India's most Popular
Online IT Championship
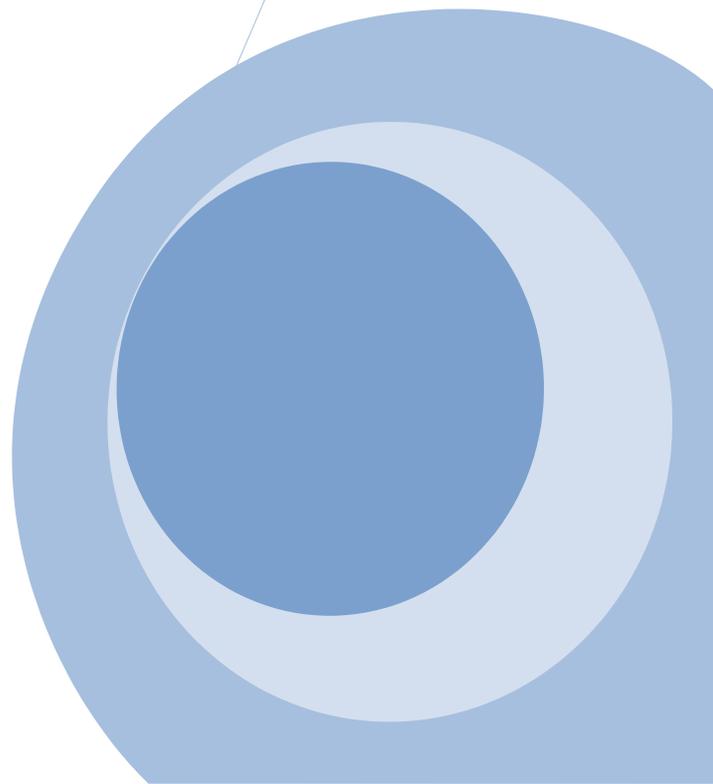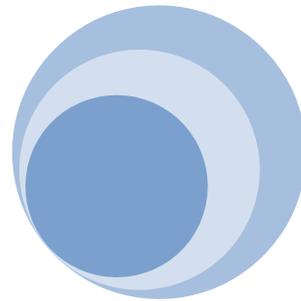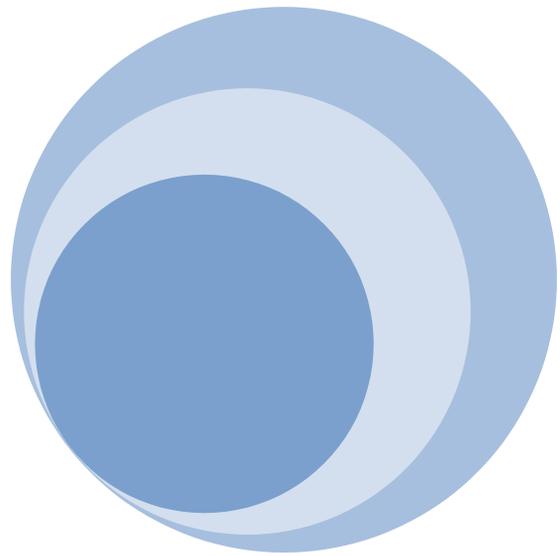
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Fun with HTML

Hypertext Markup Language

HTML is markup language using which you can create static web pages to form a website.

Std. II

INDEX
(HTML)

(CSS)

Topic 1.

Introduction to HTML

1.1   Introduction

Now a day different kinds of Websites are there on Internet. Educational, social, Commercial, Information providers etc. Worldwide there are number of users of websites. Numbers of Businesses are in need of their own website to deliver what they have through sites. So they need website developer. Using Web developing languages websites are developed by developers.

HTML is one of the languages used for website development

Website is a collection of web pages which contains Information, form, Images, advertisements, link etc. and plays more important role in our day to day life.

1.2   What is HTML?

HTML stands for Hyper Text Markup Language which is used for designing web pages.

HTML developed by scientist Tim Berners-Lee in 1990.

It is a markup language. *A* markup language is a set of markup tags.

1.2.1   What is Tag?

Text enclosed within angle bracket is called tags. These tags tell the browser how to display the text or graphics in the document. The tags describe document content.

HTML markup tags are usually called HTML tags

HTML tags normally come in pairs like and

The first tag in a pair is the start tag, the second tag is the end tag

The end tag is written like the start tag, with a forward slash before the tag name

Start and end tags are also called opening tags and closing tags

Syntax:

<tagname> content </tagname>

1.3 HTML Editors

HTML can be edited by using a professional HTML editor like:

1. Adobe Dreamweaver
2. KompoZer
3. Coffee Cup **HTML** Editor
4. CKEditor etc.

However, we also can use a text editor like Notepad (PC),Notepad++ also.

Note:

Extension: specifies the type of file.

Editor: used to write or edit codings.

Questions

Q. A   OBJECTIVE TYPE QUESTIONS

I. Fill in the blanks by selecting appropriate option.

The first tag in a pair is the ....(start tag/end tag)

Html stands for .... (Hyper text markup language/Hyper Tag Markup Language.)

Html document has............................ (.htmlj.txt)extension.

....(Singular /Paired tags) are- HTML tags normally come in pairs like and

HTML used for designing..............................(web/ text) pages.

II. Match the followings.

	A		B
1.	KompoZer	a.	Singular tag
2.	**html**	b.	Paired taag
3.	 	c.	Editor
4.	have closing tag.	d.	Markup

Topic 2.

HTML Document

2.1   HTML documents

Html Document contains HTML tags and plain text.

HTML documents are also called web pages.

This document has .html or .htm (both are same) extension.

All HTML documents are divided into two main parts:

head

body.

HTML document must have a declaration: <!DOCTYPE html> at beginning. It's declaring to the browser that the following file is an HTML file.

The basic structure for all HTML documents is simple and minimum <html>, <head>, <title> and <body> these four primary tags are required to build any webpage. These are all container tags and must appear as pairs with a beginning and an ending.

HTML Page structure example:

<! DOCTYPE html>

```
<html>
<head>
    This is the first part of html document.
</head>
<body>
    This is the second part of html document.
</body>
</html>
```

Explanation:

<HTML> -   The main container for html pages

<HEAD>-   The container for page header information

<TITLE> -   The title of the page

<BODY>-   The main body of the page

Questions:

Q. A   OBJECTIVE TYPE QUESTIONS

I. Fill in the blanks by selecting appropriate option.

1. All HTML documents are divided into ....and .... two main parts.(head and title/ head and body)

2..(head/Title)tag specifies title of web page.

3. HTML document must have a declaration: ....(DECLARATION html/<! DOCTYPE html> at beginning.

Topic 3

HTML Elements

3.1   The <html> ele ment :

The <html> element defines the whole HTML document.

The element has a start tag <html> and an end tag </html>.

The element content is another HTML element (the body element).

Following two elements appear as direct children of an <html> element:

<head>

<body>

<html>

<body>
<p>This is my first paragraph.</p>
</body>
</html>

3.1.1   The <head> Element:

The <head> element is just a container for all other header elements.

 It should be the first thing to appear after the opening <html> tag.

Each <head> element should contain a <title> element indicating the title of the document.

The <head> tag contains the title of the document along with general information about the file, like the author, copyright, keywords and/or a description of what appears on the page.

Although it may also contain any combination of the following elements.

<object>

<meta>

<link>

<style>

<script>

<base>

3.1.2 The <title> Element:

We can specify a title for every page that you write inside the <title> element.

This element is a child of the <head> element.

It is important to use a title that really describes the content of your site. The <title> element should contain only the text for the title and it may not contain any other elements.

It is used in several ways:

It displays at the very top of a browser window.

It is used as the default name for a bookmark in browsers such as IE and Google Chrome.

Its is used by search engines that use its content to help index pages.

3.1.3 The <body> Ele ment :

The <body> element appears after the <head> element

Contains the main content of Webpage actually those contents are text, images, links, tables and so on.

In following example it contain a <P> element.

```
<body>
<p>This is my first paragraph.</p>
</body>
```

3.1.4 The <p> element:

The <p> element defines a paragraph in the HTML document.

The element has a start tag <p> and an end tag </p>.

The element content is: This is my first paragraph.

<p>This is my first paragraph.</p>

Time to Practic:

1. create HTML document

Follow the following steps to create HTML document
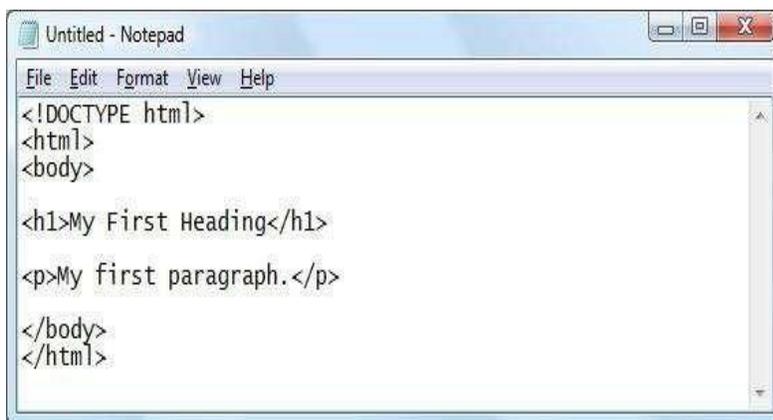
Step 1: Start Notepad

To start Notepad go to:

Sta rt ---   All Programs ---   Access ories ---   Notepad

Step 2: Edit Your HTML with Notepad

Type your HTML code into your Notepad:

Step 3: Save Your HTML

Select Save as.. in Notepad's file menu.

When you save an HTML file, you can use either the .htm or the .html file extension. There is no difference; it is entirely up to you.

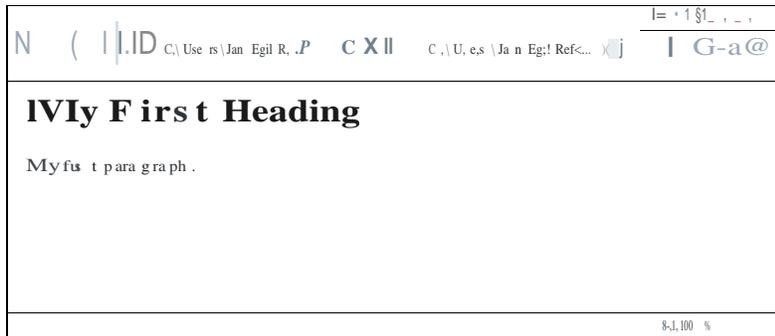Save the file in a folder that is easy to remember, like My webpages.

Step 4: Run the HTML in Your Browser

There are two options to run html document.

Start your web browser and open your html file from the File, Open menu,

just browse the folder and double-click your HTML file.

The result will be like this:

lVIy First Heading

My fust paragraph.

Topic4

Html Attributes

4.1   Introduction to attribute:

Most of the html elements have their own attributes. Attributes provide additional information about an element. An attribute is used to define the characteristics of an HTML element and is placed inside the element's opening tag. Attributes come in name/value pairs like: name="value".

EXAMPLE:

<Body> tag has bgcolor attribute which is used to specify background color of the webpage.

Syntax:

<tagname attribute name="value> .... </tagname>

Note:

(W3C) recommends lowercase attributes/attribute values

4.1.1   Core Attributes

There are four core attributes in html. These attributes can be used with maximum of HTML elements (although not all). These attributes are as follows:

Id

Title

Class

Style

class   Specifies one or more class names for an element (refers to a class in a stylesheet)

id   Specifies a unique id for an element

style   Specifies an inline CSS style for an element

title   Specifies extra information about an element (displayed as a tool tip)

Example:

```
ife   Edit   Format   View   Help
< !DOCTYPE html >
< html' >

    < head>
        <title>The title Attribute Example</title>
    </ head>

    <body>
        < h3 title = "Hello HTML!" > Titled Heading Tag
Example</ h3>
    </ body>

</ html >
```
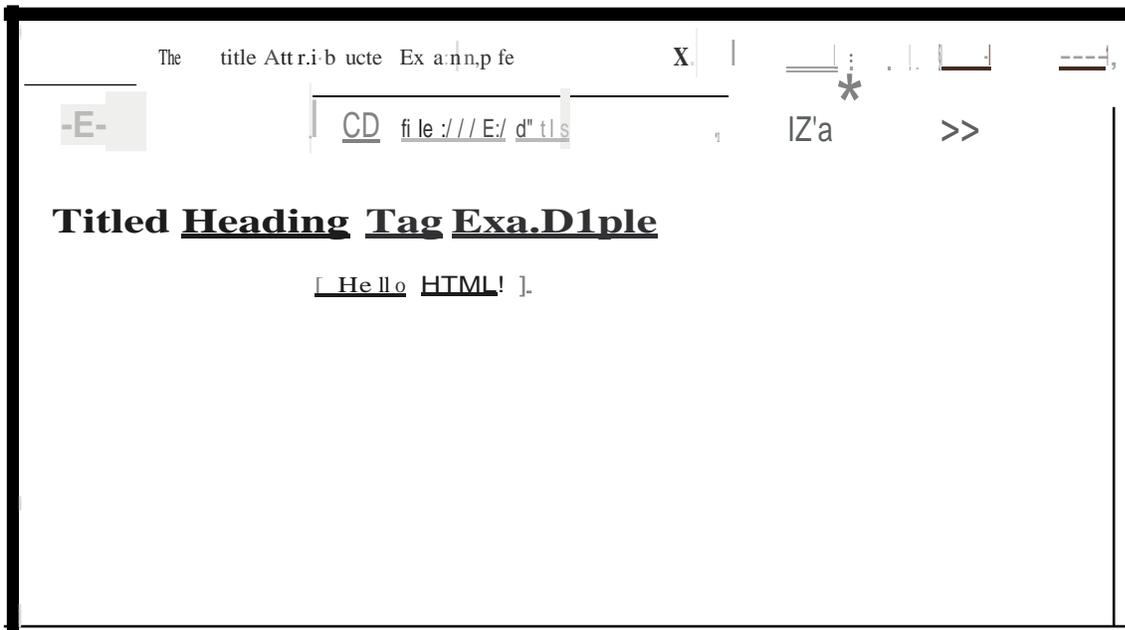
Output

The title Attribute Example   X

CD file:/// E:/ d"tls   IZ'a   >>

Titled Heading Tag Exa.D1ple

[Hello HTML!].

Q. *A*   OBJECTIVE TYPE QUESTIONS

I. Fill in the blanks by selecting appropriate option.

.......................(Id/title)Specifies a unique id for an element

<Body> tag has .... (background/bgcolor) attribute which is used to specify background color of the webpage.

................(style /class)Specifies an inline CSS style for an element

An.....................(element/ attribute) is used to define the characteristics of an **HTML** element.

Topic 5.

Formatting Tags in HTML

5.1   Int roduction :

Formatting tags are used to display text in different format. The changes the appearance of text on the webpage

5.1.1   HTML Headings

HTML headings are defined with the <hl> to <h6> tags.

Search engines use your headings to index the structure and content of your web pages.

It is important to use headings to show the document structure.

Hl headings should be used as main headings, followed by H2 headings, then the less important H3 headings, and so on.

<hl> defines the most important heading. <h6> defines the least important heading.
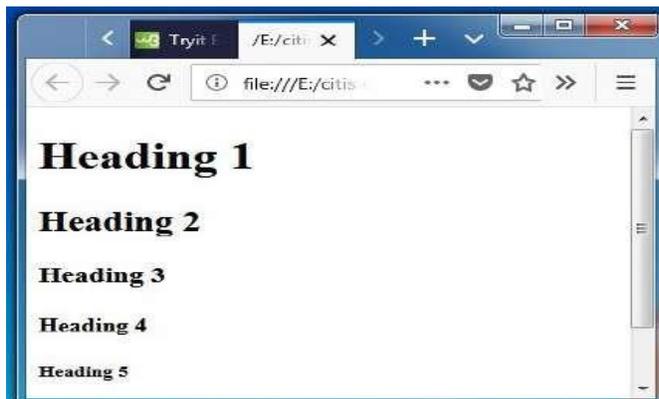
Use HTML headings for headings only. It is wrong to use headings to make text BIG or bold.

Syntax: -<hl> text</hl>

Example:-

```
headings - Notepad
File  Edit  Format  View  Help
<!DOCTYPE html>
<html>
<body>

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

</body>
</html>
```

Output

5.1.2   HTML Text Formatting tags

1.   ....

Defines bold text

   2.   .....

Defines emphasized text

   3.   <i>.... </i>

Defines a part of text in an alternate voice or mood

   4.   <small>... </small>

Defines smaller text

   5.   ....

      Defines important text

   6.   _{......}

      Defines subscripted text

   7.   ^{......}

Defines superscripted text

   8.   <ins>.......</ins>

Defines inserted text

   9.   ~~....~~

Defines deleted text

5.1.3 Other Text Formatting Element

Formatting ELEMENTS allow the content of webpage to appear in a different manner. Some useful elements are as follows.

1. ADDRESS
2. TT

5.1.3.1 Address

The address element is a container element, which encloses the address or contact information. Such information often appears in the beginning or at the end of the HTML page.

Syntax: -

<Address> address to display</Address>

5.1.3.2 TT

The TT element displays the text such that appears as if it has been typed using a typewriter.

Syntax:-

<TT>Text</TT>

Questions:

Q. *A*   OBJECTIVE TYPE QUESTIONS

I. Fill in the blanks by selecting appropriate option.

The first Formatting................................. (elements/attributers) allow the content of webpage to appear in a different manner.

..........................(TT/Address)element encloses the address or contact information..

..............................tag defines important text.

(Search engines/Browsers) .... use your headings to index the structure and content of your web pages.

(<h1>/<h6>) .... defines the most important heading

II. Match the followings.

A		B
1.	<i>...</i>	a. bold text

2.   ...   b. superscripted text

3.   <TT>...<TT>   c. Italic text

4.   ^{..}   d. Typewriter text

QB. Do It Yourself

Write Html Code to show the use of all HTML Text formatting Tags.

Topic 6

HTML Tables

6.1   Introduction

Sometimes it is necessary to show information on tabular format like time table on web page. Html provides Table tag for this purpose. Table is collection of rows and columns. The intersection of one row and one column know as cell. Cell contains data.

example

Rollno	Name	Address
1	Rupali	Nigdi
2	Gauri	Akurdi

One row contains one record.

Table Tag

<Table>........</Table>

This tag is used to create table.

But only this tag is not enough to make table

<Th><TR> And< TD>tag also required these tags must be there between Opening and closing Table Tag.

<TH> - This tag is used to define Table Headings

<TR>- This is used to define Table Row

<TD>- This tag is used to define Table Column

Example

```
<HTML>
<HEAD>
        <TITLE>Table Example</TABLE>
</HEAD>
<BODY>
        <TABLE BORDER=S BGCOLOR="Yellow">
        <TR><TH>Animals</TH><TH>Type</TH></TR>
```

```
    <TR><TD>Tiger</TD»<TD>Wild</TD></TR>

<TR><TD> Donkey< /TD><TD> Domestic</TD></TR>

      </TABLE>

</BODY>

 </HTML>
```

6.2   Attributes of table tag

There are some attributes of table tag like . They are as following.

1. Bgcolor :This attribute specifies the background color of the table.
    Eg.<Table bgcolor="Yellow">
    </Table>
2. Border : By default, html table is borderless, to specify border of table this attribute is used.
    Eg.<Table border="S">
    </Table>

3. Align: This attribute specifies the alignment of table according to surrounding text. Left,
    Right and Center are the values of this attribute.
    Eg.<Table Align="right">
    </Table>

4. Cellpadding: This attribute is used to specify the space between Cell wall and cell content.
    Eg.<Table Cellpadding="S">
    </Table>

5. Cell Spacing: This attribute specifies the space between two cells.
    Eg.<Table cellspacing="S">
    </Table>

6.3   Colspan and Rowspan

These are attributes of <TD> tag which are used to merge more than one cell into single cell.

1. Colspan :- This allows a single cell spanning more than one column.
2. Rowspan:- This allows a single cell spanning more than one row.

Eg.<tr><td colspan="3"></td></tr>

Above example merge 3 cells horizontally.

Questions:

QI. Fill in the blanks by selecting appropriate option.

1. To merge 3 cells vertically .... (colspan/rowspan) is used.
2. To define background color to the table ....(BGcolor/Background color)attribute is used.
3. (Cell padding/ Cell spacing)is used to specify the space between two cells.

QII. Do It Yourself

1. Create Following Table.

Total Students			
Girls		Boys	
Web designing	DTP	Web designing	DTP
23	21	20	25

Topic 7

HTML List

7.1 Introduction:

Some Information is in list format. This Information on webpage is displayed by HTML List.

There are types of List in Html.

1. Ordered List
2. Unordered List

7.2.1 Order List

This List is also called as Numbered List.

<OL> Tag is used to create this type of List.

The Type Attribute Play important role in creating List. It specifies the format of number. It has values 1, I, I, A and a. By default Number format is 1.

Example

<OL Type=I">

<LI>Tiger</LI>

<Ll>Monkey</LI>

<LI>Deer</LI>

</OL>

Output

    I.   Tiger
    II.   Monkey
    III.   Deer

7.2.1 Unordered list

<UL> Tag is used to create unordered list. It creates bulleted list. Disc, Circle and square are the values for type attribute. Default attribute is Disc.

Example

<UL Type="Circle">

<Ll>Tiger</LI>

<Ll>Monkey</LI>

<Ll>Deer</LI>

</UL>

Output:

- o   Tiger
- o   Monkey
- o   Deer

Questions

Q I. Fill in the blanks by selecting appropriate option.

1. (<OL>/<UL>)..........................Tag is used to create numbered type of List
2. (Disc/Square) ....is the default value of UL Type attribute.

QII. Do It Yourself.

1. Create List of story book

<div align="center">

Topic 8

Links

</div>

8.1 Introduction - HTML links refers to the hyperlinks. That is to create the link to the other document or web page. The links color is blue and it is underlined when it is unvisited. When we hover mouse or a key on the link the cursor changes the shape it turns into the hand shape.

Visited links are underlined and purple.

Details

We use <a> tag to produce the link, with the 'href' attribute to define the link address.

Syntax

<a   !:!: lfl   " >'1

Example of link tag

<html>

<body>

<h2>Test links</h2>

<p>Visit your gmail account</p>

</body>

</html>

Result

Insert links image

8.2 Target Attribute

Target attribute tells us where to open the result document may be in same window or in another blank window

Values for the target attributes are

_blank - to open in new window or tab

_self - open in same window

_parent - open in the parent frame

_top - open in full body of the window

framename - Opens document in a prescribed named frame

To create the image as a hyperlink

To use image it should be in same folder

Example

<html>

<body>

<h2>create link to an image</h2>

<p>click on the image</p>

  <img src="smile.gif' style="width:42px;height:42px;border:0">

</body>

</html>

Result Insert imagelink screen

Questions.

QI. Do it your self

Try to develop an application using different images for your local document and for the web page

Try to create the local link that is to open the document within your computer

Chapter 9

HTML Forms

9.1 Introduction -

When one can request a page, it making an HTTP request normally a GET request. Then browser send a request to the server, and the server responds with desired result that is the web page you are looking for. This is one of the most fundamental concepts of the internet. And based on this HTML forms are designed to work.

We_create forms when we want to take input from users or visitors. For example, when we want to create a Gmail account, we need to fill all the details in the form provided by Gmail.

Like usemame we need to select, then password, our data of birth and location etc. The form will take input data from users or visitors and then submit the data to the backend application. Like CGI, ASP Script.

The back-end application will perform required processing on the passed data based on defined business logic inside the application.

All input inside a <form> element has a name attribute, and also a value.

After submission of form, the name-value pairs from all the fields within the specified <form> tag are included in an HTTP request. The URL inside the   attribute will receive the request, and the request may be GET or POST is defined in the   attribute. This means server will receive all the data and the process on it.

9.2 Details

The form tag in HTML is used to create forms for accepting user input. A form may contain labels, textboxes, checkbox and a submit button.

Syntax for form is <FORM></FORM>

Code example of form tag

<form action="" method="GET">

 <label for="Email">Enter your email</label>

 <inp ut name="name" id= "name"> <input type="submit">

</form>

9.3   Form tab elelements

Form tab may contain the following elements.

- <textarea >
- <input>
- <fieldset>
- <output>
- <label>
- <button>

Etc

<Button> tag is useful when user want to create any button on form. It is inline tag. So, we can use inside the form tag. With the help of button tag user will able to submit data to server.

Example of button tag

```
<form action="https://www.hashtagwebsoft .in/cgi-bin/search.cgi">
<input name="a" type="text" size="20">
<button type="Submit" >Click for search</button>
```

Answer Insert Button.html

9.4   Field set tag

This tag   is used to group related elements in   _____ by drawing a box around them.

Example of field set tag

<html>

<body>

<form>

 <fieldset>

  <legend>Personal Details:</legend>

 Full Name: <input type="text">

 Email address: <input type="text">

 Birth Date: <input type="text" >

 </fieldset>

</form>

\</body\>

\</html\>

\<optgroup \> -This tag is for grouping together related elements within a datalist tag or select tag.Options will be selected using   drop-down menu.

Example

\<Html\>

\<select\>

  \<optgroup label="leafy vegetables" \>

   \<option\>Spinach\</option\>

   \<option\>Fenugreek\</option\>

  \</optgroup\>

  \<optgroup label="Fruit Vegetables"\>

   \<option\>Cucumber\</option\>

   \<option\>Cabbage\</option\>

  \</optgroup\>

  \<optgroup label="F ruits"\>

   \<option\>Watermelon\</option\>

   \<option\>Apple\</option\>

   \<option\>Orange\</option\>

  \</optgroup\>

\</select\>

\</Html\>

Result

Example of form tag

```
<html>
   <head>
      <title>Form Tag Example </title>
   </head>
   <body>
      Enter First name:
         <input type = "text" name = "Enter your first name" value = "" maxlength = "100" />
       <br />


      Enter Last name:
         <input type = "text" name = "Enter last_name" value = "" maxlength = "100" />
       <input type= "submit" value ="Submit" />
    </form>
  </body>
</html>
```

Tarique -Insert screen shot of formtag

9.4 Form attribute.

Html form tag supports following attributes

Specific Attributes

The HTML <form> tag also supports the following additional attributes -

Like Accept, action, novalidate, method,etc.

Event Attributes

All event attributes are

supported by form tag

Questions

QI. Do IT your self

Try to develop the input form for the school database

Topic 1.

Introduction to CSS

1.1   Introduction

We have developed WebPages using HTML. Now it's time to give them pretty and equal look. How its Possible? The answer is CSS.

CSS is a Style sheet language which is used to apply style to the web pages. It helps to maintain same style format to all web pages. CSS stands for Cascading Style Sheet. To style the HTML elements CSS canbe used.

For Example:

If you want to select all <H3> Elements of the html page and change its color to red Then CSS cod helps us to do. The code is as following.

H3

{

Color: Red

}

1.2 HTML File and CSS File

CSS File is written separately. This File has .css extension. To apply styling from Css File to the html file we need to Link both files together. <Link> Element is used for this Purpose.

```
<head>

   <title>CSS Demo</title>

   <link type="text/css" rel="stylesheet" href="mystyle.css" />

</head>
```

As Shown in above code we directly add Link tag after <title> tag of <Head> tag in Html document.

This Link Tag has three attribute

Type: Specifies the type Of File

Rel: Specifies the Relationship of html and css file to the browser.

Href: Specifies the address of file css file.

Questions:

1. CSS Stands For…………………………………………………………………….
2. ………………………….element is used to create link between html file and CSS file.
3. CSS file has......................................Extension.
4......................................Is used to maintain the same style to all WebPages.

Topic 2

Writing

CSS File

<u>2.1</u>   <u>Introduction</u>:

Writing a css code must be written properly. It has specific syntax for writing a code.

Syntax:

Selector

{

Property: Property_value;

}

Explenation

1. *Syntax: is a way to write a code.*
2. *Selector: It can select html elements which we want to style.*
3. *Property: Property is which you can style a given html elements.*
4. *Property_value: Value to be assigned to the property.*

Example:

H3 *{* *Color: red;* *}*

<u>Rules to be follow while writing CSS – see above example</u>

1. The styling instructions are contained within curly brackets - { }.

2. What we will be styling (color) is immediately followed by a colon-   :

3.Then we add the value (which is red in this example).

4.Each style must end with a semicolon- ;

2.2 modify multiple properties

It is possible to modify multiple properties of single element. Just separate it by semicolons.

Syntax:

Selector

{

Property1: Property_value;

Property2: Property_value;

Property3: Property_Value;

}

Example:

```
P

{

Color: Red;

Width: 50px;

Border: 1 px, solid Yellow;

}
```

2.3 Apply same style on multiple elements

It is possible to apply same Style on multiple elements. To do this each selector should be separated by commas.

Syntax:

Selector1, Selector2, selector3:

{

Property1: Property_value;

}

Example:

P, Li, H1

{

Color: Red;

}

@ Tariq : Please add mulele code and Output window here

Topic 3

Applying CSS

Methods

3.1 Introduction

Using CSS we can change the look and style of the webpage. There three different methods available to apply styling to the webpage.

3.1.1 Inline CSS

In this method we can directly add css style to an HTML Element in HTML File Itself. It get applied to only that element to which it written.

 E.g.

<P Style="Border: 2px dotted red;">

In Above example paragraph get applied 2 pixels Solid border with black color. Style element contains property and value pair.

@ Tariq : Please add Inline css code and Output window here

3.1.2 Internal CSS

In this method we can add CSS style at the beginning of the HTML Document, Which further applies tothe whole document. We should enclose this style in head element using style element.

```
<head>
<style type="text/css">
p{
 Border: 2px dotted red
}
</Head>
```

@ Tariq : Please add internal CSS code and Output window here

3.2.3 External CSS

In this method we write css code in different file and save that file with .css extension. Then Link this fileto the html File.

This method is very ideal method as we are able to apply same style to the entire website.Eg.

```
p{
 Border: 2px dotted red
}
```

Write above code in notepad and save file with name "mystyle.css"Now

Add following cod to your html file where you want to apply this style.

```
<head>
   <title>CSS Demo</title>
   <link type="text/css" rel="stylesheet" href="mystyle.css" />
</head>
```

@ Tariq : Please add external code, mystyle code and Output window here

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