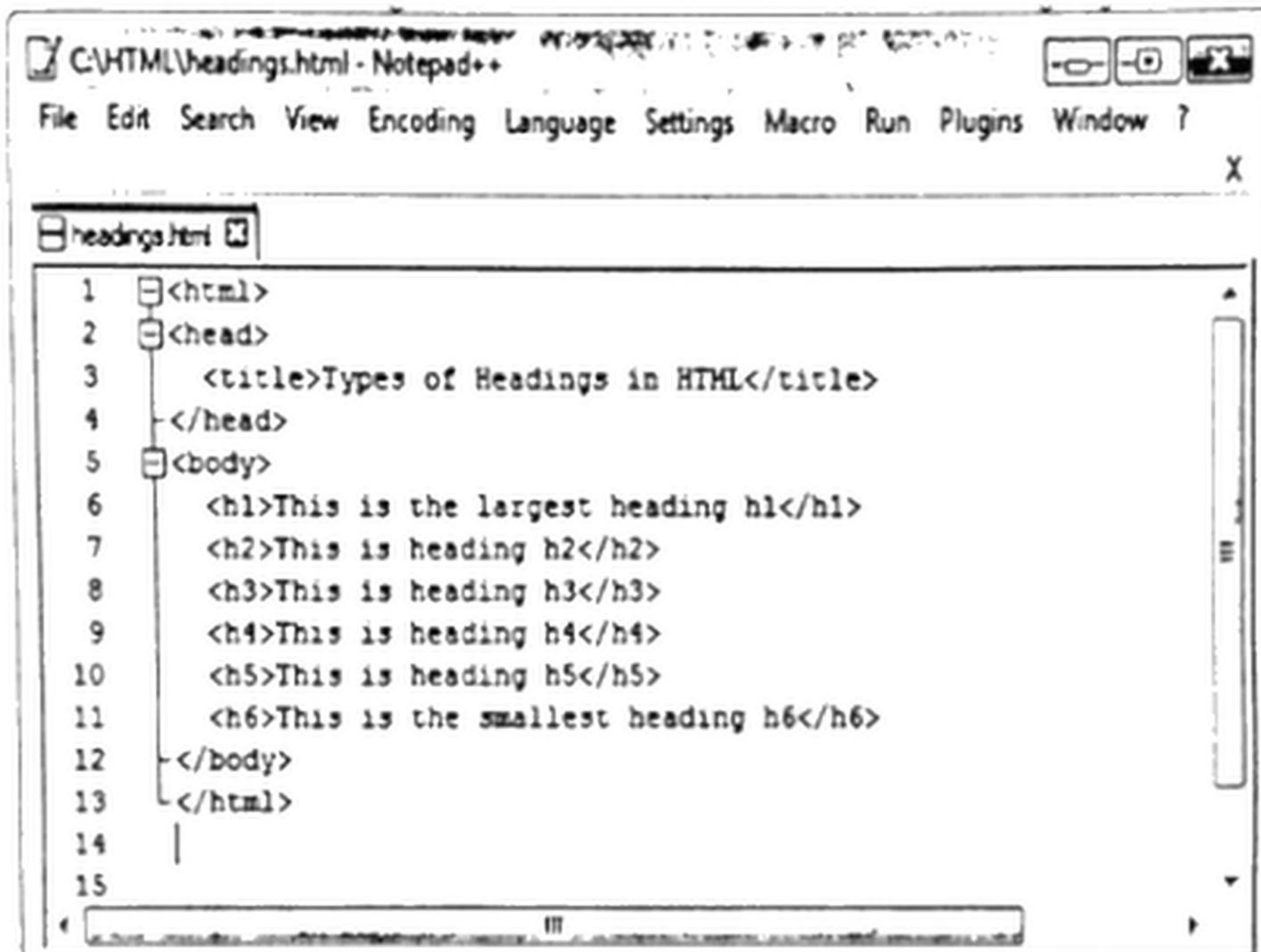
HTML Document to demonstrate the use of basic tags

The browser window will display it as shown in Fig.



Browser window showing heading and paragraph

The HTML document in Fig. demonstrates the use of all the heading tags.

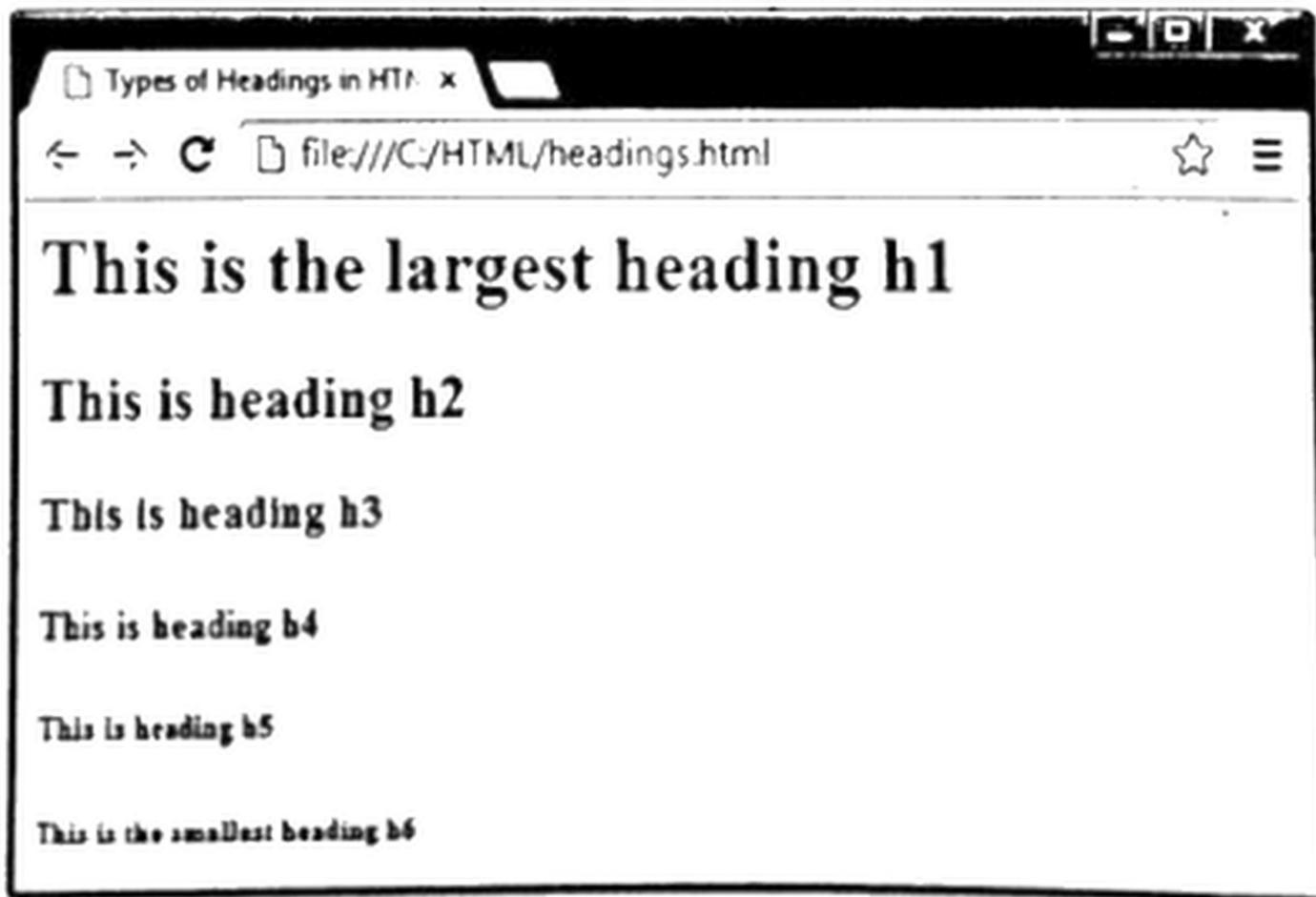


The image shows a Notepad++ window titled "C:\HTML\headings.html - Notepad++". The menu bar includes "File", "Edit", "Search", "View", "Encoding", "Language", "Settings", "Macro", "Run", "Plugins", and "Window". The document content is as follows:

```
1 <html>
2 <head>
3   <title>Types of Headings in HTML</title>
4 </head>
5 <body>
6   <h1>This is the largest heading h1</h1>
7   <h2>This is heading h2</h2>
8   <h3>This is heading h3</h3>
9   <h4>This is heading h4</h4>
10  <h5>This is heading h5</h5>
11  <h6>This is the smallest heading h6</h6>
12 </body>
13 </html>
14
15
```

Using all the heading tags in a HTML document

The browser window will display it as shown in Fig.



Browser window displaying various headings

iii) Bold:

BOLD ``

These tags will make the text bold that is within the tags.

For example: ` Chapter 5 Output Devices`

Result: **Chapter 5 Output Devices**

i) Underline:

Underline `<u></u>`

These tags will underline the text that is within the tags.

For example: `<u>Please Note:</u>`

Result: Please Note.

ii) Italic:

Italic `<i></i>`

These tags are used to make the text italic that is within the tags.

For example: `<i> I Love Pakistan</i>`

Result: I Love Pakistan

iii) **Center text:**

Center `<center></center>`

These tags will make the text centered that is within the tags, the text will appear in the middle of the left and right margins.

For example `<center>UNIT 2 PROGRAMMING IN C</center>`

Result: UNIT 2 PROGRAMMING IN C

iv) **Strike out:**

Strike-out `<strike></strike>`

These tags will put a line right through the center of the text that is within the tags. This is known as strike-out.

For example: `<strike>Obsolete Computer Devices</strike>`

v) **Superscript:**

Superscript ``

These tags are used to convert the text to superscript that is within the tags.

For example:

`X _Y`

Result: X^Y

vi) **Subscript:**

Subscript ``

These tags are used to convert the text to subscript that is within the tags.

For example: `X₅`

Result: X₅

vii) Font size, color and typeface:

Font size

These tags are used to change the font size. Replace the ? symbol with a number in the range 1 to 7. One is the smallest and seven is the largest font size.

For example: Types of Computers

Result: Types of Computers

- **Font Color **

These tags are used to change the color of text that is within the tags. Replace the ? symbol with color such as black, brown, gray, green, maroon, orange, pink, red, yellow etc.

For example: Laptop Computer

Result: Laptop Computer

- **Font Face **

These tags are used to change the font face of text that is within the tags. Replace the ? symbol with font face such as arial, courier, Calibri, roman etc.

For example: FORMATTING TAGS

Result: FORMATTING TAGS

viii) Inserting Line Breaks:

The
 tag is a line break tag. It is used to end a line wherever it is placed and it does not have a closing tag.

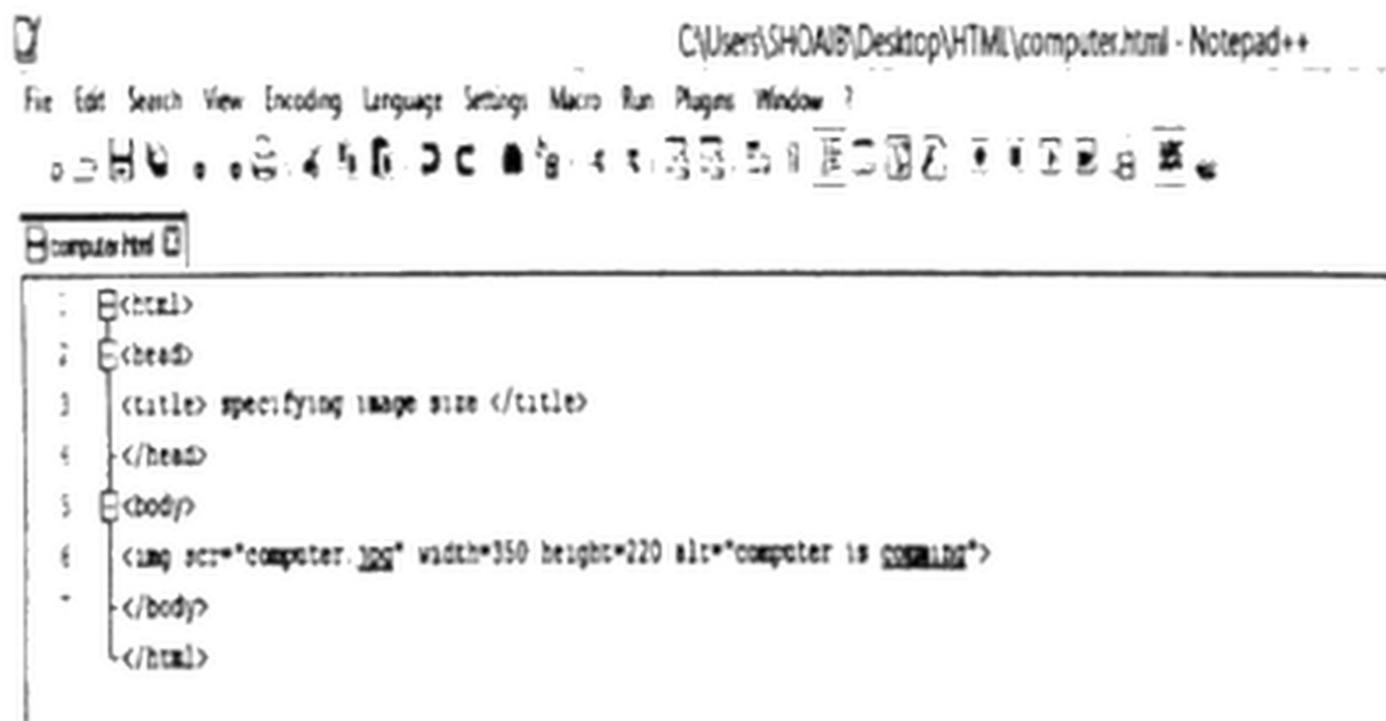
ix) Inserting Spaces:

Very often, spaces are needed in HTML documents. If the user inserts more than one space anywhere in a document, the browser will show only one space, rest of the spaces will be truncated. If the user wants to have many spaces in a HTML document then the character entity must be used. Some characters have

special meaning in HTML, like (non-breaking space) and <these are known as character entities.

Q5. Create a Web page in HTML that displays image of a computer. The width of image should be 350 pixels and height 220 pixels

Ans:



The screenshot shows a Notepad++ window titled "C:\Users\SHOAIB\Desktop\HTML\computer.html - Notepad++". The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Macro, Run, Plugins, and Window. The toolbar contains various icons for file operations and editing. The main text area shows the following HTML code:

```

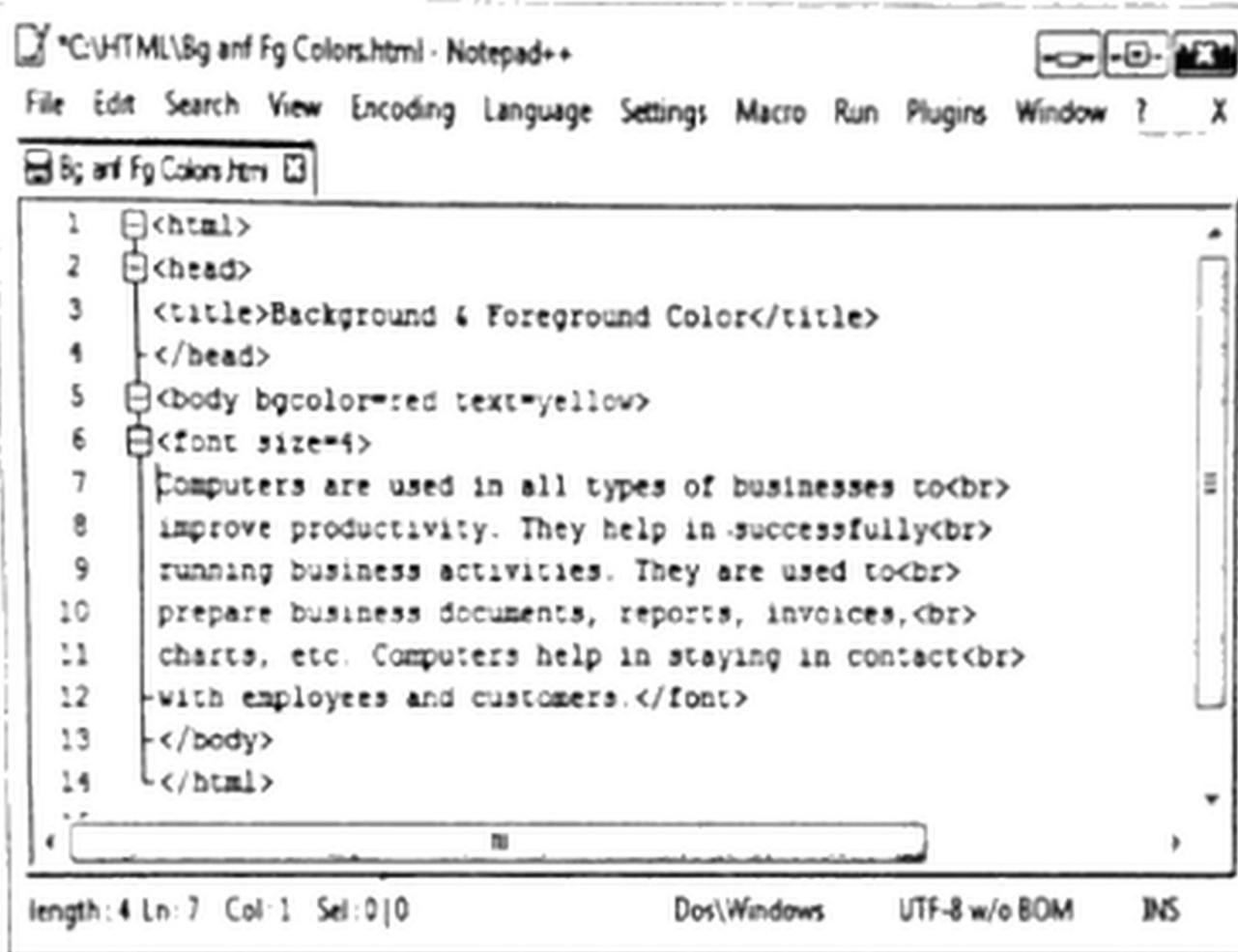
1 <html>
2 <head>
3   <title> specifying image size </title>
4 </head>
5 <body>
6   
7 </body>
8 </html>

```

Q6. Describe how background color and image are applied to Web page.

Ans: Applying Background and Foreground Colors:

To apply a background color in a page, insert the background color attribute. And for foreground color, insert text attribute in the <body> tag as shown in Fig.

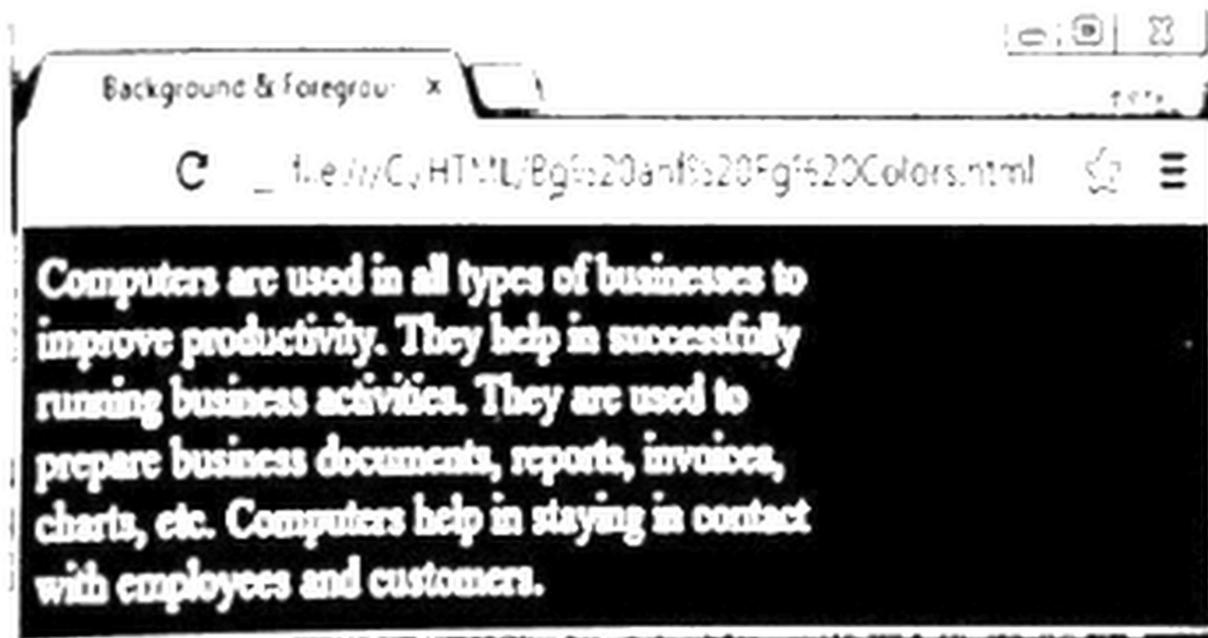


```
1 <html>
2 <head>
3 <title>Background & Foreground Color</title>
4 </head>
5 <body bgcolor=red text=yellow>
6 <font size=4>
7 Computers are used in all types of businesses to<br>
8 improve productivity. They help in successfully<br>
9 running business activities. They are used to<br>
10 prepare business documents, reports, invoices,<br>
11 charts, etc. Computers help in staying in contact<br>
12 with employees and customers.</font>
13 </body>
14 </html>
```

length: 4 Ln: 7 Col: 1 Sel: 0|0 Dos\Windows UTF-8 w/o BOM INS

Using background and foreground color in HTML

In this HTML document the background color is red and foreground color is yellow. The browser window will display it as shown in Fig.



Web page with background and foreground color

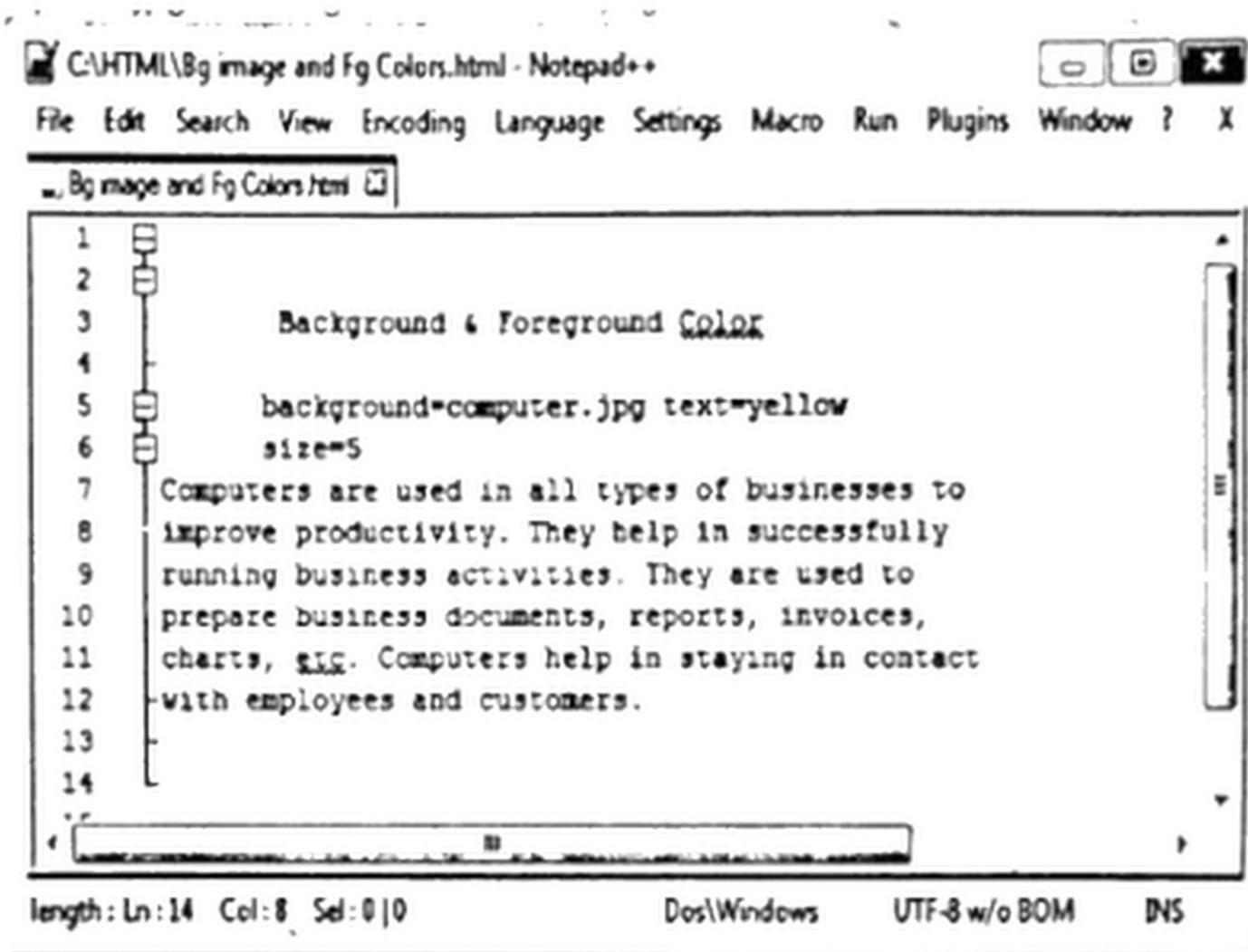
Applying Background Image:

An image can be set as background of a page using the background attribute in the <body> tag

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

If the image is smaller than the browser window then it will repeat itself till the entire window is filled.

The HTML document in Fig, demonstrates the use of image file computer.jpg as background of a Web page.



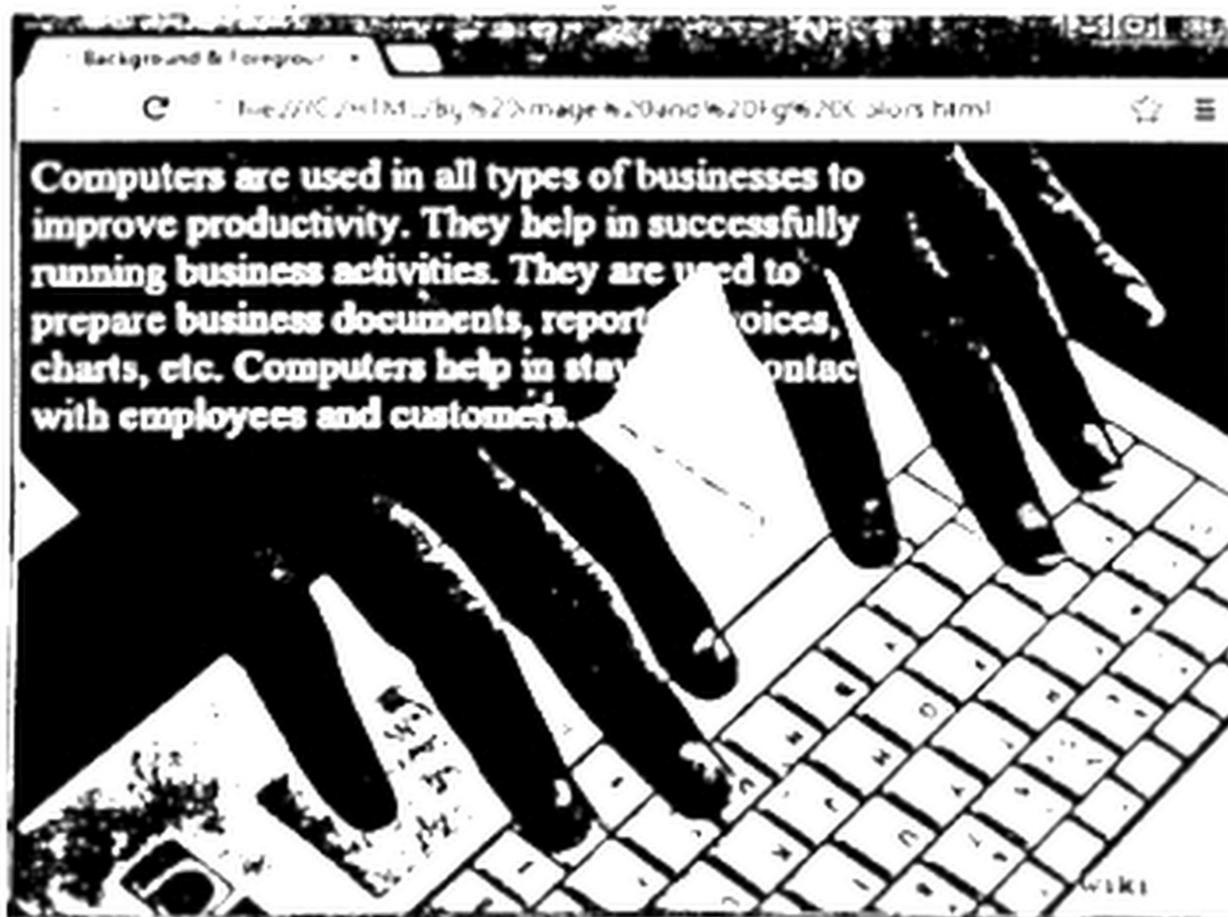
The screenshot shows a Notepad++ window titled "C:\HTML\Bg image and Fg Colors.html - Notepad++". The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Macro, Run, Plugins, Window, and Help. The document content is as follows:

```
1  
2  
3      Background & Foreground Color  
4  
5      background=computer.jpg text=yellow  
6      size=5  
7      Computers are used in all types of businesses to  
8      improve productivity. They help in successfully  
9      running business activities. They are used to  
10     prepare business documents, reports, invoices,  
11     charts, etc. Computers help in staying in contact  
12     with employees and customers.  
13  
14
```

The status bar at the bottom indicates "length: Ln:14 Col:8 Sel:0|0", "Dos\Windows", "UTF-8 w/o BOM", and "DNS".

Using image as background in HTML document

The browser will display it as shown in Fig.



Using image as background of Web page

Q7. Create an HTML document that contains a graphical hyperlink.

Ans: Creating a Graphical Hyperlink:

The syntax for creating a graphical hyperlink to another Web page is ``

For example:

```
<a href='http://www.fbise.edu.pk'><img src='image.jpg'></a>
```

It will display the image jpg image file in the browser window. When the reader moves the mouse pointer over the image, it will change to a small hand and clicking on the image will open the Federal Board website that has the URL www.fbise.edu.pk

The HTML document in Fig. demonstrates how to create a graphical hyperlink.

```
C:\HTML\image anchor.html - Notepad++
File Edit Search View Encoding Language Settings Macro Run Plugins Window ? X
image anchor.html
1 <html>
2 <head>
3 <title>Inserting Image Anchor</title>
4 </head>
5 <body>
6 <a href="http://www.fbise.edu.pk"></a>
7 <br><br>
8 <font size=3>Click on the image to visit Federal Board Web site</font>
9 </body>
10 </html>
11
12
13
length: 237 lines Ln: 8 Col: 53 Sel: 0|0 Dos\Windows UTF-8 w/o BOM BVS
```

Using graphical hyperlink in HTML document

The browser windows will display it as shown in Fig.



Graphical link in Web page

Q8. Describe the tags used for creating a table in HTML.

Ans: Creating Tables:

Tables are very often used in Web pages to present information in an organized manner which is easy to read and understand by the user.

A table consists of rows and columns. The following tags are used for creating a table.

<table></table>: These tags are used to create a table

<tr></tr>: These tags define a row

<td></td>: These tags define data cell. Column of each row is called data cell. A data cell can contain text, image, paragraph etc.

The HTML document for creating the following table (Fig) for data sheet for examination is shown in Fig. This table has 5 rows and 4 columns.

FINAL EXAMINATIONS 2011-2012			
S.No.	Date	Class IX	Class X
1	06-04-2015	Mathematics	English
2.	07-04-2015	Islamiat	Computer Sc.
3.	08-04-2015	Chemistry	Urdu

Table for data sheet of examination in Web page

In the HTML document of Fig, the tag

<table border=1 cellspacing=3 cellpadding=8>

Tells the browser to display the table with border and to have cell spacing equal to 3 pixels and cellpadding to 8 pixels. Cell spacing is the space between the cells of table and cell padding is the space between the text and the border of the cell.

If cell spacing and cellpadding are not specified then the table will look as shown in Fig.

FINAL EXAMINATIONS 2011-2012			
S No	Date	Class IX	Class X
1.	06-04-2012	Mathematics	English
2.	07-04-2012	Islamiat	Computer
3.	08-04-2012	Chemistry	Urdu

Table in Web page without cellspacing and cellpadding

The space between the cells and also the space between the text and the border of the cells has decreased to default values.

In the HTML document, the code for creating the heading of each column of second row is given as below.

```
<tr>
<td>S No </td>
<td>Date</td>
<td>Class IX</td>
<td>Class X</td>
</tr>
```

The text of all the four cells of second row is within the `<tr></tr>` tags and the text of each cell is within the `<td></td>` tags. The text of the next three rows is also defined in the same way.

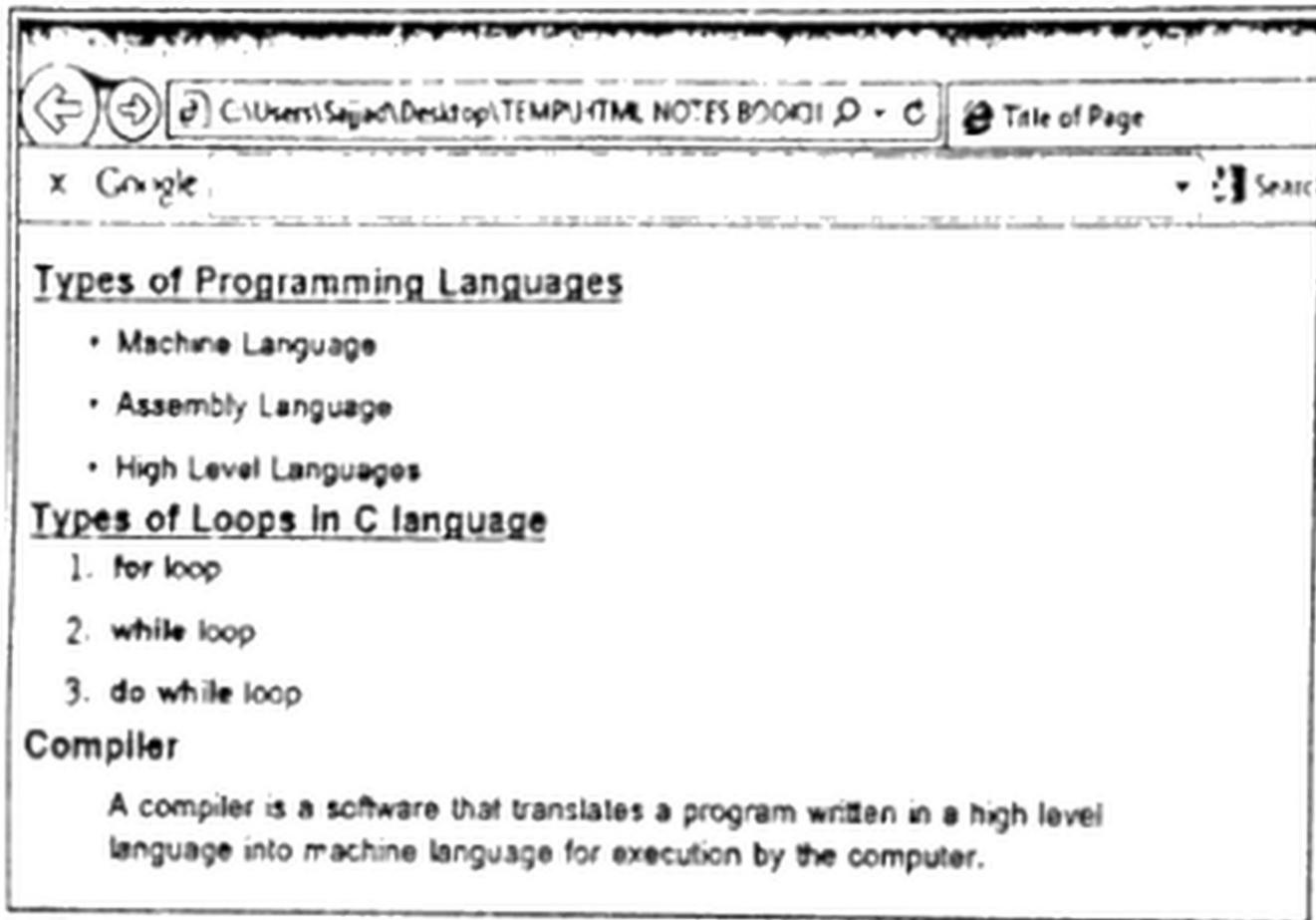
The code for the first row that contains the title.

```
<tr>  
<td colspan=4 align=center>  
<b> FINAL EXAMINATIONS 2011-2012</b></td>  
</tr>
```

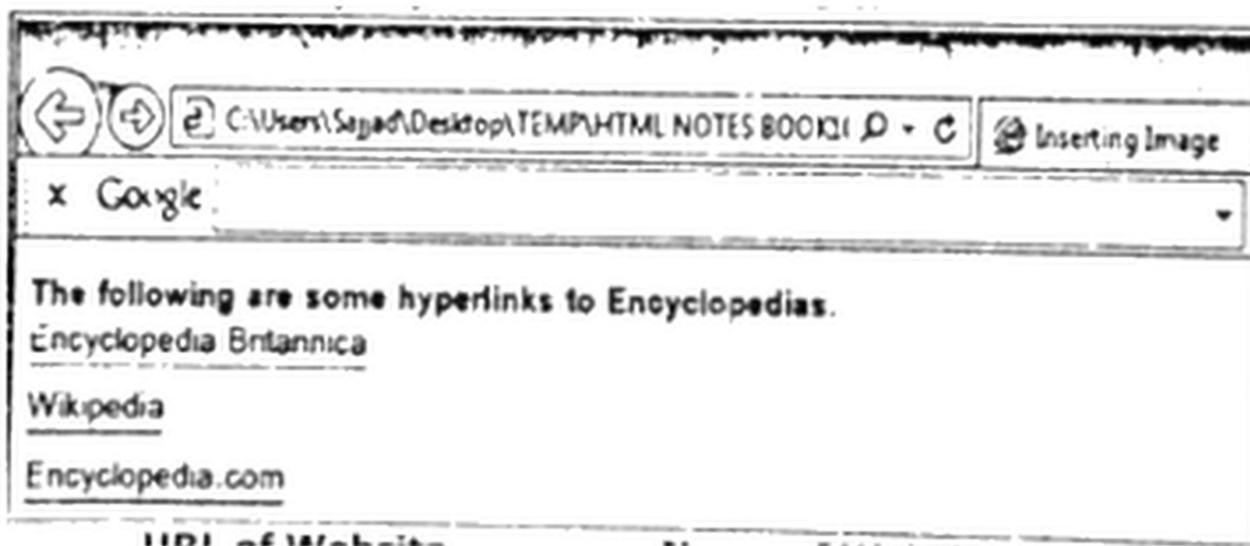
Here, the `colspan` attribute is used to combine the four columns and the `align` attribute centers the table. The user can also use the `rowspan` attribute to combine the cells of rows of a table. The `align` attribute is used to align the title in the center of the row. Title can also be aligned to the left or right.

LAB ACTIVITIES

1. **Create a Web page in HTML that contains unordered and ordered lists and a definition as shown below.**



2. Create an HTML document that contains hyperlinks to three websites of encyclopedia as shown below.



URL of Website

www.britannica.com

Name of Website

Encyclopedia Britannica

www.wikipedia.org

Wikipedia

www.encyclopedia.com

Encyclopedia.com

3. Create the following table in HTML.

RESULT SHEET			
No.	Student Name	Class	Total Marks
1	Javed Akhtar	IX-A	445
2	Afzal Khokhar	IX-A	480
3	Muslim Khan	IX-B	470
4	Syed Najar Ali Shah	IX-B	452
5	Sajjad Haider	IX-C	460

