ATOMIC ENERGY EDUCATION SOCIETY

CLASS - 7

COMPUTER STUDY MATERIAL

ATOMIC ENERGY EDUCATION SOCIETY

COMPUTER SYLLABUS OF CLASS VII

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Split-up of Syllabus

Quarter	Period	Units
I	April to June	1 and 2
II	July to September	3 and 4
III	October to December	5
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UNIT –I

COMPUTER SECURITY

1.1 Threats to computer

- A threat is a possible damage that might exploit a vulnerability to breach security and therefore cause possible harm.
- A threat can be either intentional or accidental.
- An example for Intentional threat is Hacking.
- Examples for Accidental threats are Earthquake, Fire, Tornado.

 # Classification of Threat

Microsoft has proposed a threat classification called STRIDE.

S- Spoofing of user identity
T- Tampering
R- Repudiation
I - Information disclosure (Privacy breach or data leak)
D- Denial of service (DoS)
E - Elevation of privilege

1.2 Virus and its types

A computer virus is a type of malicious software program (Malware) that, when executed, replicates itself modifying other computer programs and inserting its own code.
Virus can affect program files, boot sector of the hard drive.
Creeper Virus was the first detected virus on ARPANET, the first internet in the early 1970s.

 # Types of computer viruses

1.Boot sector virus
2. Program files virus.
3. Stealth virus.
4. Multipartite virus.
5.Macro virus

- **Boot sector virus**
  - This type of virus hides in the boot sector of a hard disk or pen drive and infects the start up instructions which are required to boot the system.
  - Examples : Stoned virus, Devil.941 and Disk killer.

- **Program Files Virus**
  - It resides in the computer memory.
  - It infects the executable files such as .com and .exe
  - Whenever the program runs, the virus also runs along with it.
  - Examples: Cascade, Sunday, AcidRain Trojan, Umbrella.3173

- **Stealth Virus**
  - This type of virus attempts to hide its presence.
  - It hides the change in date, time and increase in file size.
  - Examples: Whale, Frodo.

- **Multipartite virus**
  - This virus can affects both the boot sector of a disk and the executable files.
  - Example : Ghostball , Flip , Invader.

- **Macro virus**
  - This type of virus infects data files.
  - This virus can attach itself to a word processing or a spread sheet file as a macro.
  - Examples : WM_concept.A and Melissa.

 # Harmful effects of virus

- Corrupting the data or program files.
- Increasing the size of the files by attaching themselves to the files.
- Interference with the display.
- Formatting the hard disk, thus destroying the data.
- Infecting disks by corrupting boot sectors.

1.3 Antivirus software

- Antivirus is an application program which is developed to detect and remove viruses from the computer system.
- It looks for changes and activities in the systems that are typical in case of a virus attack.
- Scanners that are built within the antivirus software looks for particular type of codes within programs.
- If a virus is detected, the anti-virus program performs one of these steps:
  (i) It removes the virus and repairs the infected file.
  (ii) It deletes both the virus and infected files.
  (iii) It if detects an unknown virus, it quarantines (isolates) the infected file. Such a file is stored in a special area called Quarantine. Files that are in Quarantine cannot interact with the rest of the system.

- **Some of the commonly used anti-virus software are**
  - Quick Heal Total Security,
  - Avast,
  - Norton Antiviurs(NAV)
  - McAfee
  - Net Protector
  - Deep freeze
  - Netwave

1.4 Firewall and its use

- A firewall is a system designed to prevent unauthorized access to or from a private network.
- Firewalls can be implemented in both hardware and software, or a combination of both.
- All messages entering or leaving the intranet pass through the firewall, which examines each message and blocks those that do not meet the specified security criteria.
- Firewall is considered as the first line of defense in protecting information.

 # Hardware and Software firewalls

- Firewalls can be either hardware or software but the ideal firewall configuration will consist of both.
- Hardware firewalls can be purchased as a stand-alone product but are also typically found in broadband routers.
- It should be considered an important part of the system and network set-up. Most hardware firewalls will have a minimum of four network ports to connect other computers, but for larger networks, business networking firewall solutions are available.

 # Common Firewall Techniques

There are several types of firewall techniques that will prevent potentially harmful information from getting through.

- **Packet Filter**
    - Looks at each packet entering or leaving the network and accepts or rejects it based on user-defined rules.
    - Packet filtering is fairly effective and transparent to users.
    - It is difficult to configure.
    - It is susceptible to IP spoofing.
- **Application Gateway**
    - Applies security mechanisms to specific applications, such as FTP and Telnet servers.
    - This is very effective.
    - It can impose performance degradation.
- **Circuit-level Gateway**
    - Applies security mechanisms when a TCP or UDP connection is established.
    - Once the connection has been made, packets can flow between the hosts without further checking.
- **Proxy Server**
    - Intercepts all messages entering and leaving the network.
    - The server effectively hides the true network addresses.
    - In practice, many firewalls use two or more of these techniques in concert.
    - A firewall is considered a first line of defense in protecting private information.

1.5 Cyber Crime and Computer Ethics

Cybercrime includes any criminal act dealing with computers and networks.
In cyber crime a computer is the target of a crime or it is used as a tool to commit a crime.

- **Cyber criminals**

Cyber criminals use computer technology or internet to access computers illegally to steal or destroy confidential data.

 # Types of Crime

(i) Cyber stalking.
(ii) Phishing.

- **Cyber stalking:** An individual uses internet to steadily harass or threaten someone through e-mail, social media, chat rooms or instant messaging.
- **Phishing:** A cyber criminal tries to steal confidential information such as usernames, passwords, credit card details or even money by fraud.

 # Cyber security: It is the means taken to protect networks, computers, programs and data from cybercrime.

How can you protect yourself from cyber crime?

1. Don't share personal information such as address, phone numbers, school, city, bank details etc. online.
2. Don't share family photos without permission. Always ask your parents before uploading.
3. Choose strong passwords. Be sure to change your passwords often and don't use the same passwords on multiple sites.
4. Enter URLs by typing instead of following links.
5. Lock your computer and cellphones when you are not using them.
6. Set privacy settings to 'Friends only' on the social networking sites and avoid uploading with time and place.
7. Never chat with strangers.
8. Don't download music or movies from unknown or unauthorized sites.
9. Use a trusted anti-virus software
10. Protect your wi-fi.

Computer Ethics

- It is set of moral principles that regulate the use of computers.
- Some common issues of computer ethics include Intellectual Property Rights (IPR) (such as copyrighted electronic content), privacy concerns and how computers affect society.

Some of the Computer Ethics are listed below,

1. You shall not use a computer to harm other people.
2. You shall not interfere with other people's computer work.
3. You shall not snoop around in other people's computer files.
4. You shall not use a computer to steal.
5. You shall not use a computer to bear false witness.
6. You shall not copy or use proprietary software for which you have not paid.
7. You shall not use other people's computer resources without authorization or proper compensation.
8. You shall not appropriate other people's intellectual output.
9. You shall think about the social consequences of the program you are writing or the system you are designing.
10. You shall always use a computer in ways that ensure consideration and respect for your fellow humans.

1.6 Hackers and Crackers

Hackers

- A hacker is a person intensely interested in the arcane and recondite workings of any computer operating system.
- Hackers are most often programmers. As such, hackers obtain advanced knowledge of operating systems and programming languages.
- They might discover holes within systems and the reasons for such holes.
- Hackers constantly seek further knowledge, freely share what they have discovered, and never intentionally damage data.
- A "**white hat**" hacker breaks security for non-malicious reasons, perhaps to test their own security system.
- A "**black hat**" violates computer security for little reason beyond maliciousness or for personal gain.
- A "**grey hat**" hacker lies between a black hat and a white hat hacker. He may surf the internet and hack into a computer system for the sole purpose of notifying the administration that their system has a security defect.

Crackers

- A cracker is one who breaks into or otherwise violates the system integrity of remote machines with malicious intent.
- Having gained unauthorized access, crackers destroy vital data, deny legitimate users service, or cause problems for their targets.
- Crackers can easily be identified because their actions are malicious.

1.7 Cyber Law and Importance

Cyber law

- It deals with the legal issues related to the use of computer.
- Cyber law covers the matters such as freedom of expression, data protection, data security, digital transactions, electronic communication, access to and usage of the internet and online privacy.

Importance of Cyber law

- Cyberlaw is important because it deals with almost all aspects of transactions and activities on and concerning the Internet, the World Wide Web and Cyberspace.
- As the aim of Digital India is "Faceless, Paperless, Cashless", cyber law is very important.
- The IT Act 2000 attempts to change outdated laws and provides ways to deal with cyber crimes. so that people can perform purchase transactions over the Net through credit cards without fear of misuse.
- In view of the growth in transactions and communications carried out through electronic records, the Act seeks to empower government departments to accept filing, creating and retention of official documents in the digital format.
- The Act has also proposed a legal framework for the authentication and origin of electronic records / communications through digital signature.

1.8 Backup and Restore

- Data backup refers making copies of data in a storage device. It allows the data to be stored in another location. Whenever it is required, it can be restored to a computer system. The addition copies are called backups.
- Data loss occurs due to file corruption, hard disk crash, fire accidents and theft. Backup will be useful to recover the data.
- Backup can be taken by copying and pasting the data in an external hard disk, etc., or by using the backup utility in Windows XP.
- Online Backup refers to copying the files and folders to some other computer on the Internet using online storage facilities.

Backup methods

There are four backup methods:

1. Full backup
2. Incremental backup
3. Differential backup
4. Mirror backup

Full Backup: The **entire data** on the hard disk is copied into a storage device on a weekly or monthly basis.

Incremental Backup: Backup levels are used to distinguish between the backups taken at different times. **Level 0 will take backup of all the files**. At **level 1** incremental backup **only the files modified after level 0** backup will be saved. In **level 2 incremental files modified after level 1** backup will be saved.

Differential Backup: In this method also backup levels are used. **Level 0 will take backup** of all the files. After that **in all other level** it will take the backup of **all the modified files since the level 0 backup.**

Mirror Backup: Only the selected files and folders are taken backup.

Restore

Data restore is the process of copying files from a backup, typically a separate disk, to the original location or other appropriate file locations.

EXERCISES

I. Fill in the blanks.

1. _____is an example for Intentional threat.
2. _____ is an application program used to detect and remove viruses from the computer system.
3. _____ is a system designed to prevent unauthorized access to or from a private network.
4. A person who hacks the computer system with an intention to notify the administration that their system has less security can be called as _____.
5. Set of moral principles that regulate the use of computers are called as _____.

II. Answer the following.

1. Define threat.
2. Define Virus and list out the types of virus.
3. Write about the harmful effects of virus.
4. Name any six Antivirus software.
5. Name any four types of firewall.
6. Define Cyber stalking and Phishing.
7. Write any five points about how can you protect yourself from cybercrime.
8. Write any five Computer Ethics.
9. Define Backup and Restore.
10. Name the four different backup methods.

UNIT-II

HTML

 # INTRODUCTION TO HTML- A glance at the 5th lesson of VI std.

- HTML stand for **H**yper **T**ext **M**arkup **L**anguage
- HTML is a computer language that describes the structure and behaviour of a web page.
- HTML is used to create web pages**.**
- **Hypertext:** It is a document that enables to organize information by connecting different pieces of information together.
- **Markup:** It is a special code that specifies the web browser how different parts of the document are processed.

 # HTML CONSTRUCTS

- **TAGS:** It describes how the webpage should be displayed. HTML tags are not case sensitive (It means tags can be written in both uppercase or lowercase).
- **ATTRIBUTES:** It provides additional information about the tag such as background color of the body, background image etc.,
- **ELEMENTS**: It is a fundamental component to create a webpage.
  - ➢ CONTAINER ELEMENT-It has a starting and an ending tag.
    Eg: <HTML> …… </HTML>
  - ➢ EMPTY ELEMENT-It has only starting tag.
    Eg:

 # WORKING WITH HTML

- **STEPS TO CREATE AND VIEW A WEBPAGE:**

  i). Open Notepad and write the HTML code.
  ii). Save the file with .html extension.
  iii). Open a web browser for example Internet Explorer.
  iv). Click on File menu, then click on open.
  v). Browse the location in the window.

 # STRUCTURE OF AN HTML DOCUMENT

```
<HTML>
    <HEAD>
        <TITLE>…….</TITLE>
     </HEAD>
    <BODY>
        …..
        …..
    </BODY>
</HTML>
```

Note:

The <!DOCTYPE> declaration must be the very first thing in your HTML document, before the <html> tag.

It is not an HTML tag; it is an instruction to the web browser about what version of HTML the page is written in.

Tip: Always add the <!DOCTYPE> declaration to your HTML documents, so that the browser knows what type of document to expect.

2.1 HEADING (H1 to H6)

- It is one of the block level elements. Block level elements are used to format a block of text.

- Headings are displayed in larger and bold font.
- There are 6 levels of headings available in HTML.
  Syntax: <Hn>……</Hn>

  Here, n is the heading level
  Eg: <H1>……..</H1>

- **Attribute of Heading tag: Align**
  It is used to align the heading position.
  Syntax: <H1 align="value">…….</H1>
  Eg: <H1 align="center">ABOUT ME</H1>

Example 2.1.1: Creating a webpage to demonstrate **Heading tag**.

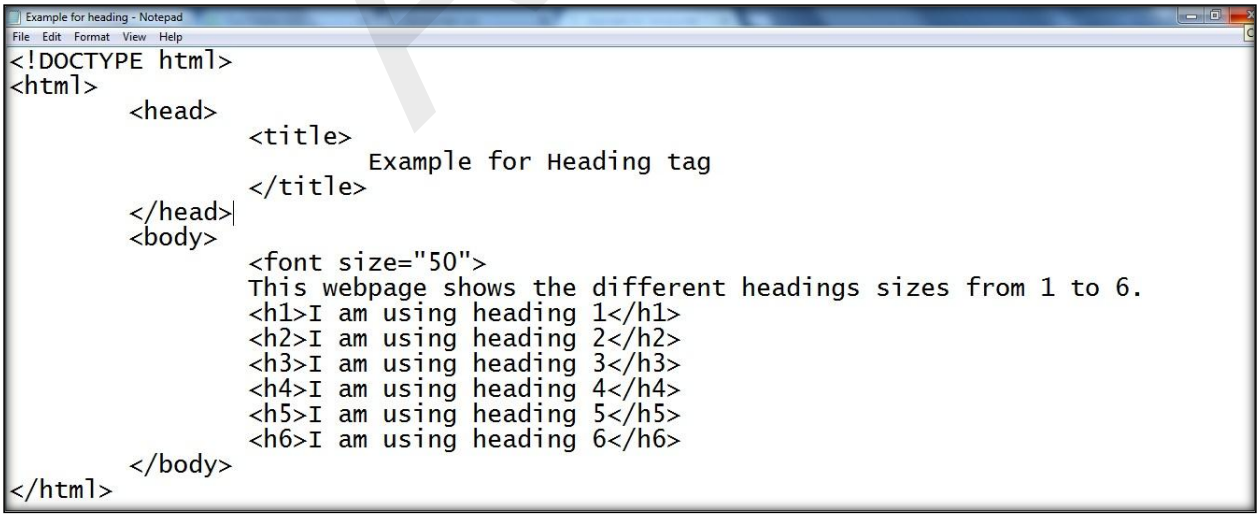

Figure 2.1 : Screen shot of coding written in Notepad for the example 2.1.1

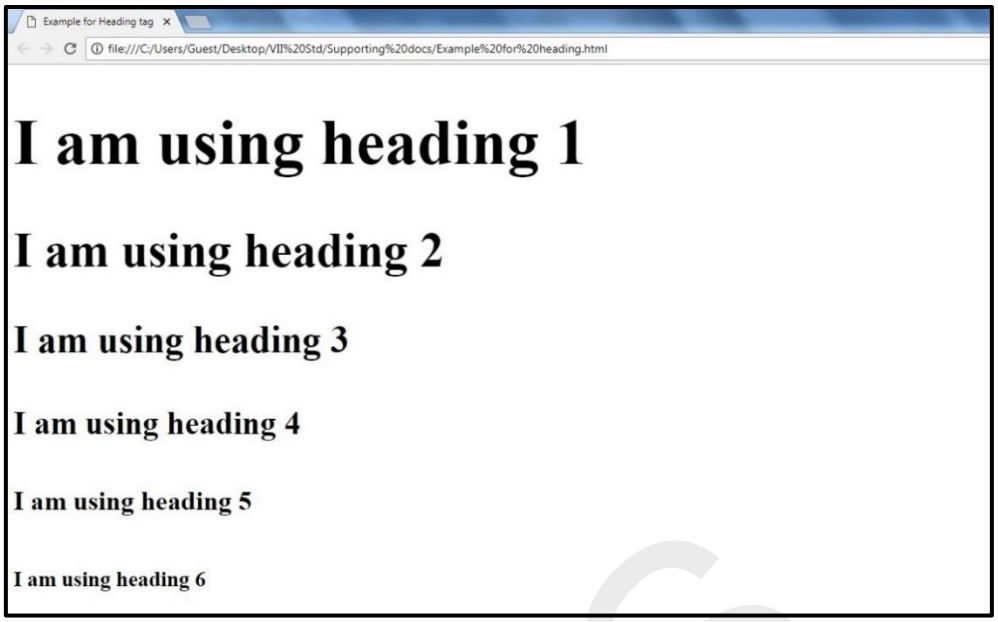

Figure 2.2 : Screen shot of output for the example 2.1.1

As shown in the example <H1> displays the heading in biggest font size. From <H2> to <H6> the heading size reduces gradually and <H6> tag has the smallest font size.

2.2 <br>, <hr> ,<comment>

(i).
 tag:

**
** is break tag.

Break tag: It is used to display the text followed by the break element in the next line. It is an empty tag. It is one of the block level element.

**Syntax:
**

Eg: line 1 <br> line 2

Example 2.2.1: Creating a webpage to demonstrate **break** tag.

Example for break tag - Notepad

File Edit Format View Help

```
<!DOCTYPE html>

<html>
        <head>
                <title>
                        Example for break tag
                </title>
        </head>
        <body>
        <font size="50">
                A break tag is used after this line.<br>
                A break tag is used before this line.
        </body>
</html>
```

Figure 2.3: Screen shot of the coding in Notepad for example 2.2.1

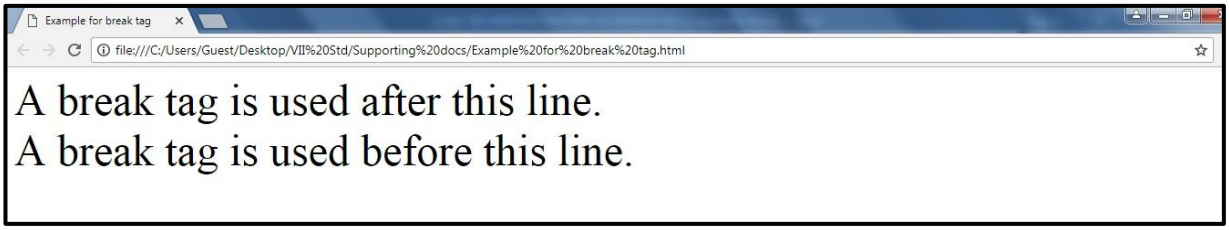

Figure 2.4: Screen shot of the output for example 2.2.1

Note: Remove the <br> tag form the coding. Save it again and run see the output screen and refresh the webpage, both the lines will be displayed in the same line if at all, it is written in two different lines in the notepad.

(ii). <hr> tag:

Horizontal Rule: It is used to generate a horizontal line in the webpage.
It is an empty tag. It is also one of the block level elements.

Syntax: <hr>
Eg: <hr> Welcome

Example 2.2.2: Creating a webpage to demonstrate Horizontal Rule tag.

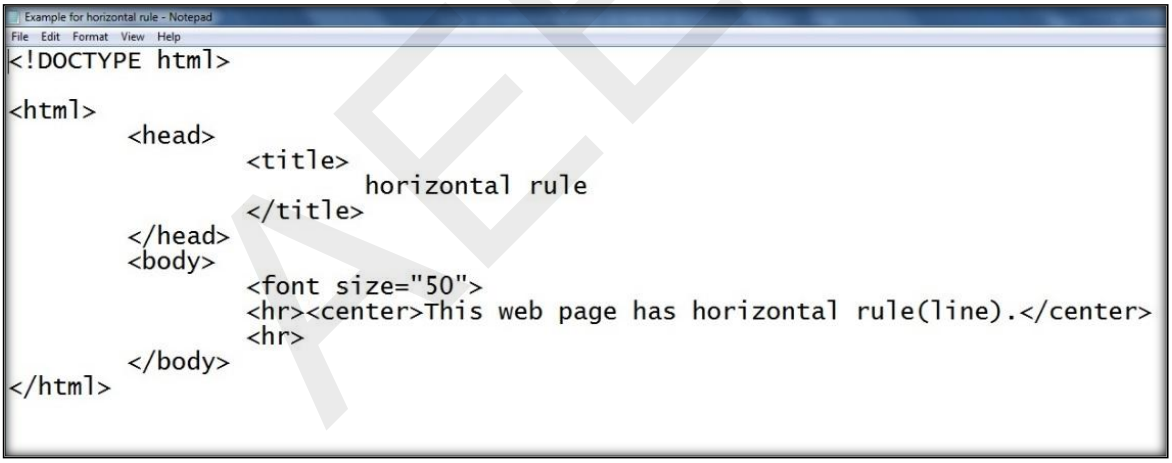

Figure 2.5 : Screen shot of coding written in Notepad for example 2.2.2

Figure 2.6: Screen shot of the output for the example 2.2.2

(iii). <comment> tag:

- It is used to add comments to the HTML source code.
- Comments are not displayed in the browser.

Syntax:

<COMMENT> comments……</COMMENT>

or

<!- - comments - ->

Eg: <COMMENT> This tag is used for increasing the font size</COMMENT>

or

<!- - This tag is used for increasing the font size- ->

Example 2.2.3: Creating a webpage to demonstrate comment tag.

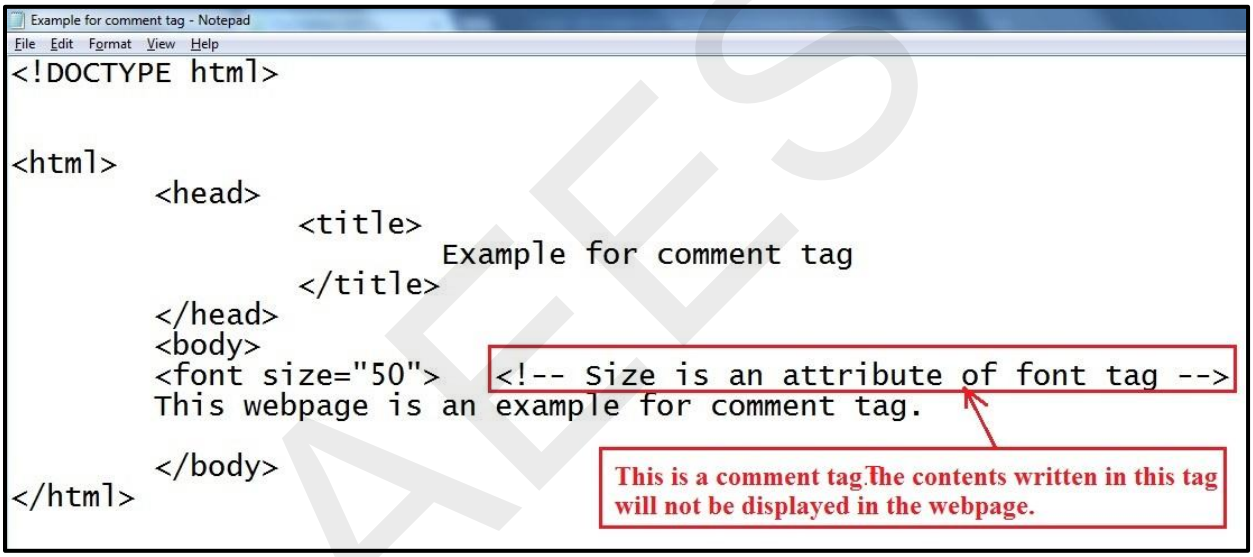

Figure 2.7 : Screen shot of coding in Notepad for example 2.2.3

Figure 2.8: Screen shot of the output for the example 2.2.3

2.3 Background Color, font tag (size, face, color)

(i). Background color:

- Background color is an attribute of body tag.
- It allows us to give a background color to the webpage.

Syntax:<body bgcolor="colorname" or "Hexadecimal code for the color">

Eg:<body bgcolor="yellow">

Example 2.3.1: Creating a webpage to demonstrate Background color attribute of body tag.

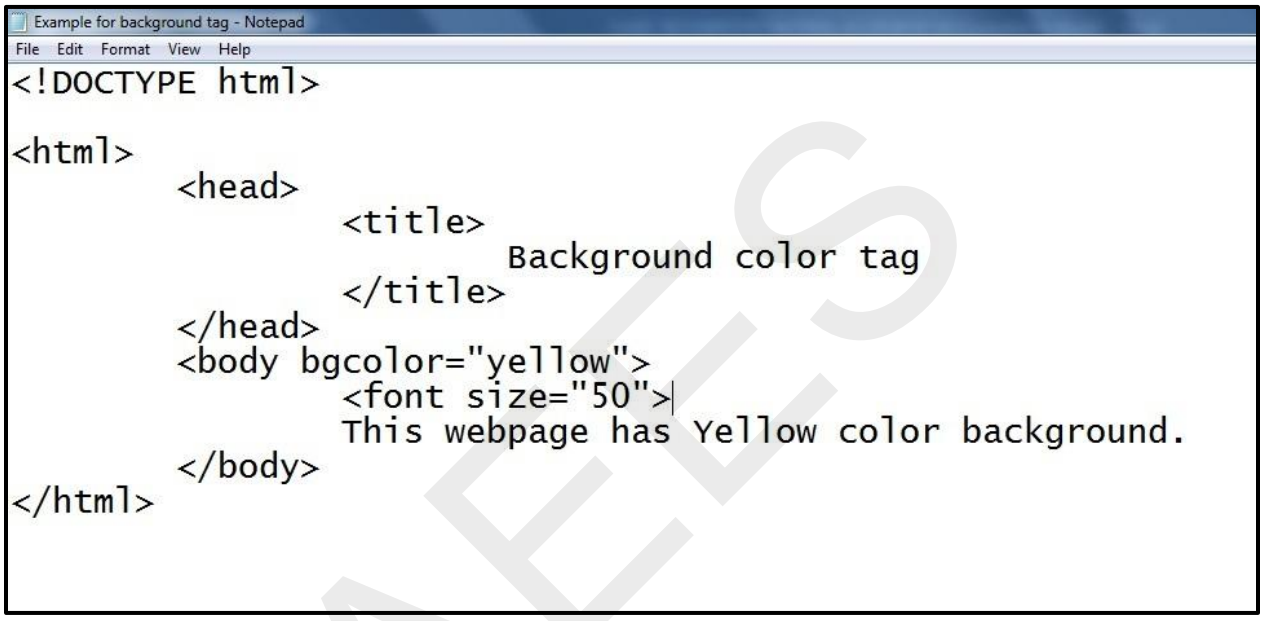

Figure 2.9 : Screen shot of coding in Notepad for example 2.3.1

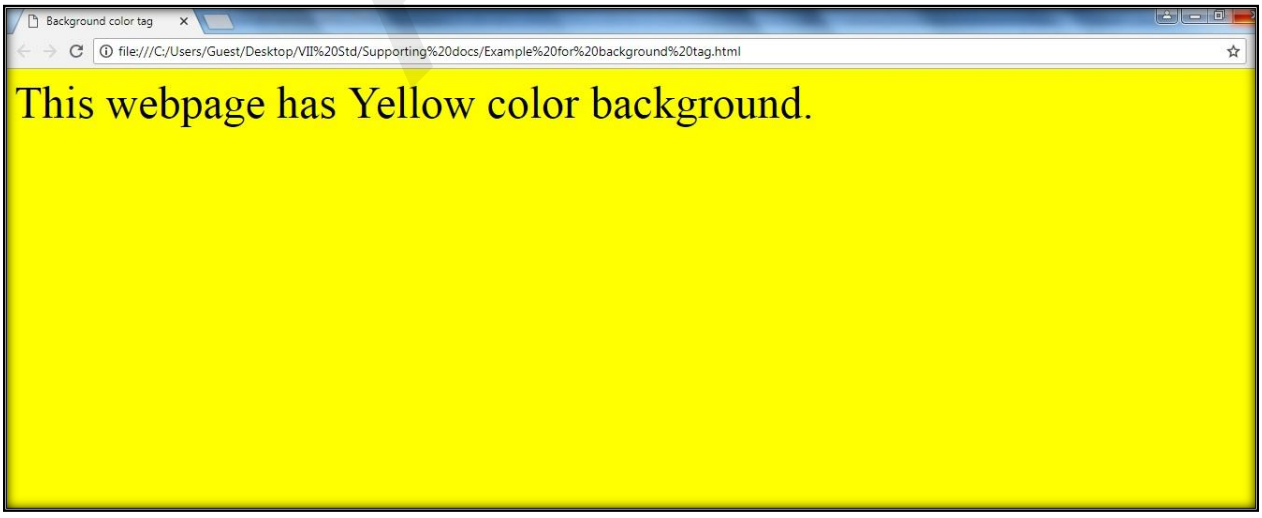

Figure 2.10 : Screen shot of output for example 2.3.1

(ii). font tag (size, face, color)

- Font tag is used to specify the size, color of the text it encloses.
- Size, face and color are the attributes of font tag.
- Font, face and color attributes are used to set a particular font size, type of font and color to the text respectively to the text enclosed between <FONT> and </FONT>.

Syntax: <FONT SIZE=n COLOR=color name or color code for the color FACE=font name>
Eg: Text for which this font style needs to be applied

2.3.2: Creating a webpage to demonstrate font tag and its attributes.

Example for attribute of font tag - Notepad

File Edit Format View Help

```
<!DOCTYPE html>

<html>
        <head>
                <title>
                        Attributes of font tag
                </title>
        </head>
        <body bgcolor="yellow">
                <font face = Comic sans MS size = 60 color=green>
                Font face Comic sans MS,font size 60 and green color is used.
                </font>
                This webpage shows the attributes of font tag.
         </body>

</html>
```

Figure 2.11 : Screen shot of coding in Notepad for example 2.3.2

]

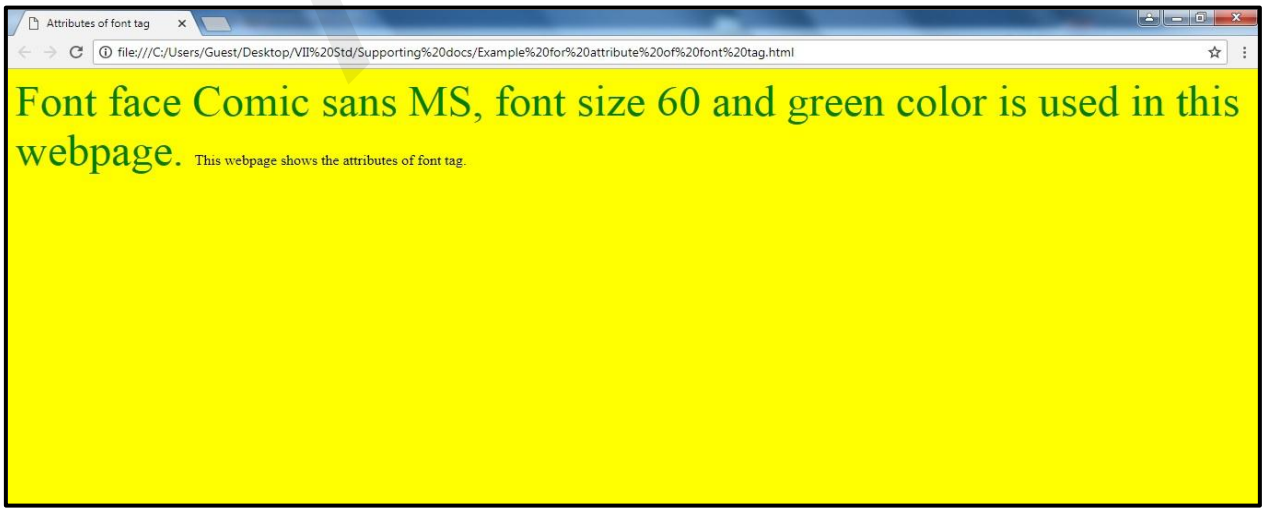

Figure 2.12 : Screen shot of output for example 2.3.2

2.4. Text alignment (center, left, right)

Left alignment

Text can be aligned in left, center or right of the webpage.
By default, the text is left aligned in the webpage.

Center alignment

For center alignment <CENTER> tag is used.
Syntax : <CENTER> Text to be aligned in center</CENTER>
Eg: <CENTER> Printers</CENTER>

Right alignment

To make the text to align in the right side, <DIV> tag can be used as shown in the example.
<DIV> tag defines a division or a section in an HTML document.

Syntax: <Div align="right"> Text to be aligned in center.</Div>
Eg: <Div align="right">This line will be displayed in the right.</Div>

Example: 2.4.1: Creating a webpage for demonstrating Text alignment.

example for text alignment - Notepad

File Edit Format View Help

```
<!DOCTYPE html>

<html>
        <head>
                <title>
                        Text alignment
                </title>
        </head>
        <body>
                By default this line will be displayed from the left side.
                <center>This line will be displayed in the center.</center>
                <Div align="right">This line will be displayed in the right.</Div>
        </body>
</html>
```

Figure 2.13 : Screen shot of coding in Notepad for example 2.4.1

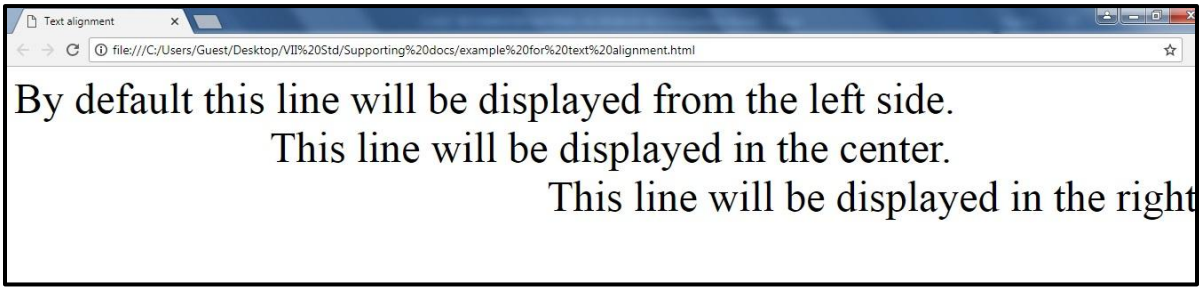

Figure 2.14 : Screen shot of output for example 2.4.1

EXERCISES

I. STATE TRUE OR FALSE.

1. Heading tag is a container tag.
2. Break tag is a container tag.
3. Comment tag is used to display the comments in the webpage.
4. By default, the text alignment in HTML is right.
5. <H1>…</H1> displays the heading in largest font size compared to other heading tags(<H2>……<H2>,….. <H6>……<H6>).

II. ANSWER THE FOLLOWING.

1. Write the syntax of comment tag.
2. Write the syntax of including background attribute in body tag.
3. Write the syntax of font tag along with its attributes..
4. What is the purpose of <br> tag in HTML.
5. What is the purpose of <hr> tag in HTML.

PRACTICAL EXERCISES

1. Create a webpage to display your Biodata. (including the details such as Name, Class/Sec., Father's Name, Mother's Name, Date of Birth, Gender, Nationality, Languages known, Hobbies, Aim, Weakness and Strength) using heading tag, break tag, horizontal rule tag, comment tag, background color attribute of body tag, font tag. Save it with the name **Biodata.html.**

Note: Practice all the examples given in this chapter.

UNIT – III
HTML (Continued)

3.1 Paragraph formatting Tags

Paragraph Tag: It is used to divide the text into distinct paragraphs, as the web browser cannot recognize tabs and more than one spaces it is required.

It also inserts a line before and after the text.

**Syntax: …… **

Attribute of Paragraph tag: Align

It is used to align the position of the paragraph.

**Syntax: ……. **

**Eg: content of the paragraph **

Example 3.1.1: Creating a webpage for demonstrating Paragraph tag.

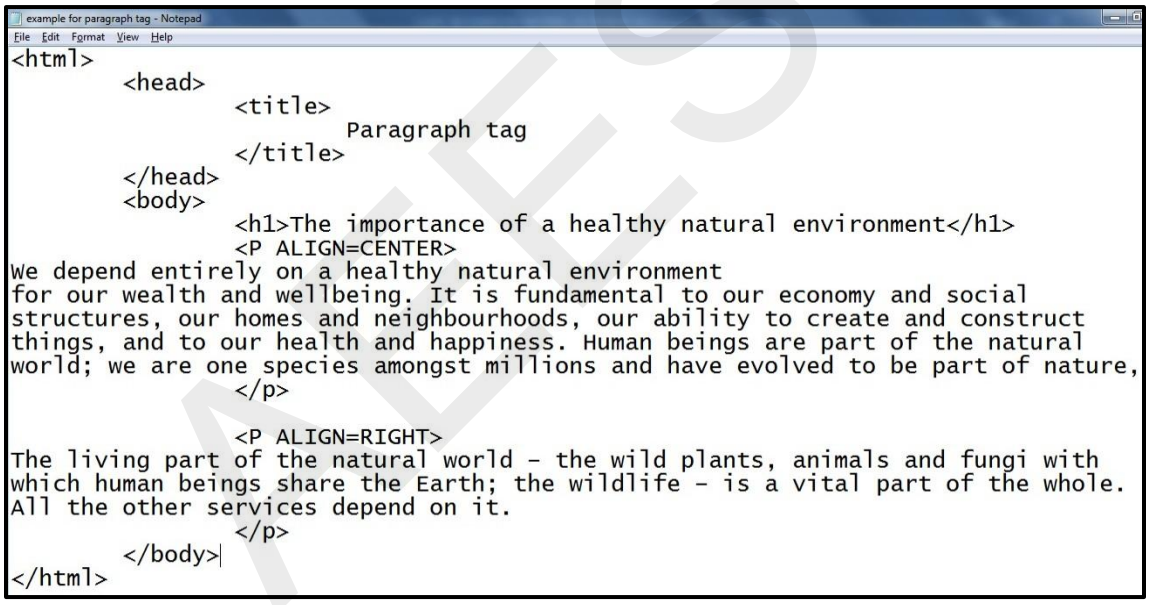

Figure 3.1 : Screen shot of coding in Notepad for example 3.1.1

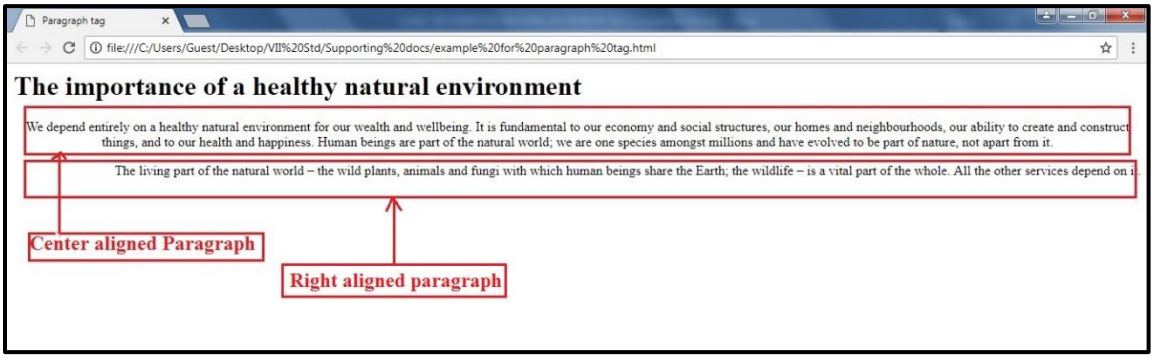

Figure 3.2 : Screen shot of the output for example 3.1.1

3.2 List Tags

- A list is a sequence of items, each of which is prescribed by a symbol or number.
- List tag is used to create lists in the webpage.

Syntax : <LI> Item Name

Eg: <LI> Apple

Different types of lists that can be created in HTML are:

1) Unordered list
2) Ordered list
3) Definition list

3.3 Order (start and type attribute) and Un order List

Ordered list

- It is used to create a list using number and alphabets.

Syntax:

```
<OL>
        <LI> Item name
</OL>
```

Eg:

```
<OL>
        <LI> Orange
</OL>
```

- Type and Start are the attributes of Ordered list.
- The value of type can be Arabic numbers (1, 2, 3,….), Roman numbers (i, ii, iii,….or I, II, III,…..), alphabets (a, b, c,…or A,B,C,…).
- Start attribute is used to change the starting point of the series in the list.

Example 3.3.1: Creating a webpage for demonstrating Ordered list tag.

Example for ordered list - Notepad

File Edit Format View Help

```
<!DOCTYPE html>
<html>
        <head>
                <title>
                        Example for Ordered list tag
                </title>
        </head>
        <body>
        <font size="50">
                <h3> List of Vegtables: </h3>
                <ol type="a">
                        <li>Carrot</li>
                        <li>Beetroot</li>
                        <li>Cauliflower</li>
                        <li>Cabbage</li>
                        <li>Broccoli </li>
                        <li>Drumstick</li>
                        <li>Brinjal</li>
                </ol>
        </body>
</html>
```

Figure 3.3 : Screen shot of coding in Notepad for example 3.3.1

Figure 3.4 : Screen shot of output for example 3.3.1

Example 3.3.2: Creating a webpage for demonstrating Ordered list tag with start attribute.

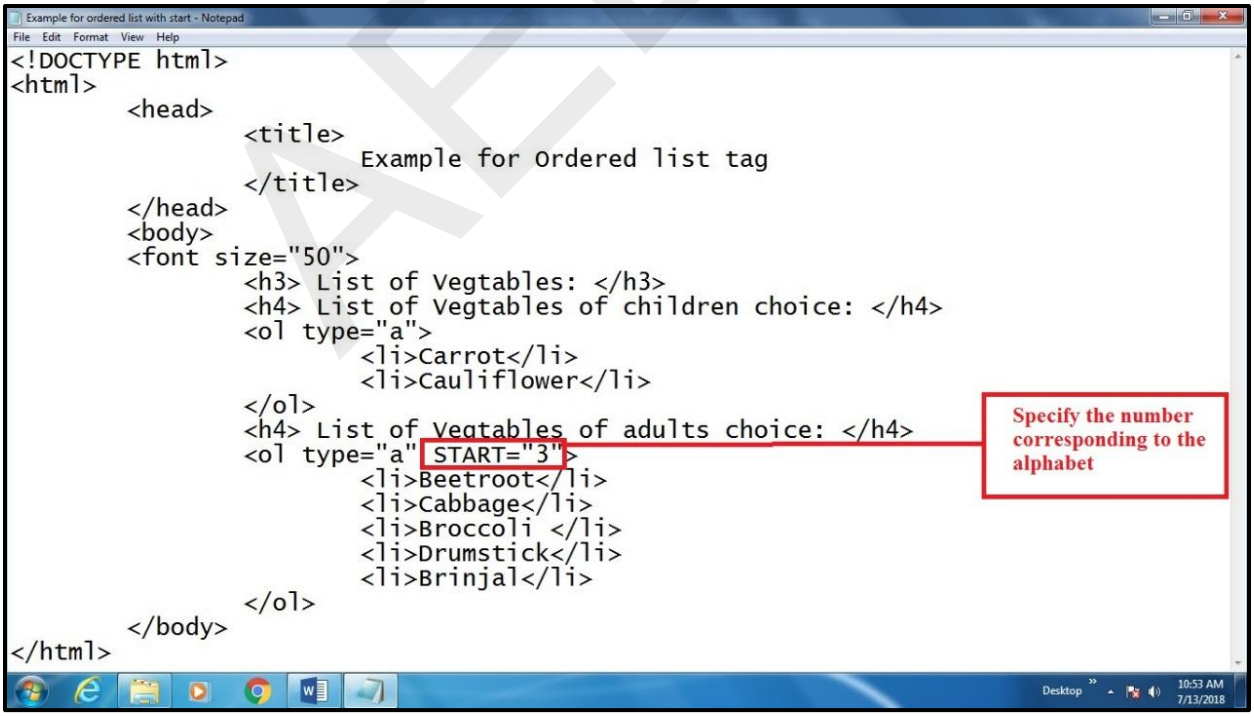

Figure 3.5 : Screen shot of coding in Notepad for example 3.3.2

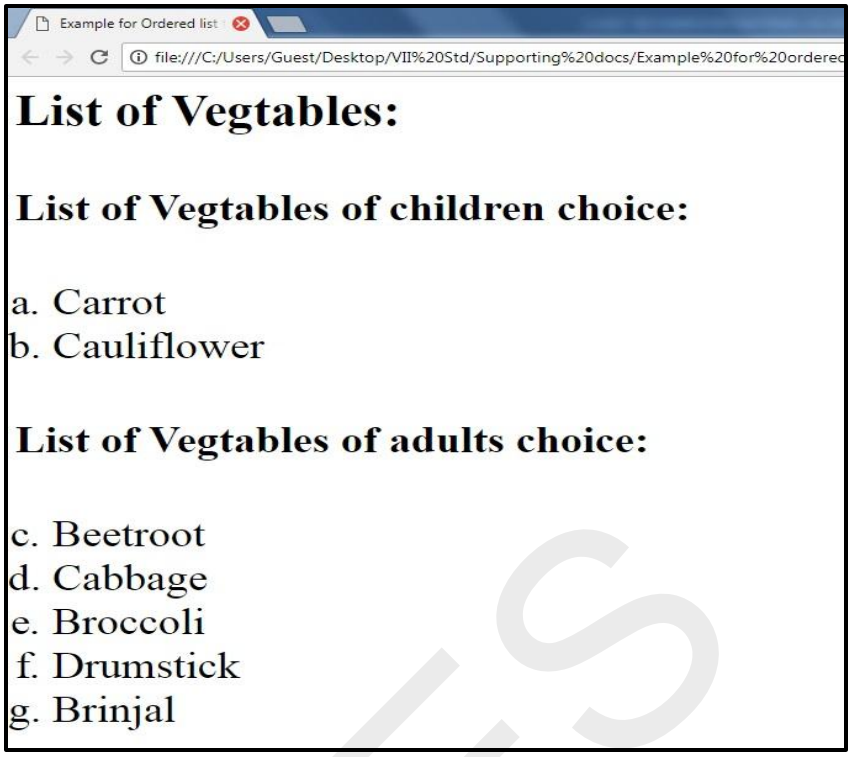

Figure 3.6 : Screen shot of output for example 3.3.2

Unordered list

- It is used to create a list using bullets.

Syntax:

```
<UL>
        <LI> Item name
</UL>
```

Eg:

```
<UL>
        <LI> Orange
</UL>
```

- An Attribute of Unordered list is **type**, using which the type of the bullet can be defined by the user.
- The value of type attribute can be circle, square or disc.
- Circle is a hollow circle where as disc is a solid circle.
- By default, disc type of bullets will be displayed if no type attribute is specified.

Syntax :

```
<UL type =”value”>
        <LI> Item name
</UL>
```

Eg:

Syntax :

<UL type =”square”>

    <LI> Item name

</UL>

Example 3.3.3: Creating a webpage for demonstrating Unordered list tag.

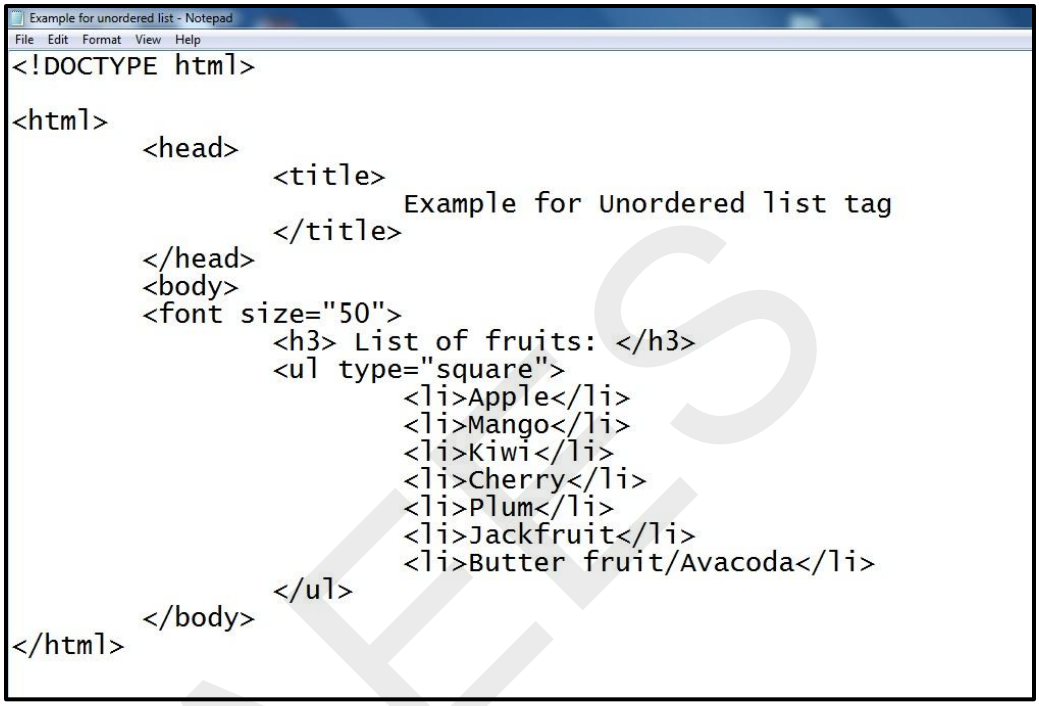

Figure 3.7 : Screen shot of coding in Notepad for example 3.3.3

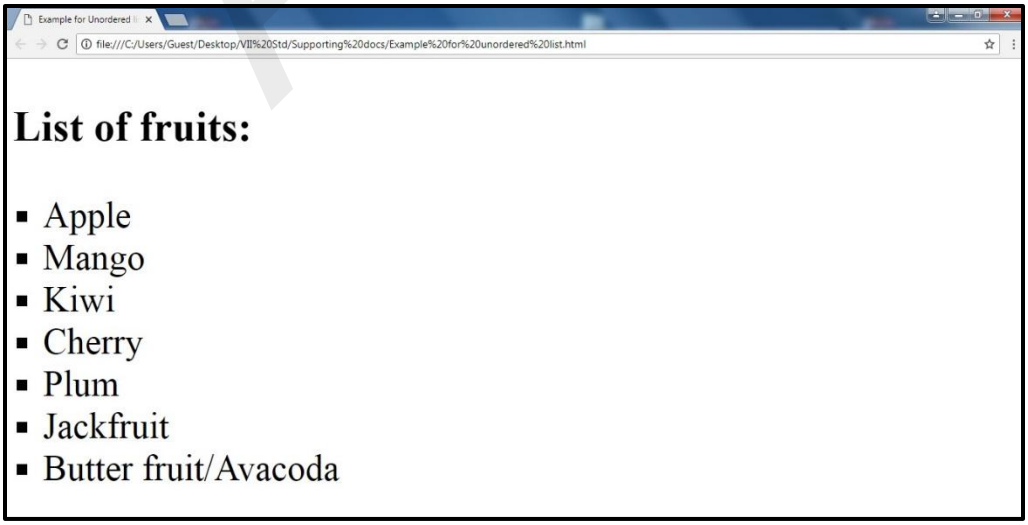

Figure 3.7: Screen shot of the output for example 3.3.3

3.4 Background Image and other Image Insertion in Web Page with alignment

Background Image

- Background is an attribute of body tag.
- It allows us to make an image as a background of the webpage
- The image will be tiled to fill the entire page and will appear at the back of the text.
- In a webpage, at a time background image and background color bath cannot be used.

Syntax: <body background="path of the image file with extension">
Eg:<body background="D:\Users\Admin\Documents\global.jpg">

Example 3.4.1: Creating a webpage to demonstrate the background attribute of body tag.

Example for background image tag - Notepad

File Edit Format View Help

```
<!DOCTYPE html>

<html>
        <head>
                <title>
                        background image attribute
                </title>
        </head>
        <body background="C:\Users\Guest\Desktop\VII Std\Supporting docs\AEES
LOGO.jpg">
        <font size="50">
        <br>
        <br>
        This webpage has the logo of AEES as the background image.
        </body>
</html>
```

Enter the path of the image which you would like to insert in the webpage

Figure 3.8 : Screen shot of coding in Notepad for example 3.4.1

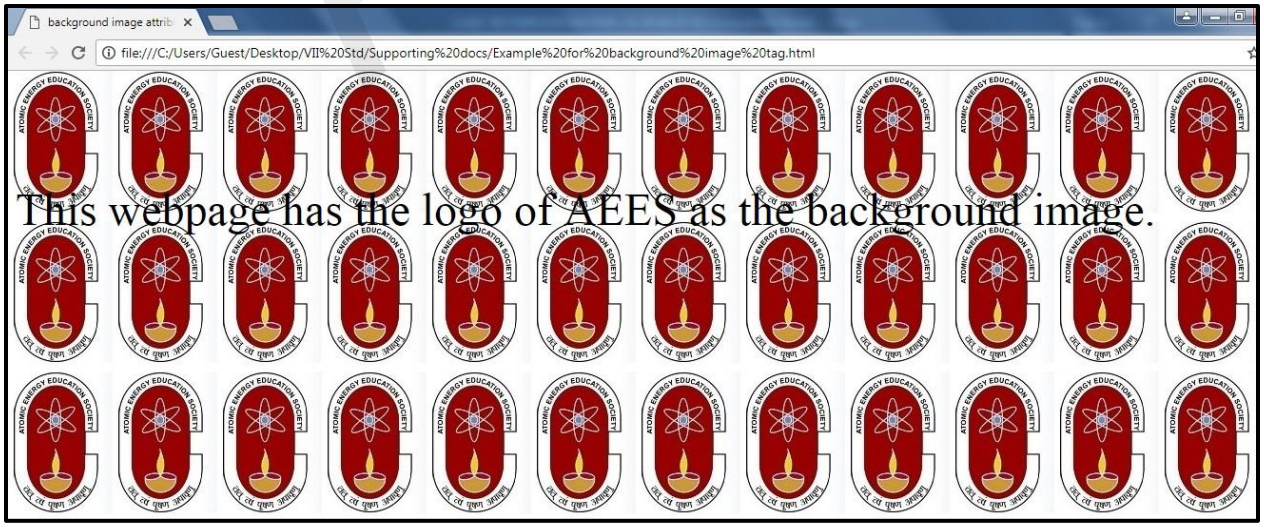

Figure 3.9 : Screen shot of output for example 3.4.1

Image Insertion in Web Page with alignment

IMG tag is used to insert an image in the webpage.

It consists of some following attributes:
(i). Src- Stands for source of the image. It is used to specify the location of the image. This attribute is mandatory where as the other attributes are optional.
(ii). Align- It is used to align the image in the webpage.
(iii). Alt- It is used to provide an alternative text in case if the image is not displayed in the webpage. The alt attribute should reflect the image content, so users who cannot see the image gets an understanding of what the image contains.
(iv). Border – It is used to set border in a specific width for the image.
(v). Height and width- It is used to specify the vertical and horizontal dimensions of an image respectively.

Syntax of IMG tag:
<IMG SRC=”Path of the image along with the file extension”>

Or

<IMG SRC=”Path of the image along with the file extension” align=value alt=value border=value height=value width=value>
Note: Except SRC all the other attributes are optional.

Eg: <IMG SRC=”D:\Users\Admin\Documents\global.jpg”>
Example 3.4.2: Creating a webpage for demonstrating the Image Insertion in Web Page with alignment.

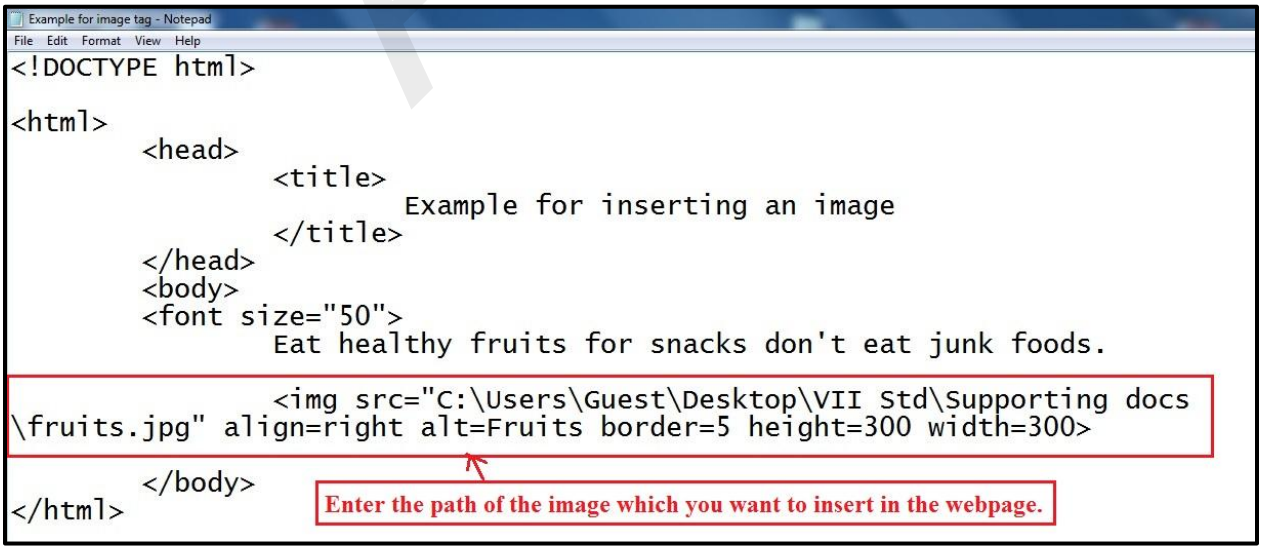

Figure 3.10 : Screen shot of coding in Notepad for example 3.4.2

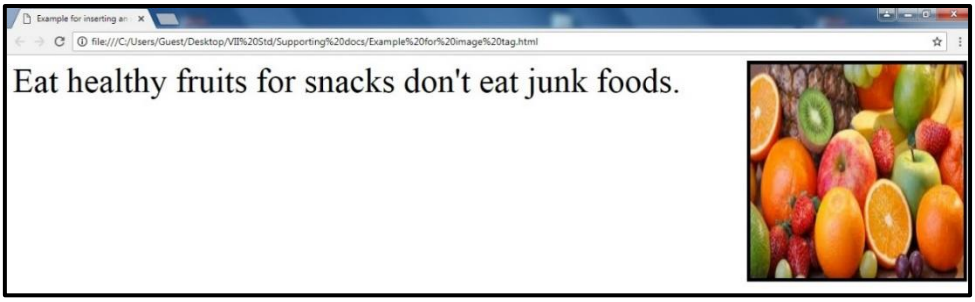

Figure 3.11 : Screen shot of output for example 3.4.2

3.5 Creation of table

<table> tag is used to create table in HTML. The table tag contains other tags that define the structure of the table.

<tr> tag is used to create a row.

<th> tag is used to define the row as the table header. By default, table headings are bold and centered.

<td> tag is used to define the data in the cells.

Example 3.5.1 Creating a webpage to demonstrate the table tag.

```
<!DOCTYPE html>
<html>
        <body>
                <h2>HTML Table</h2>
                <table border = "1">
                        <tr>
                                <th>Name</th>
                                <th>Class</th>
                                <th>Blood Group</th>
                        </tr>
                        <tr>
                                <td>Sai</td>
                                <td>VII</td>
                                <td>B+ve</td>
                        </tr>
                        <tr>
                                <td>Devid</td>
                                <td>VII</td>
                                <td>B-ve</td>
                        </tr>
                        <tr>
                                <td>Abdul</td>
                                <td>VII</td>
                                <td>O+ve</td>
                        </tr>
                </table>
</body>
</html>
```

Figure 3.12 : Screen shot of the coding for example 3.5.1

Figure 3.13 : Screen shot of the output for example 3.5.1

3.6 Anchor Tag

- The **anchor tag** is used to define hyperlinks that links one webpage to another webpage.
- The "href" attribute is the mandatory attribute of the anchor tag.
- The href attribute is used to define the path of the file to be linked.

Syntax : Link Text

Eg: <a href="second.html">Click here for Second Page****

3.7 Hyperlinks

- Hyperlinks is used to link one webpage to another web page or some other location in the same webpage.
- There are two major types of links that can be created in HTML.
    1. Internal links
    2. External link
- Internal link: It refers to linking of a webpage to another location in the same webpage.

Syntax:

<a name="Lable of the link"

Lengthy content on the webpage.

Click here to go to the top of this webpage

Eg: <a name="TOP"

Lengthy content on the webpage.

Click here to go to the top of this webpage

Example 3.7.1: Creating a webpage to demonstrate internal linking.

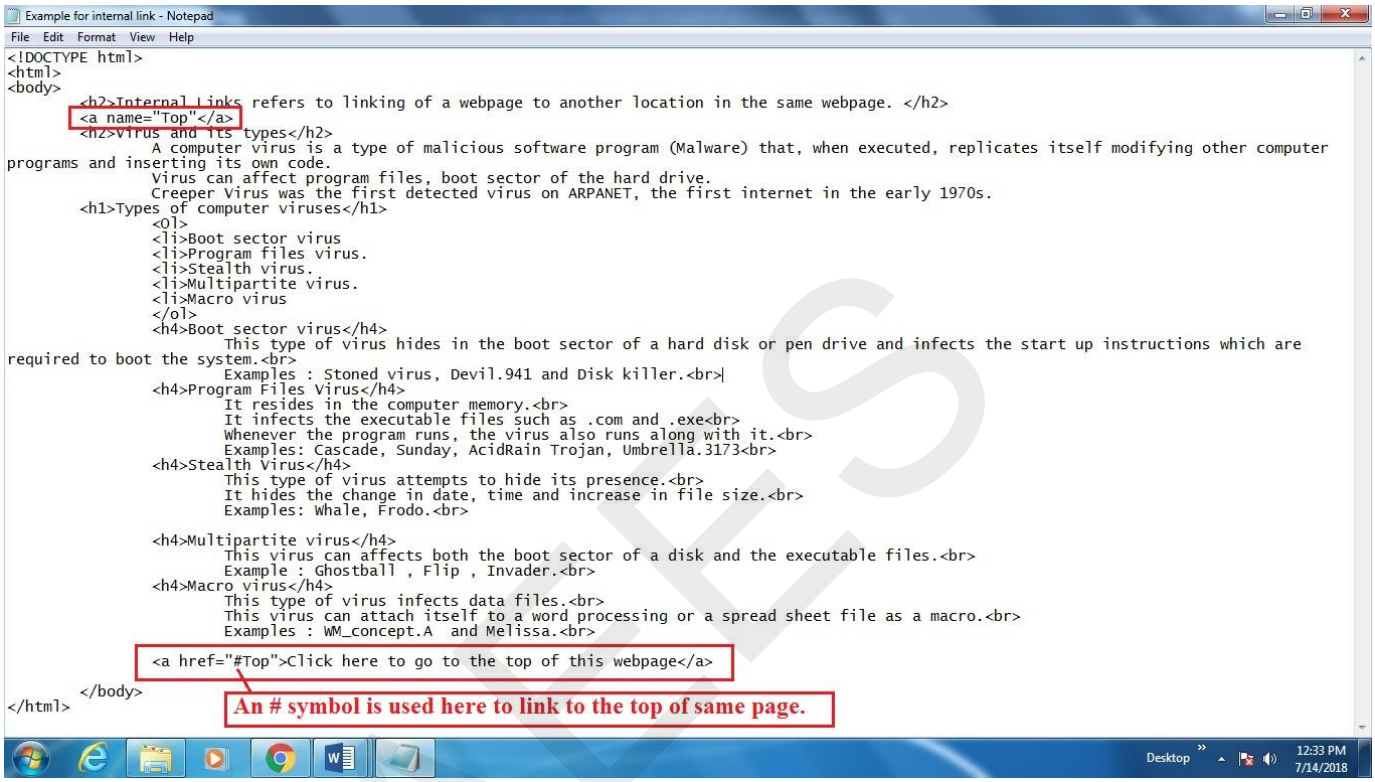

Figure 3.14: Screen shot of coding for example 3.7.1

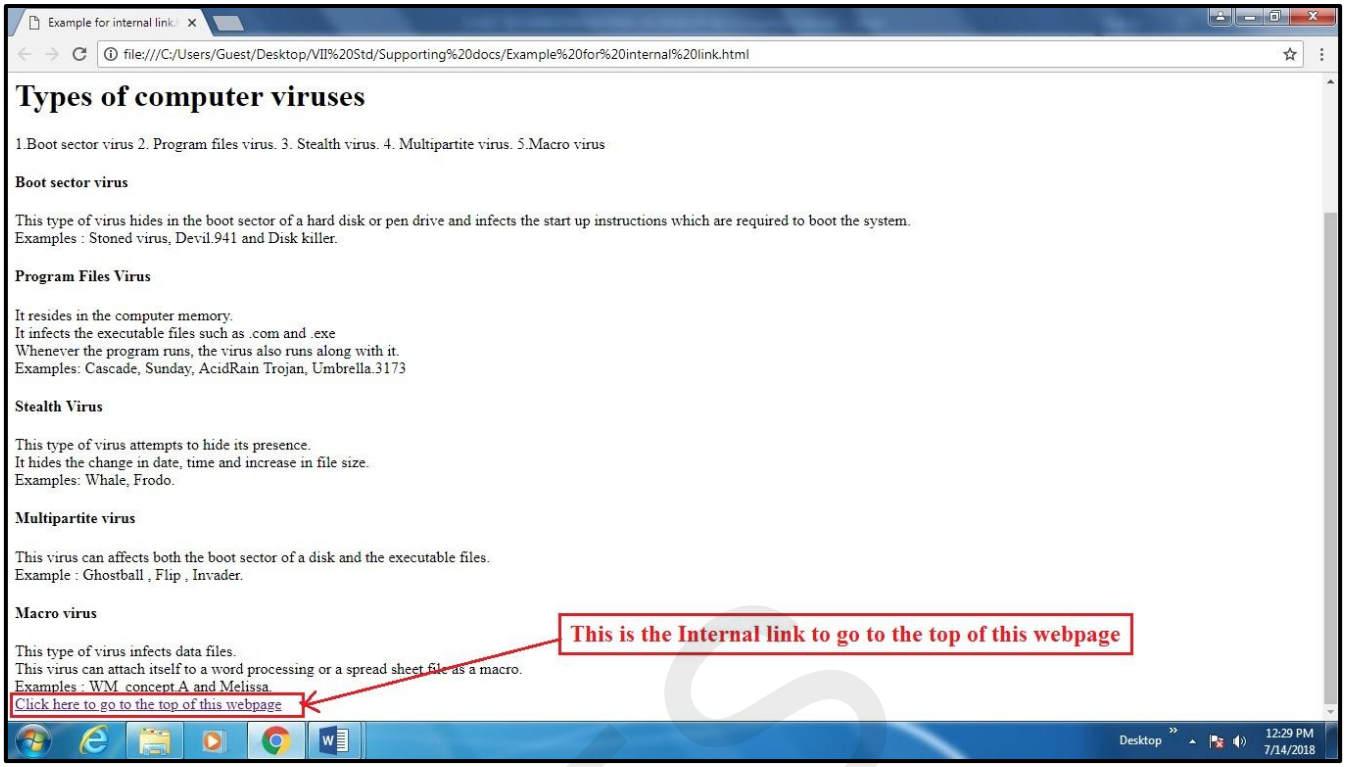

Figure 3.15: Screen shot of output for example 3.7.1

- **External linking**: There are two types of External links:
    1. Local – Link to another webpage available in the same computer.
    2. Global- Link to another website in a remote computer. Using this a webpage can be linked to any other website. (Internet connection is required to get it connected to the other websites).

Example 3.7.2: Creating a webpage to demonstrate external Local linking (another webpage available in the same computer).

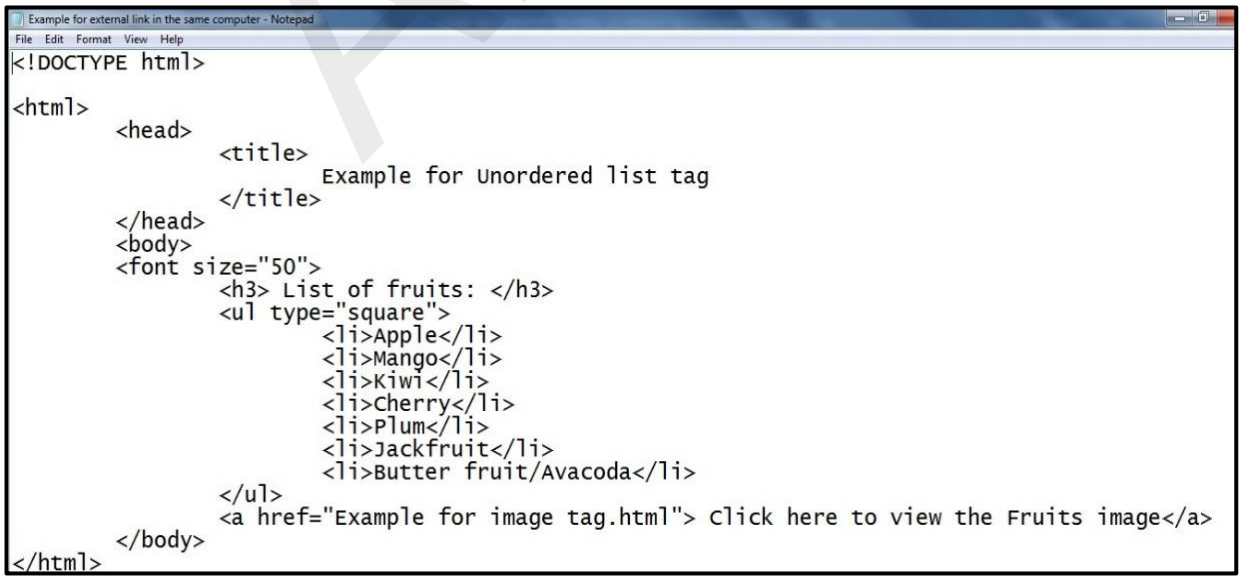

Figure 3.16: Screenshot of the coding for example 3.7.2

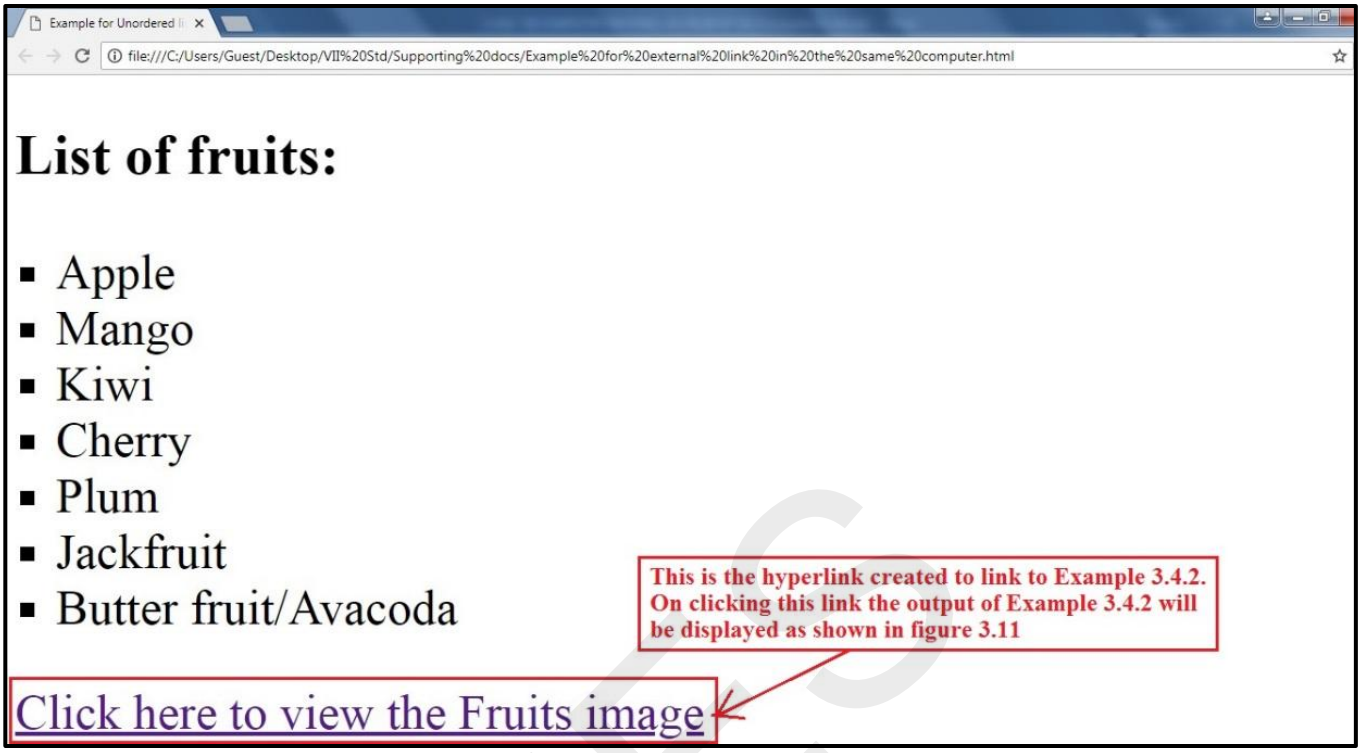

Figure 3.17: Screen shot of output for example 3.7.2

In the above example 3.7 2, a webpage created in example 3.3.3 is linked to the webpage created in example 3.4.2.

Example 3.7.3: Creating a webpage to demonstrate external Global linking (another webpage available in the Remote computer).

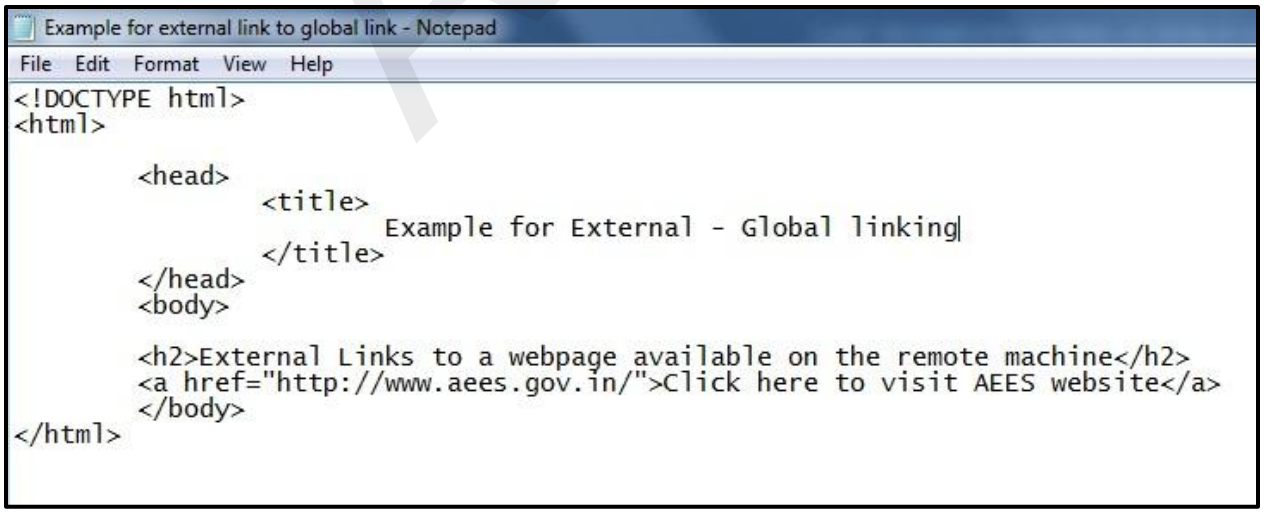

Figure 3.18: Screenshot of the coding for example 3.7.3

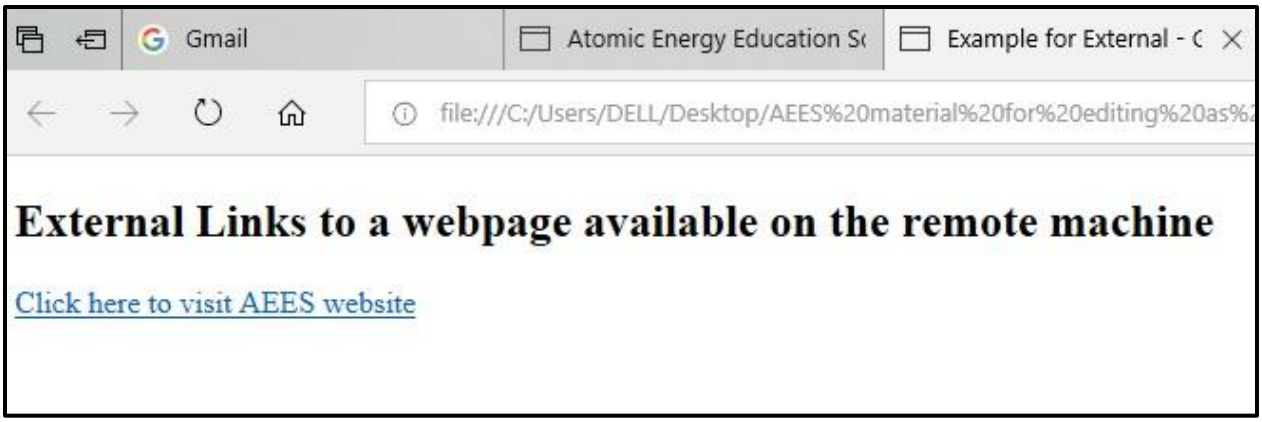

Figure 3.19: Screen shot 1 for output of example 3.7.3

Figure 3.20: Screen shot 2 for output of example 3.7.3

EXERCISES

I. Fill in the blanks.

1) By default, a paragraph in HTML is ……. aligned.

2) By default, ……type of bullets will be displayed if no type attribute is specified in unordered list.

3) For IMG tag ,……. Attribute is not optional.

4) jpeg, bmp, gif , png are the different formats of …… file.

5) The …… attribute is the mandatory attribute of the anchor tag.

II. State True of False.

1) HTML is case insensitive.

2) # symbol is used in internal linking.

3) In HTML, a table can be inserted into another table (nested table).

4) We can use <, > symbols as a bullet in unordered list.

5) <image> tab is used to insert an image in the web-page.

III Answer the following :

1) Explain about <img> tag and its attributes.

2) Write any three differences between ordered and unordered list.

3) Write a program to display time-table in a web-page.

4) Write a program to show different alignments of paragraph in a web page.

5) Write a sample program to link two web pages.

Practical Exercise :

1) Create a web page to display the types of software using OL & UL tags.

2) Create a web page to display a table of CCA prize winners.

3) Create a web page to display an image.

4) Link the above web pages (Q.no 1,2 and 3) using external linking.

Note: Practice all the examples given in this chapter.