KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed to be University)
(Established Under Section 3 of UGC Act 1956)
Coimbatore – 641 021

DEPARTMENT OF COMPUTER SCIENCE,COMPUTER APPLICATION AND INFORMATION TECHNOLOGY

17CTU404A HTML PROGRAMMING 3H – 3C

Instruction Hours / week: L: 3 T: 0 P: 0Marks: Int : **40** Ext : **60** Total: **100**

SCOPE

This course design focuses on the structure of the website including the information architecture, the layout or the pages and the conceptual design with branding. PHP helps the students for developing dynamic web pages.

OBJECTIVES

- understand the fundamental of HTML and use different formatting options
- creation of tables and frames
- relate with DHTML and CSS
- To work with open source applications that deal with database and website development

UNIT – I

Introduction the basics: The Head, the Body,Colors, Attributes, Lists, ordered and unordered.

UNIT – II

Links Introduction: Relative links, absolute links, Link attributes, Using the ID attribute to Link within a Document.

UNIT – III

Images: Putting an image on a page, Using images as Links, Putting an image in the background.

UNIT – IV

Tables: Creating a table, Table headers, Captions, Spanning Multiple columns, styling Table.

UNIT – V

Forms: Basic input and attributes, other kinds of inputs, styling forms with CSS, Where to Go from Here.

Suggested Readings

1. Virginia DeBolt (2006). Integrated HTML and CSS A Smarter, Faster way to learn Wiley/Sybex.
2. Cassidy Williams, Camryn Williams (2015). Introduction to HTML and CSS, O'Reilly.

Websites

1. www.w3schools.com/
2. alecle.net/archives/category/web-technology
3. jmarshall.com/easy
4. www.php.net/
5. en.wikipedia.org/wiki/php
6. www.w3schools.com/PHP/DEfaULT.asp

ESE Pattern		**INTERNAL Pattern**	
Part – A (Online)	20 x 1 = 20	Part – A	20 x 1 = 20
Part – B	5 x 2 = 10	Part – B	3 x 2 = 6
Part – C (Either or)	5 x 6 = 30	Part – C	3 x 8 = 24
Total	**60 marks**	**Total**	**50 marks**

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed to be University)
(Established Under Section 3 of UGC Act 1956)

Coimbatore - 641021.

(For the candidates admitted from 2017 onwards)

DEPARTMENT OF CS, CA & IT

SUBJECT :**HTML PROGRAMMING**

SEMESTER : **IV** **L T P C**

SUBJECT CODE: **17CTU404A** **CLASS**: **II B.Sc.C T** **3 0 0 3**

LECTURE PLAN

STAFF NAME: Dr.P.TAMIL SELVAN

S.No	Lecture Duration (Hr)	Topics	Support Materials
		UNIT-I	
1.	1	• **Introduction to HTML**	T1:7-10
2.	1	• The Head	T1:23-25
3.	1	• The Body	T1:30-46
4.	1	• Colors	T1:188
5.	1	• Attributes	W2
6.	1	• Lists	T1:276-278
7.	1	• Ordered	T1:281-285
8.	1	• Unordered	T1:280-281
9.	1	• Recapitulation and Discussion of important questions	
		Total No of Hours Planned For Unit – I	**9**
		UNIT-II	
1.	1	• **Links Introduction**	T4:91
2.	1	• Relative Links	T1:251
3.	1	• Absolute Links	T1:254 W1
4.	1	• Use styling links in your web page.	T1:255
5.	1	• Link Attributes	T1:256

6.	1	• Using the ID Attribute to Link Within a Document	T1:258
7.	1	• The <a> Element's and Other Attributes • The accesskey Attribute	T1:261
8.	1	• The href lang Attribute • The rel Attribute	T1:244, W2
9.	1	• Recapitulation and Discussion of important questions	
		Total No of Hours Planned For Unit – II	**9**
UNIT-III			
1.	1	• Putting an Image on a Page	T4:118
2.	1	• Adding images Using the <img> element ➢ The src Attribute	T1:202
3.	1	• The alt Attribute	T1:204
4.	1	• The height and width Attributes	T1:206
5.	1	• Putting an Image in the Background	T1:214
6.	1	➢ Continuation to putting an image in the background	T1:214
7.	1	• Styling Images	T4:119,W2
8.	1	• Adding Images to a Web Page	T1:196
9.	1	• Recapitulation and Discussion of important questions	
		Total No of Hours Planned For Unit – III	**9**
UNIT-IV			
1.	1	• Creating a Table	T1:298-300
2.	1	• Table Headers	T1:302-303
3.	1	• Captions	T1:334-335
4.	1	• Spanning Multiple Columns	T1:309
5.	1	• Spanning Multiple rows	T1:309
6.	1	• Styling Table	T1:311
7.	1	• The dir Attribute • The <tr> Element Contains Table Rows	T1:327-328
8.	1	• The <td> and <th> Elements Represent Table Cells	T1:329-331, W1
9.	1	• Recapitulation and Discussion of important	

		questions	
		Total No of Hours Planned For Unit – IV	**9**
UNIT-V			
1.	1	• Forms	T4:136
2.	1	• Basic Input and Attributes	T4:139
3.	1	• Other Kinds of Inputs	T4:145
4.	1	• Styling forms with CSS	T4:207
5.	1	• Where To Go From Here	T4:209
6.	1	• Recapitulation and Discussion of important questions	
7.	1	**Discussion of previous ESE Question papers**	
8.	1	**Discussion of previous ESE Question papers**	
9.	1	**Discussion of previous ESE Question papers**	
		Total No of Hours Planned For Unit – V	**9**
		Total No. of Hours Planned: 45	

Suggested Readings:

1. Steven Holzner,"*HTML Black Book"*, Dreamtech Press, New Delhi, 2009.

2. Virginia DeBolt,"*Integrated HTML and CSS A Smarter, Faster Way to Learn"* , Wiley / Sybex, 2006.

3. Cassidy Williams, Camryn Williams,"*Introduction to HTML and CSS"*, O'Reilly, 2015.

4. Ramesh Bangia,"*Web Technology*", Firewall Media, New Delhi, 2010.

WEBSITES

1. www.w3schools.com/
2. alexle.net/archives/category/web-technology
3. jmarshall.com/easy/
4. www.php.net/
5. en.wikipedia.org/wiki/Php
6. Www.W3schools.Com/Php/Default. Asp

UNIT-I

SYLLABUS

HTML : **Introduction The Basics:** The Head, the Body, Colors, Attributes, Lists, ordered and unordered

What is an html File?

HTML stands for Hypertext Markup Language, and it is the most widely used language to write Web Pages.

• Hypertext refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.

• As its name suggests, HTML is a Markup Language which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display. Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

Basic HTML Document

In its simplest form, following is an example of an HTML document:

```
<!DOCTYPE html>
<html>
<head>
<title>This is document title</title>
</head>
<body>
```

<h1>This is a heading</h1>
Document content goes here.....
</body>
</html>

HTML Tags

As told earlier, HTML is a markup language and makes use of various tags to format the content. These tags are enclosed within angle braces **<Tag Name>**. Except few tags, most of the tags have their corresponding closing tags. For example, **<html>** has its closing tag**</html>** and **<body>** tag has its closing tag **</body>** tag etc. Above example of HTML document uses the following tags:

Tag	Description
<!DOCTYPE... >	This tag defines the document type and HTML version.
<html>	This tag encloses the complete HTML document and mainly comprises of document header which is represented by <head>...</head> and document body which is represented by <body>...</body> tags.
<head>	This tag represents the document's header which can keep other HTML tags like <title>, <link> etc.
<title>	The <title> tag is used inside the <head> tag to mention the document title.
<body>	This tag represents the document's body which keeps other HTML tags like <h1>, , etc.
<h1>	This tag represents the heading.
	This tag represents a paragraph.

HTML Document Structure

A typical HTML document will have the following structure:

```
Document declaration tag
<html>
    <head>
        Document header related tags
    </head>

    <body>
        Document body related tags
    </body>
</html>
```

We will study all the header and body tags in subsequent chapters, but for now let's see what is document declaration tag.

The<!DOCTYPE> Declaration

The <!DOCTYPE> declaration tag is used by the web browser to understand the version of the HTML used in the document. Current version of HTML is 5 and it makes use of the following declaration:

```
<!DOCTYPE html>
```

There are many other declaration types which can be used in HTML document depending on what version of HTML is being used. We will see more details on this while discussing

<!DOCTYPE...> tag along with other HTML tags.

HTML Basic Tags

HeadingTags

Any document starts with a heading. You can use different sizes for your headings. HTML also has six levels of headings, which use the elements **<h1>, <h2>, <h3>, <h4>,<h5>, and <h6>**. While displaying any heading, browser adds one line before and one line after that heading.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Heading Example</title>
</head>
<body>
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
</body>
</html>
```

Paragraph Tag

The ** ** tag offers a way to structure your text into different paragraphs. Each paragraph of text should go in between an opening and a closing tag as shown below in the example:

Example

```
<!DOCTYPE html>
<html>
<head>
```

```
<title>Paragraph Example</title>
</head>
<body>
<p>Here is a first paragraph of text.</p>
<p>Here is a second paragraph of text.</p>
<p>Here is a third paragraph of text.</p>
</body>
</html>
```

Line Break Tag

Whenever you use the **
** element, anything following it starts from the next line. This tag is an example of an **empty** element, where you do not need opening and closing tags, as there is nothing to go in between them.

The
 tag has a space between the characters **br** and the forward slash. If you omit this space, older browsers will have trouble rendering the line break, while if you miss the forward slash character and just use
 it is not valid in XHTML.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Line Break Example</title>
</head>
<body>
<p>Hello<br />
You delivered your assignment on time.<br />
Thanks<br />
Mahnaz</p>
</body>
</html>
```

Horizontal Lines

Horizontal lines are used to visually break-up sections of a document. The **<hr>** tag creates a line from the current position in the document to the right margin and breaks the line accordingly.

For example, you may want to give a line between two paragraphs as in the given example below:

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Horizontal Line Example</title>
</head>
<body>
<p>This is paragraph one and should be on
top</p> <hr />
<p>This is paragraph two and should be at bottom</p>
</body>
</html>
```

Again <hr /> tag is an example of the empty element, where you do not need opening and closing tags, as there is nothing to go in between them.

The <hr /> element has a space between the characters hr and the forward slash. If you omit this space, older browsers will have trouble rendering the horizontal line, while if you miss the forward slash character and just use <hr> it is not valid in XHTML

Preserve Formatting

Sometimes, you want your text to follow the exact format of how it is written in the HTML document. In these cases, you can use the preformatted tag <pre>.

Any text between the opening <pre> tag and the closing </pre> tag will preserve the formatting of the source document.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Preserve Formatting Example</title>
</head>
<body>
<pre>
function testFunction( strText ){
alert (strText)
}
</pre>
</body>
</html>
```

This will produce the following result:

```
function testFunction( strText ){
alert (strText)
}
```

Try using the same code without keeping it inside **<pre>...</pre>** tags

HTML element

An **HTML element** is defined by a starting tag. If the element contains other content, it ends with a closing tag, where the element name is preceded by a forward slash as shown below with few tags:

Start Tag	Content	End Tag
	This is paragraph content.	
<h1>	This is heading content.	</h1>
	This is division content.	

So here ** .... ** is an HTML element, **<h1>...</h1>** is another HTML element. There are some HTML elements which don't need to be closed, such as **<img.../>**, **<hr />** and **
** elements. These are known as **void elements**.

HTML documents consists of a tree of these elements and they specify how HTML documents should be built, and what kind of content should be placed in what part of an HTML document.

HTML Tag vs. Element

An HTML element is defined by a starting tag. If the element contains other content, it ends with a closing tag.

For example, ** ** is starting tag of a paragraph and ** ** is closing tag of the same paragraph but ** This is paragraph ** is a paragraph element.

HTML – COLORS

Colors are very important to give a good look and feel to your website. You can specify colors on page level using <body> tag or you can set colors for individual tags using **bgcolor** attribute. The <body> tag has following attributes which can be used to set different colors:

- **bgcolor -** sets a color for the background of the page.
- **text -** sets a color for the body text.
- **alink -** sets a color for active links or selected links.
- **link -** sets a color for linked text.
- **vlink -** sets a color for visited links - that is, for linked text that you have already clicked on.

HTML Color Coding Methods

There are following three different methods to set colors in your web page:

- **Color names -** You can specify color names directly like green, blue or red.
- **Hex codes -** A six-digit code representing the amount of red, green, and blue that makes up the color.
- **Color decimal or percentage values -** This value is specified using the rgb() property.

Now we will see these coloring schemes one by one.

HTML Colors - Color Names

You can specify direct a color name to set text or background color. W3C has listed 16 basic color names that will validate with an HTML validator but there are over 200 different color names supported by major browsers.

HTML Standard 16 Colors

Here is the list of W3C Standard 16 Colors names and it is recommended to use them.

Black	Gray	Silver	White
Yellow	Lime	Aqua	Fuchsia
Red	Green	Blue	Purple
Maroon	Olive	Navy	Teal

Example

Here are the examples to set background of an HTML tag by color name:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Colors by Name</title>
</head>
<body text="blue" bgcolor="green">
<p>Use different color names for for body and table and see the result.</p>
<table bgcolor="black">
<tr>
<td>
<font color="white">This text will appear white on black background.</font>
</td>
</tr>
</table>
</body>
</html>
```

HTML Colors - Hex Codes

A hexadecimal is a 6 digit representation of a color. The first two digits(RR) represent a red value, the next two are a green value(GG), and the last are the blue value(BB).

A hexadecimal value can be taken from any graphics software like Adobe Photoshop, Paintshop Pro or MS Paint.

Each hexadecimal code will be preceded by a pound or hash sign #. Following is a list of few colors using hexadecimal notation.

Color HEX
#000000
#FF0000
#00FF00
#0000FF
#FFFF00
#00FFFF
#FF00FF
#C0C0C0
#FFFFFF

HTML Colors - RGB Values

This color value is specified using the **rgb( )** property. This property takes three values, one each for red, green, and blue. The value can be an integer between 0 and 255 or a percentage.

Note: All the browsers does not support rgb() property of color so it is recommended not to use it.

Following is a list to show few colors using RGB values.

Color RGB
rgb(0,0,0)
rgb(255,0,0)
rgb(0,255,0)
rgb(0,0,255)

rgb(255,255,0)

rgb(0,255,255)

rgb(255,0,255)

rgb(192,192,192)

rgb(255,255,255)

Example

Here are the examples to set background of an HTML tag by color code using rgb() values:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Colors by RGB code</title>
</head>
<body text="rgb(0,0,255)" bgcolor="rgb(0,255,0)">
<p>Use different color code for for body and table and see the result.</p>
<table bgcolor="rgb(0,0,0)">
<tr>
<td>
<font color="rgb(255,255,255)">This text will appear white on black background.</font>
</td>
</tr>
</table>
</body>
</html>
```

HTML – ATTRIBUTES

We have seen few HTML tags and their usage like heading tags **<h1>, <h2>,** paragraph tag **<p>** and other tags. We used them so far in their simplest form, but most of the HTML tags can also have attributes, which are extra bits of information.

An attribute is used to define the characteristics of an HTML element and is placed inside the element's opening tag. All attributes are made up of two parts: a **name** and a **value**:

- The **name** is the property you want to set. For example, the paragraph **<p>** element in the example carries an attribute whose name is **align**, which you can use to indicate the alignment of paragraph on the page.

- The **value** is what you want the value of the property to be set and always put within quotations. The below example shows three possible values of align attribute: **left, center** and **right**.

Attribute names and attribute values are case-insensitive. However, the World Wide Web Consortium (W3C) recommends lowercase attributes/attribute values in their HTML 4 recommendation.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Align Attribute Example</title>
</head>
<body>
<p align="left">This is left aligned</p>
<p align="center">This is center aligned</p>
<p align="right">This is right aligned</p>
</body>
</html>
```

This will display the following result:

This is left aligned

Core Attributes

The four core attributes that can be used on the majority of HTML elements (although not all) are:

- Id
- Title
- Class
- Style

The Id Attribute

The **id** attribute of an HTML tag can be used to uniquely identify any element within an HTML page. There are two primary reasons that you might want to use an id attribute on an element:

- If an element carries an id attribute as a unique identifier, it is possible to identify just that element and its content.
- If you have two elements of the same name within a Web page (or style sheet), you can use the id attribute to distinguish between elements that have the same name.

We will discuss style sheet in separate tutorial. For now, let's use the id attribute to distinguish between two paragraph elements as shown below.

Example

```
<p id="html">This para explains what is HTML</p>
<p id="css">This para explains what is Cascading Style Sheet</p>
```

The title Attribute

The **title** attribute gives a suggested title for the element. They syntax for the **title** attribute is similar as explained for **id** attribute:

The behavior of this attribute will depend upon the element that carries it, although it is often displayed as a tooltip when cursor comes over the element or while the element is loading.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>The title Attribute Example</title>
</head>
```

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

This will produce the following result:

Titled Heading Tag Example

Now try to bring your cursor over "Titled Heading Tag Example" and you will see that whatever title you used in your code is coming out as a tooltip of the cursor.

The class Attribute

The **class** attribute is used to associate an element with a style sheet, and specifies the class of element. You will learn more about the use of the class attribute when you will learn Cascading Style Sheet (CSS). So for now you can avoid it.

The value of the attribute may also be a space-separated list of class names. For example:

class="className1 className2 className3"

The style Attribute

The style attribute allows you to specify Cascading Style Sheet (CSS) rules within the element.

```
<!DOCTYPE html>
<html>
<head>
<title>The style Attribute</title>
</head>
<body>
<p style="font-family:arial; color:#FF0000;">Some text...</p>
</body>
</html>
```

This will produce the following result:

Some text...

At this point of time, we are not learning CSS, so just let's proceed without bothering much about CSS. Here, you need to understand what are HTML attributes and how they can be used while formatting content.

Internationalization Attributes

There are three internationalization attributes, which are available for most (although not all) XHTML elements.

- dir
- lang
- xml:lang

The dir Attribute

The **dir** attribute allows you to indicate to the browser about the direction in which the text should flow. The dir attribute can take one of two values, as you can see in the table that follows:

Value	Meaning
ltr	Left to right (the default value)
rtl	Right to left (for languages such as Hebrew or Arabic that are read right to left)

Example

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>English Language Page</title>
</head>
<body>
This page is using English Language
</body>
</html>
```

The xml:lang Attribute

The *xml:lang* attribute is the XHTML replacement for the *lang* attribute. The value of the*xml:lang* attribute should be an ISO-639 country code as mentioned in previous section.

Generic Attributes

Here's a table of some other attributes that are readily usable with many of the HTML tags.

Attribute	Options	Function
align	right, left, center	Horizontally aligns tags
valign	top, middle, bottom	Vertically aligns tags within an HTML element.
bgcolor	numeric, hexidecimal, RGB values	Places a background color behind an element
background	URL	Places a background image behind an element
id	User Defined	Names an element for use with Cascading Style Sheets.
class	User Defined	Classifies an element for use with Cascading Style Sheets.

HTML – LISTS

HTML offers web authors three ways for specifying lists of information. All lists must contain one or more list elements. Lists may contain:

- **<ul>** - An unordered list. This will list items using plain bullets.
- **<ol>** - An ordered list. This will use different schemes of numbers to list your items.
- **<dl>** - A definition list. This arranges your items in the same way as they are arranged in a dictionary.

HTML Unordered Lists

An unordered list is a collection of related items that have no special order or sequence. This list is created by using HTML **<ul>** tag. Each item in the list is marked with a bullet.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Unordered List</title>
</head>
<body>
<ul>
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ul>
</body>
</html>
```

This will produce the following result:

- Beetroot
- Ginger
- Potato
- Radish

The type Attribute

You can use **type** attribute for <ul> tag to specify the type of bullet you like. By default, it is a disc. Following are the possible options:

```
<ul type="square">
<ul type="disc">
<ul type="circle">
```

Example

Following is an example where we used <ul type="square">

```
<!DOCTYPE html>
<html>
<head>
```

```
<title>HTML Unordered List</title>
</head>
<body>
<ul type="square">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ul>
</body>
</html>
```

This will produce the following result:

- Beetroot
- Ginger
- Potato
- Radish

Example

Following is an example where we used <ul type="disc">:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Unordered List</title>
</head>
<body>
<ul type="disc">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
```

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

This will produce the following result:

- Beetroot
- Ginger
- Potato
- Radish

Example

Following is an example where we used <ul type="circle">:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Unordered List</title>
</head>
<body>
<ul type="circle">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ul>
</body>
</html>
```

This will produce the following result:

o Beetroot

o Ginger o

Potato o

Radish

HTML Ordered Lists

If you are required to put your items in a numbered list instead of bulleted, then HTML ordered list will be used. This list is created by using **<ol>** tag. The numbering starts at one and is incremented by one for each successive ordered list element tagged with <li>.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
<ol>
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

1. Beetroot
2. Ginger
3. Potato
4. Radish

The type Attribute

You can use **type** attribute for <ol> tag to specify the type of numbering you like. By default, it is a number. Following are the possible options: <ol type="1"> - Default-Case Numerals.

<ol type="I"> - Upper-Case Numerals.

<ol type="i"> - Lower-Case Numerals.

<ol type="a"> - Lower-Case Letters.

<ol type="A"> - Upper-Case Letters.

Example

Following is an example where we used <ol type="1">

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
<ol type="1">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

1. Beetroot
2. Ginger
3. Potato
4. Radish

Example

Following is an example where we used <ol type="I">

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
```

```
<body>
<ol type="I">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

I. Beetroot

II. Ginger

III. Potato

IV. Radish

Example

Following is an example where we used <ol type="i">

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
<ol type="i">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

i. Beetroot

ii. Ginger

iii. Potato

iv. Radish

Example

Following is an example where we used <ol type="A">

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
<ol type="A">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

A. Beetroot

B. Ginger

C. Potato

D. Radish

Example

Following is an example where we used <ol type="a">

```
<!DOCTYPE html>
<html>
```

```
<head>
<title>HTML Ordered List</title>
</head>
<body>
<ol type="a">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

a. Beetroot

b. Ginger

c. Potato

d. Radish

HTML Definition Lists

HTML and XHTML supports a list style which is called **definition lists** where entries are listed like in a dictionary or encyclopedia. The definition list is the ideal way to present a glossary, list of terms, or other name/value list.

Definition List makes use of following three tags.

- <dl> - Defines the start of the list
- <dt> - A term
- <dd> - Term definition
- </dl> - Defines the end of the list

Example

```
<!DOCTYPE html>
<html>
<head>
```

```
<title>HTML Definition List</title>
</head>
<body>
<dl>
<dt><b>HTML</b></dt>
<dd>This stands for Hyper Text Markup
Language</dd> <dt><b>HTTP</b></dt>
<dd>This stands for Hyper Text Transfer Protocol</dd>
</dl>
</body>
</html>
```

This will produce the following result:

HTML

This stands for Hyper Text Markup Language

HTTP

This stands for Hyper Text Transfer Protocol

POSSIBLE QUESTIONS

PART-B

1. What is HTML?
2. What is head tag?
3. What is list?
4. What is a hyper document?
5. What is use of <noscript>?

PART-C

1. Describe the basic tags used in HTML in detail. Create a Resume using HTML using all these basic tags. Explain in detail about all possible linking in HTML.
2. Elucidate about ordered lists in HTML with example HTML code.
3. Describe text formatting tags in HTML with syntax and example
4. Enumerate in detail about unordered lists in HTML with an example program.
5. Explain in detail about basic tag elements available in HTML and provide examples wherever necessary
6. Write in detail about definition lists with syntax and example.
7. Describe the structure of a HTML document and explain with example code.
8. What are nested lists in HTML. Explain in detail with an example code.
9. Write a HTML code to create a webpage with the following:

   (i) superscript (ii) heading (iii) bold (iv)italic (v) marquee (vi) paragraph

10. Describe in detail about various types of lists used in HTML with example

KARPAGAM ACADEMY OF HIGHER EDUCATION

COIMBATORE - 21

DEPARTMENT OF CS,CA & IT

CLASS : II B.Sc COMPUTER TECHNOLOGY

BATCH : 2017-2020

Part -A Online Examinations **(1 mark questions)**

SUBJECT: HTML Programming **SUBJECT CODE: 17CTU404A**

S.No	Question	opt 1	opt 2	opt 3	opt 4	ANSWER
1	HTML stands for_____	Hyper text Markup	Hyperlink Text markup	Hyper Text Markup	Hyper Text Mkarkedup	Hyperlink Text markup Language
2	HTML is known as_____	platform dependant	platform independent	place dependent	place indpendent	platform independent
3	_____ are used to markup HTML elements	HTML tags	HR tags	head tags	SGML tags	HTML tags
4	what is meant by meta data?	data from data	data about data	data about set	data from link	data about data
5	A _____element is used to define style information for single HTML	tilte	set	style	character	style
6	The_____element is used to specify which character set is	meta	link	style	title	meta
7	URL is abbreviated as_____	Uni Resource Location	Uniform Resource	Uniform Resource	Uniform Research	Uniform Resource Locater
8	How many levels of heading elements are in HTML	6	3	7	8	6
9	how many attributes are in HTML?	12	3	5	4	2
10	_____ tag are userd to break up sections of a document	line break	horizontal line	preserve	heading	horizontal line
11	the____tag creates a line from current position the document to the	 	<hr>	<b>	<pre>	<hr>

12	<pre> tag is used for _____	font color	alignment	formatting	links	formatting
13	_____ are very important to give good look and fel to the website	colors	images	font colors	fonts	colors
14	How many<body>tags are in attributes which is used to set	4	3	7	5	5
15	_____ is used to set a color for active links or for selective links	Vlink	link	Alink	text	Alink
16	_____ is used to set a color for visited link that is linked text	Vlink	Alink	link	text	Vlink
17	_____ is used to set a color for linked text	Vlink	Alink	link	text	link
18	_____ sets a color for the back-ground of the page	bg color	Alink	Vlink	text	bg color
19	_____ sets a color for the body text.	text	vlink	Alink	bgcolor	text
20	How many methods are there to set color in web page?_____	3	5	8	7	3
21	What are there methods to set color in web page ?_____	color name,color	color name,color decimal,bgcolor	color name,color	color font,color	color name,color decimal,hen codes
22	_____ can specify colors directly like green,blue,red.	color name	color decimal	font color	bgcolor	color name
23	A _____Digit code representing the amount of red, green and blue.	6	5	7	3	6
24	_____ is specified using the rbg property.	percentage values	percentage decimal	percentege method	percentage	percentage values
25	Color decimal is also known as _____	percentage values	percentage decimal	percentege method	percentage	percentage values
26	Hexa decimal code will proceded by _____	Sigma or hash sign	pound or hash sign	pound or euro	hash sign or	pound or hash sign
27	HTML property takes _____ one for red, green and blue.	5 values	3 values	2 values	4 values	3 values

28	rgb values can be an integer between _____	0 to 255 or %	0 to 256 or %	0 to 265 or %	0 to 275 or %	0 to 255 or %
29	All the browers does not support _____properties of color.	rgb	rcb	rby	rrb	rgb
30	_____ is used to define the characters of an HTML element.	attribute	links	font color	Vlink	attribute
31	How many categories are in core attributes ? _____	3	4	5	6	4
32	What are core attributes ? _____	id,title,class,style	id,calss,style,head	id,class,link,st	id,head,link,cl	id,title,class,style
33	_____ of HTML tag can be used to uniquely identify any	id attribute	class attribute	style attribute	title attribute	id attribute
34	The value is what you want to the value of the property to set always	" "	?	#	=	" "
35	_____ gives a suggested title for the element.	id attribute	title attribute	class attribute	style attribute	title attribute
36	_____ attribute allows you to specify css rules within the	style	id	head	font	style
37	css is abbreviated as _____.	cascading style sheet	cascading style script	cascading script style	control style	cascading style sheet
38	The _____is used to associate an element with a single	class attribute	id attribute	title attribute	head attribute	class attribute
39	How many type of list is there in HTML?_____.	2	3	4	5	3
40	What are list in HTML?_____	ordered, unordered,	ordered, preordered,	definition, unordered,	definition, nested,	ordered,unordered, definition
41	_____ offers web authors three ways for specifying list of	SGML	HTML	XML	HTTP	HTML
42	_____ will contain list of items using plain bullets.	ordered list	unordered list	definition list	nested kist	unordered list

43	An unordered list is a _____ of related	collection	set	order	unordered	collection
44	Each item in the list is marked with _____.	bullets	numeric	hash sign	pound	bullets
45	_____ were created by unordered list.	type attribute	id attribute	style attribute	core attribute	type attribute
46	_____ tag is used to create a unordered list.	<UL>	<OL>	<LI>	<DT>	<UL>
47	_____ tag is used to create a ordered list.	<UL>	<OL>	<LI>	<DT>	<OL>
48	Ordered list is used for the purpose of _____representation.	numeric	alphabet	symbols	heading	numeric
49	Unordered list is used for the purpose of _____	symbols and bullets	alphabet and numeric	numeric and	heading and	symbols and bullets
50	HTML supports a list style which is called as _____.	definition list	nested list	unordered list	ordered list	definition list
51	_____ list where entires are listed like a dictionary or	definition list	nested list	unordered list	ordered list	definition list
52	Defination list makes use of now many tags_____	8	3	5	4	3
53	A_____list is a idealed way to present a glossary list of the	defination	nested	ordered	unordered	definition
54	<DT> tag is used for __in defination list	style	links	heading	paragraph	heading
55	<DD> tag is used for _____ in defination list	style	links	heading	paragraph	paragraph
56	<l1> tag is used to define the list item	<OL>	<LL>	<LI>	<UL>	<LI>
57	<DT> tag is known as _____	defination transfer	defination term	definition task	definition text	defination term
58	<DD> tag is known as	defination data	defination term	definition device	definition disk	defination data

59	Give a code for inserting a square in<UL> tags	<UL type"="square>	<UL type"=square">	<UL type="squar	"<UL type=squar	<UL type="square">
60	Give a code for inserting alphabets in caps in the ordered	<OL Type ="A">	<"OL Type =A">	<OL Type "=A">	<"OL Type "=A>	<OL Type ="A">

UNIT-II

SYLLABUS

Links: Introduction: Relative Links, Absolute Links, Link Attributes, Using the ID Attribute to Link within a Document

A webpage can contain various links that take you directly to other pages and even specific parts of a given page. These links are known as hyperlinks.

Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images. Thus you can create hyperlinks using text or images available on a webpage.

- Use the **<a>** element to define a link
- Use the **href** attribute to define the link address
- Use the **target** attribute to define where to open the linked document
- Use the **<img>** element (inside <a>) to use an image as a link
- Use the **id** attribute (id="*value*") to define bookmarks in a page
- Use the **href** attribute (href="*#value*") to link to the bookmark

Linking Documents

A link is specified using HTML tag <a>. This tag is called **anchor tag** and anything between the opening <a> tag and the closing tag becomes part of the link and a user can click that part to reach to the linked document. Following is the simple syntax to use <a> tag.

```
<a href = "Document URL" ... attributes-list>Link Text</a>
```

Example

<html>

```
<head>
   <title>Hyperlink Example</title>
</head>
<body>
   <p>Click following link</p>
   <a href = "https://www.tutorialspoint.com">Tutorials Point</a>
</body>
</html>
```

The target Attribute

We have used target attribute in our previous example. This attribute is used to specify the location where linked document is opened. Following are the possible options −

Sr.No	Option	Description
1	_blank	Opens the linked document in a new window or tab.
2	_self	Opens the linked document in the same frame.
3	_parent	Opens the linked document in the parent frame.
4	_top	Opens the linked document in the full body of the window.
5	targetframe	Opens the linked document in a named targetframe.

Example

Try following example to understand basic difference in few options given for target attribute.

```
<html>
   <head>
```

```
    <title>Hyperlink Example</title>
    <base href =
  "https://www.tutorialspoint.com/"> </head>
  <body>
    <p>Click any of the following links</p>
    <a href = "/html/index.htm" target = "_blank">Opens in New</a> |
    <a href = "/html/index.htm" target = "_self">Opens in Self</a> |
    <a href = "/html/index.htm" target = "_parent">Opens in Parent</a> |
    <a href = "/html/index.htm" target = "_top">Opens in Body</a>
  </body>
</html>
```

HTML Links - Create a Bookmark

HTML bookmarks are used to allow readers to jump to specific parts of a Web page.

Bookmarks can be useful if your webpage is very long.

To make a bookmark, you must first create the bookmark, and then add a link to it. When the link is clicked, the page will scroll to the location with the bookmark.

Example

First, create a bookmark with the id attribute:

```
<h2 id="C4">Chapter 4</h2>
```

Then, add a link to the bookmark ("Jump to Chapter 4"), from within the same page:

```
<a href="#C4">Jump to Chapter 4</a>
```

Or, add a link to the bookmark ("Jump to Chapter 4"), from another page:

Example

```
<a href="html_demo.html#C4">Jump to Chapter 4</a>
```

```
<!DOCTYPE html>
```

```
<html>
<body>
<p><a href="#C4">Jump to Chapter 4</a></p>
<h2>Chapter 1</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 2</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 3</h2>
<p>This chapter explains ba bla bla</p>
<h2 id="C4">Chapter 4</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 5</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 6</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 7</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 8</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 9</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 10</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 11</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 12</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 13</h2>
```

```
<p>This chapter explains ba bla bla</p>
<h2>Chapter 14</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 15</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 16</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 17</h2>
<p>This chapter explains ba bla bla</p>
</body>
</html>
```

Linking to a Page Section

You can create a link to a particular section of a given webpage by using **name** attribute. This is a two-step process.

Note − The *name* attribute deprecated in HTML5. Do not use this attribute. Use *id* and *title* attribute instead.

First create a link to the place where you want to reach with-in a webpage and name it using <a...> tag as follows −

```
<h1>HTML Text Links <a name = "top"></a></h1>
```

Second step is to create a hyperlink to link the document and place where you want to reach −

```
<a href = "/html/html_text_links.htm#top">Go to the Top</a>
```

This will produce following link, where you can click on the link generated **Go to the Top** to reach to the top of the HTML Text Link tutorial.

Go to the Top

Local Links

The example above used an absolute URL (A full web address).

A local link (link to the same web site) is specified with a relative URL (without http://www....).

Example

```
<a href="html_images.asp">HTML Images</a>
```

HTML Link Colors

By default, a link will appear like this (in all browsers):

- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red

You can change the default colors, by using styles:

Example

```
<style>
a:link {
  color: green;
  background-color: transparent;
  text-decoration: none;
}
a:visited {
  color: pink;
  background-color: transparent;
  text-decoration: none;
}
a:hover {
  color: red;
  background-color: transparent;
  text-decoration: underline;
```

```
}
a:active {
  color: yellow;
  background-color: transparent;
  text-decoration: underline;
}
</style>
</head>
<body>
<p>You can change the default colors of links</p>
<a href="html_images.asp" target="_blank">HTML Images</a>
</body>
</html>
```

Setting Link Colors

You can set colors of your links, active links and visited links using **link**, **alink** and **vlink** attributes of <body> tag

Example

Save the following in test.htm and open it in any web browser to see how link, alink and vlink attributes work.

```
<html>
   <head>
   <title>Hyperlink Example</title>
   <base href =
  "https://www.tutorialspoint.com/"> </head>
  <body alink = "#54A250" link = "#040404" vlink = "#F40633">
   <p>Click following link</p>
   <a href = "/html/index.htm" target = "_blank" >HTML Tutorial</a>
```

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

This will produce the following result. Just check color of the link before clicking on it, next check its color when you activate it and when the link has been visited. Click following link

HTML Tutorial

Download Links

You can create text link to make your PDF, or DOC or ZIP files downloadable. This is very simple; you just need to give complete URL of the downloadable file as follows:

Example

```
<html>
<head>
<title>Hyperlink Example</title>
</head>
<body>
<a href="http://www.tutorialspoint.com/page.pdf">Download PDF File</a>
</body>
</html>
```

This will produce following link and will be used to download a file.

Download PDF File

ABSOLUTE LINK IN HTML

A link is an absolute link if the URL and file name can be found from anywhere on the Web, not just from a single Web site. An absolute link specifies a fully-qualified URL; the protocol must be present in addition to a domain name, and often a file name must be included as well.

Relative vs. Absolute Links

A link is an **absolute link** if the URL and file name can be found from anywhere on the Web, not just from a single Web site. An absolute link specifies a fully-qualified URL; the protocol must be present in addition to a domain name, and often a file name must be included as well.

Absolute Paths

- http://www.mysite.com
- http://www.mysite.com/graphics/image.png
- http://www.mysite.com/help/articles/how-do-i-set-up-a-webpage.html

example:

- Click here to visit CoffeeCup Software.
- You *must* use absolute paths when linking to another Website, but you can also use absolute paths within your own website.

A **relative link** specifies the name of the file to be linked to only as it is related to the current document.

Relative Paths

- index.html
- /graphics/image.png
- /help/articles/how-do-i-set-up-a-webpage.html

Example

Here

http://www.website.com domain had a subfolder called **pictures**. Inside the pictures folder is a file called **pictures.html**. The full path to this page would be:

"http://www.website.com/pictures/pictures.html"

Still with us? Good. Let's say in this pictures.html file, we have a link:

Difference between an absolute and a relative URL

An absolute URL contains more information than a relative URL does. Relative URLs are more convenient because they are shorter and often more portable. However, you can use them only to reference links on the same server as the page that contains them.

Linking with absolute URLs

An absolute URL typically takes the following form:

```
protocol://domain/path
```

The protocol is usually http://, but can also be https://, ftp://, gopher://, or file://. The domain is the name of the website. For example, the domain name of Indiana University's central web server is www.indiana.edu. The path includes directory and file information. You must use absolute URLs when referring to links on different servers.

Linking with relative URLs

Relative URLs can take a number of different forms. When referring to a file that occurs in the same directory as the referring page, a URL can be as simple as the name of the file. For example, if you want to create a link in your home page to the file foobar.html, which is in the same directory as your home page, you would use:

```
<a href="foobar.html">The Wonderful World of Foobar!</a>
```

If the file you want to link to is in a subdirectory of the referring page's directory, you need to enter only the directory information and the name of the file. So if foobar.html were in the foobar subdirectory of your www directory, you could refer to it from your home page by using:

```
<a href="foobar/foobar.html">The Wonderful World of Foobar!</a>
```

If the file you want to link to is in a higher directory than the referring page, use .., which means to go up a directory. For example, to link from foobar.html to home.html, which is in the directory above, you would use:

```
<a href="../home.html">Go back to my home page</a>
```

HTML Global Attributes

Attribute	Description
accesskey	Specifies a shortcut key to activate/focus an element
class	Specifies one or more classnames for an element (refers to a class in a style sheet)
contenteditable	Specifies whether the content of an element is editable or not
contextmenu	Specifies a context menu for an element. The context menu appears when a user right-clicks on the element
data-*	Used to store custom data private to the page or application
dir	Specifies the text direction for the content in an element
draggable	Specifies whether an element is draggable or not
dropzone	Specifies whether the dragged data is copied, moved, or linked, when dropped
hidden	Specifies that an element is not yet, or is no longer, relevant
id	Specifies a unique id for an element
lang	Specifies the language of the element's content
spellcheck	Specifies whether the element is to have its spelling and grammar checked or not
style	Specifies an inline CSS style for an element
tabindex	Specifies the tabbing order of an element
title	Specifies extra information about an element
translate	Specifies whether the content of an element should be translated or not

HTML Email Tag

HTML **<a>** tag provides you option to specify an email address to send an email. While using <a> tag as an email tag, you will use **mailto: email address** along with *href* attribute. Following is the syntax of using **mailto** instead of using http. Send Email

This code will generate the following link which you can use to send email.

Send Email

Now, if a user clicks this link, it launches one Email Client (like Lotus Notes, Outlook Express etc.) installed on your user's computer. There is another risk to use this option to send email because if user do not have email client installed on their computer then it would not be possible to send email.

POSSIBLE QUESTIONS

PART-B

1. What is a relative link?
2. What is head tag?
3. What is absolute link?
4. What is target attribute?
5. What are the values of target attribute?

PART-C

1. Explain in detail about link with an example program.
2. Write about the attributes of <a> tag.
3. What is link? Explain about absolute link with an example.
4. Explain about ID attribute to link within a document.
5. Write about the attributes of <a> tag with an example.
6. What is link? Explain about relative link with an example.
7. What are the various kinds of linking available in HTML. Explain with an example.
8. Explain about how to use styling links in a web page.

KARPAGAM ACADEMY OF HIGHER EDUCATION

COIMBATORE - 21

DEPARTMENT OF CS,CA & IT

CLASS : II B.Sc COMPUTER TECHNOLOGY

BATCH : 2017-2020

Part -A Online Examinations (1 mark questions)

SUBJECT: HTML Programming **SUBJECT CODE: 17CTU404A**

Questions	opt 1	opt 2	opt 3	opt 4	ANSWER
Which of the following are commonly found on web pages?	internet	hyperlinks	intranet	all of the above	hyperlinks
What is the correct syntax in HTML for creating a link on a webpage?	<LINK SRC= "mcqsets.html">	<BODY LINK = "mcqsets.html">	<A SRC = "mcqsets.html" >	< A HREF = "mcqsets.html">	< A HREF = "mcqsets.html">
Links have _____parts	1	2	3	4	3
The _____for the link must be between <a> and tag	list	combobox	label	radio button	label
The ____path specifies the entire directory structure	relative	absolute	file	network	absolute
The ____path specifies onnly the file name which is to be linked	relative	absolute	file	network	relative
_____tag is used to allow colors for links	color	link	linkcolor	linkclr	link
Active links are specified with _____ attribute	active	actlink	alink	link	alink
Visited links are specified with _____ attribute	visited	vstlink	link	vlink	vlink
If the image cannot be displayed then _____specifies an alternate text for an image.	text attribute	alt attribute	value attribute	caption attribute	alt attribute

UNIT-III

SYLLABUS

Images: Putting an Image on a Page, Using Images as Links, Putting an Image in the Background

Images are very important to beautify as well as to depict many complex concepts in simple way on your web page. This tutorial will take you through simple steps to use images in your web pages.

Insert Image

You can insert any image in your web page by using <img> tag. Following is the simple syntax to use this tag.

The <img> tag is an empty tag, which means that, it can contain only list of attributes and it has no closing tag.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Using Image in Webpage</title>
</head>
<body>
<p>Simple Image Insert</p>
<img src="test.png" alt="Test Image" />
</body>
</html>
```

You can use PNG, JPEG or GIF image file based on your comfort but make sure you specify correct image file name in src attribute. Image name is always case sensitive.

The alt attribute is a mandatory attribute which specifies an alternate text for an image, if the image cannot be displayed.

Attributes

Attribute	Value	Description
align	top bottom middle	Not supported in HTML5. Specifies the alignment of an image according to surrounding elements
alt	text	Specifies an alternate text for an image
border	pixels	Not supported in HTML5. Specifies the width of the border around an image
crossorigin	anonymous use-credentials	Allow images from third-party sites that allow cross-origin access to be used with canvas
height	pixels	Specifies the height of an image
hspace	pixels	Not supported in HTML5. Specifies the whitespace on left and right side of an image
ismap	ismap	Specifies an image as a server-side image-map
longdesc	URL	Specifies a URL to a detailed description of an image
sizes		Specifies image sizes for different page layouts

src	URL	Specifies the URL of an image
srcset	URL	Specifies the URL of the image to use in different situations
usemap	#mapname	Specifies an image as a client-side image-map
vspace	pixels	Not supported in HTML5. Specifies the whitespace on top and bottom of an image
width	pixels	Specifies the width of an image

Set Image Location

Usually we keep all the images in a separate directory. So let's keep HTML file test.htm in our home directory and create a subdirectory images inside the home directory where we will keep our image test.png.

Example

Assuming our image location is "image/test.png", try the following example:

```
<!DOCTYPE html>
<html>
<head>
<title>Using Image in Webpage</title>
</head>
<body>
<p>Simple Image Insert</p>
<img src="images/test.png" alt="Test Image" />
</body>
</html>
```

Set Image Width/Height

You can set image width and height based on your requirement using width and height attributes. You can specify width and height of the image in terms of either pixels or percentage of its actual size.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Set Image Width and Height</title>
</head>
<body>
<p>Setting image width and height</p>
<img src="test.png" alt="Test Image" width="150" height="100"/>
</body>
</html>
```

Set Image Border

By default, image will have a border around it, you can specify border thickness in terms of pixels using border attribute. A thickness of 0 means, no border around the picture.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Set Image Border</title>
</head>
<body>
<p>Setting image Border</p>
<img src="test.png" alt="Test Image" border="3"/>
</body>
</html>
```

Set Image Alignment

By default, image will align at the left side of the page, but you can use align attribute to set it in the center or right.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Set Image Alignment</title>
</head>
<body>
<p>Setting image Alignment</p>
<img src="test.png" alt="Test Image" border="3" align="right"/>
</body>
</html>
```

HTML – IMAGE LINKS

We have seen how to create hypertext link using text and we also learnt how to use images in our webpages. Now, we will learn how to use images to create hyperlinks.

Example

It's simple to use an image as hyperlink. We just need to use an image inside hyperlink at the place of text as shown below:

```
<!DOCTYPE html>
<html>
<head>
<title>Image Hyperlink Example</title>
</head>
<body>
<p>Click following link</p>
<a href="http://www.tutorialspoint.com" target="_self">
<img src="/images/logo.png" alt="Tutorials Point"
border="0"/> </a>
```

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

Mouse-Sensitive Images

The HTML and XHTML standards provides a feature that lets you embed many different links inside a single image. You can create different links on the single image based on different coordinates available on the image. Once different links are attached to different coordinates, we can click different parts of the image to open target documents. Such mouse-sensitive images are known as image maps. There are two ways to create image maps:

- **Server-side image maps -** This is enabled by the **ismap** attribute of the <img> tag and requires access to a server and related image-map processing applications.
- **Client-side image maps -** This is created with the **usemap** attribute of the <img> tag, along with corresponding <map> and <area> tags.

Server-Side Image Maps

Here you simply put your image inside a hyper link and use ismap attribute which makes it special image and when the user clicks some place within the image, the browser passes the coordinates of the mouse pointer along with the URL specified in the <a> tag to the web server. The server uses the mouse-pointer coordinates to determine which document to deliver back to the browser.

When ismap is used, the href attribute of the containing <a> tag must contain the URL of a server application like a cgi or PHP script etc. to process the incoming request based on the passed coordinates.

The coordinates of the mouse position are screen pixels counted from the upper-left corner of the image, beginning with (0,0). The coordinates, preceded by a question mark, are added to the end of the URL.

```
<!DOCTYPE html>
<html>
<head>
```

```
<title>ISMAP Hyperlink Example</title>
</head>
<body>
<p>Click following link</p>
<a href="/cgi-bin/ismap.cgi" target="_self">
<img ismap src="/images/logo.png" alt="Tutorials Point" border="0"/>
</a>
</body>
</html>
```

Then the browser sends the following search parameters to the web server which can be processed by ismap.cgi script or map file and you can link whatever documents you like to these coordinates:

/cgi-bin/ismap.cgi?20,30

This way you can assign different links to different coordinates of the image and when those coordinates are clicked, you can open corresponding linked document. To learn more about ismap attribute, you can check How to use Image ismap?

Note: You will learn CGI programming when you will study Perl programming. You can write your script to process these passed coordinates using PHP or any other script as well. For now, let's concentrate on learning HTML and later you can revisit this section.

Client-Side Image Maps

Client side image maps are enabled by the usemap attribute of the <img /> tag and defined by special <map> and <area> extension tags.

The image that is going to form the map is inserted into the page using the <img /> tag as a normal image, except it carries an extra attribute called usemap. The value of the usemap attribute is the value which will be used in a <map> tag to link map and image tags. The <map> along with <area> tags define all the image coordinates and corresponding links.

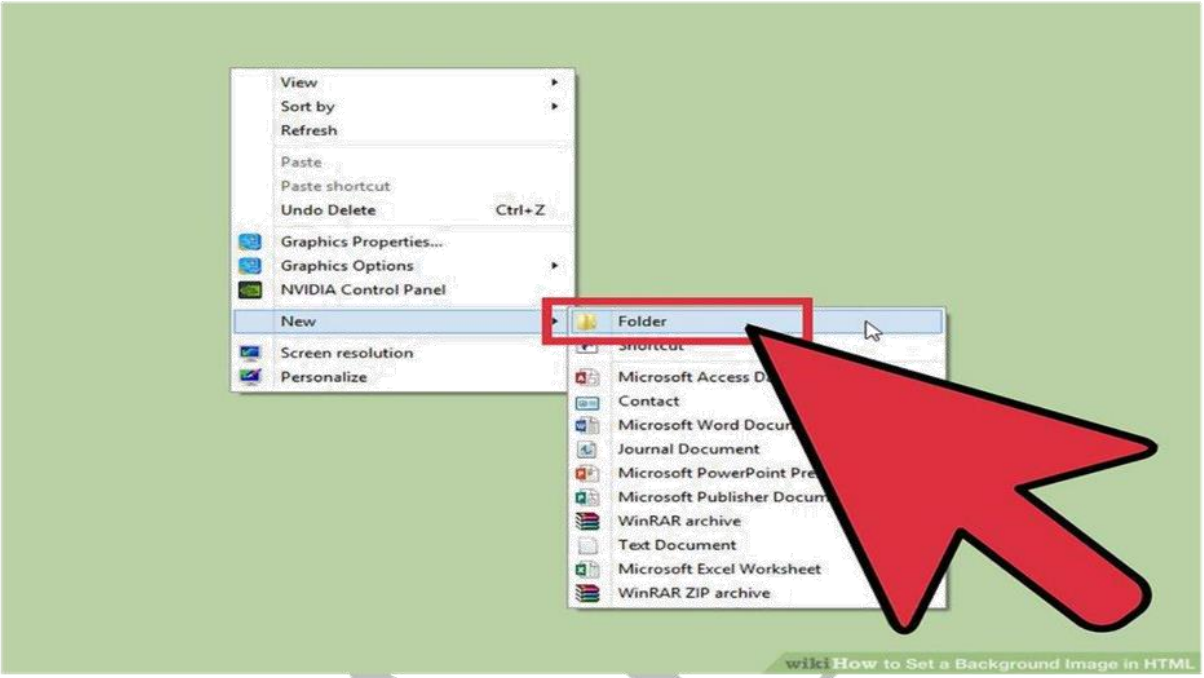
The <area> tag inside the map tag, specifies the shape and the coordinates to define the boundaries of each clickable hotspot available on the image. Here's an example from the image map:

```
<html>
<head>
<title>USEMAP Hyperlink Example</title>
</head>
<body>
<p>Search and click the hotspot</p>
<img src=/images/html.gif alt="HTML Map" border="0" usemap="#html"/>
<!-- Create Mappings -->
<map name="html">
<area shape="circle"
coords="80,80,20" href="/css/index.htm" alt="CSS Link" target="_self" />
<area shape="rect"
coords="5,5,40,40" alt="jQuery Link" href="/jquery/index.htm" target="_self" />
</map>
</body>
```

Add a Background Image to a Custom HTML

If you want to add an image to a web page, all you need is HTML. If you'd like to set an image as a background to a web page, you'll need both HTML and CSS. HTML stands for Hypertext Markup Language and is code that tells a browser what to show on a web page.[1] CSS stands for Cascading Style Sheets and is used to change the appearance and layout of a web page.[2] You'll need a background image that you'd like to use for your web page.

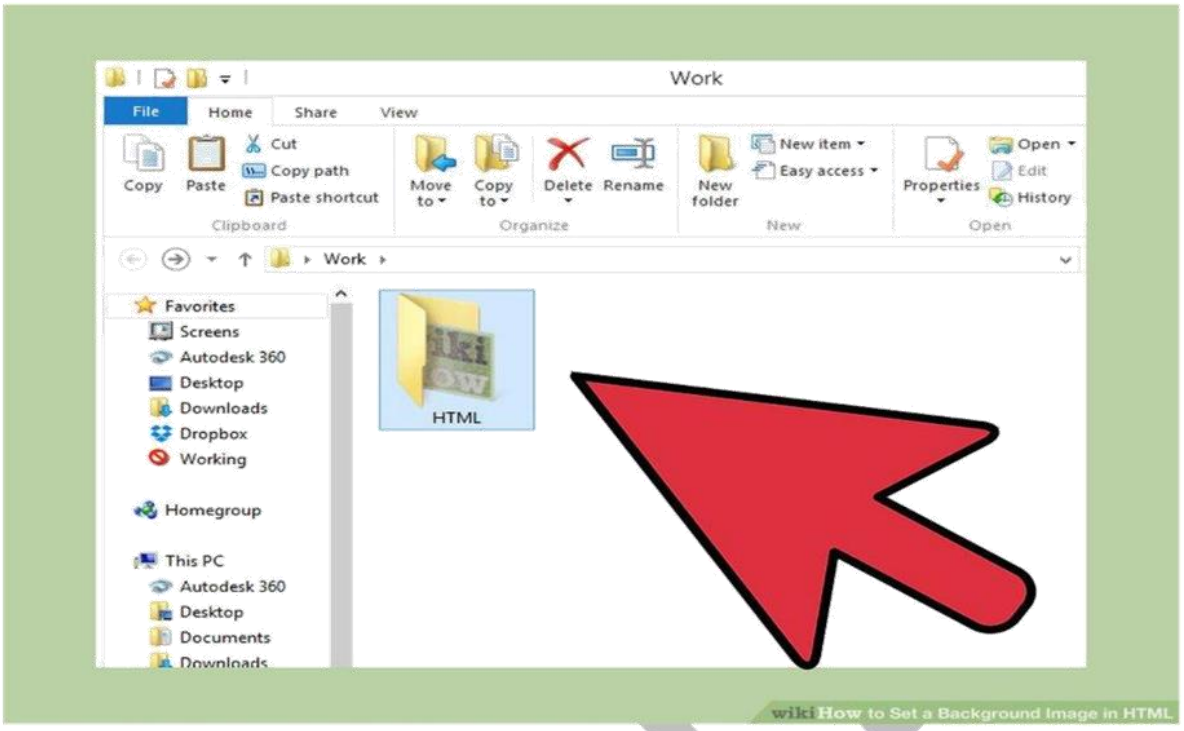
Setting Up Your Files



Create a folder to hold your HTML file and background image.

On your computer, create and name a folder that you can easily find later.

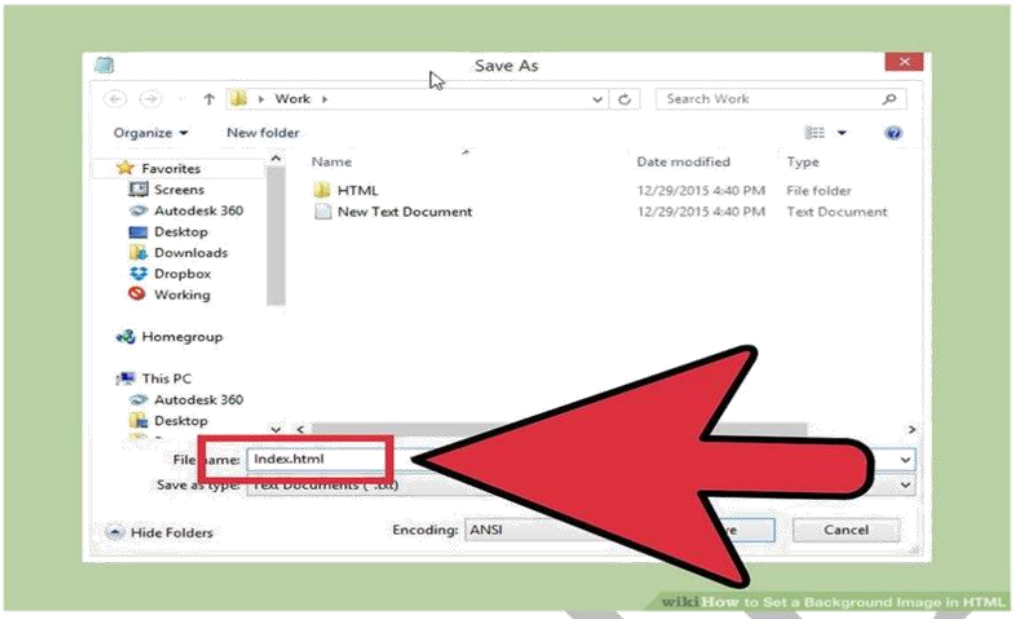
You can name the folder anything you like, but when working with HTML, it's best to get in the habit of naming files and folders with short, single word names.



Put the background image into the HTML folder. Put the image you'd like to use as background into the HTML folder.

If you aren't too concerned with ensuring your website will run well on older devices with slower internet connections, you should be safe in using a higher resolution image as your background. Simple images with light, repetitive patterns are also a good choice when deciding on a background image so that you can read any text on top of it.

If you don't have an image, you can download a free background image. If you download an image, put it in the HTML folder you created.



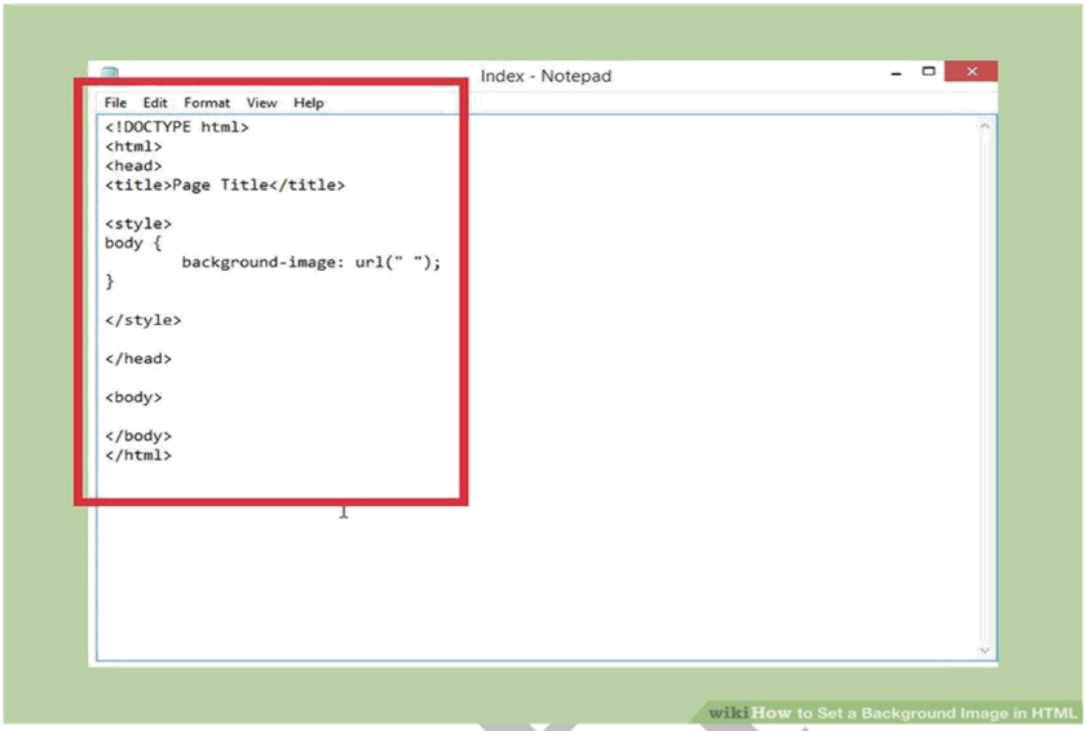
Create an HTML file. Open a text editor, and then create a new file. Save the file as index.html.

You can use any text editor you want, even the system text editors provided by Windows, Notepad, and Mac OS X, TextEdit.

If you want to use a text editor intended for working with HTML, click here to download Atom, a text editor that works on Windows, Mac OS X, and Linux operating systems.

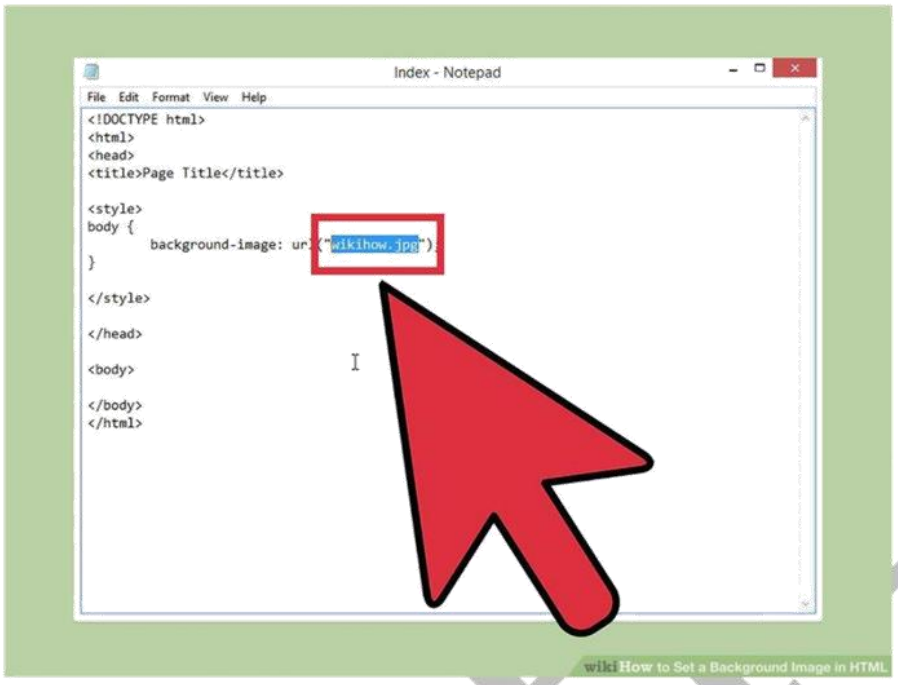
If you're using TextEdit, before starting to write the HTML file, click the Format menu, and then click Make Plain Text. This setting will make sure the HTML file loads properly in a web browser.

Word processors, such as Microsoft Word, are not great for writing HTML, because they add invisible characters and formatting that can break an HTML file so that it doesn't display correctly in a web browser.



Copy and paste the standard HTML code. Select and copy the HTML code below, and then paste it into your open index.html file.

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
 <style>
body {
      background-image: url(" ");
}
 </style>
 </head>
 <body>
 </body>
</html>
```


Index - Notepad
File Edit Format View Help
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
<style>
body {
background-image: url("wikihow.jpg");
}
</style>
</head>
<body>
</body>
</html>
wikiHow to Set a Background Image in HTML


kiHpw\Desktop\Work\HTML\Index.html
Hello World !!
wikiHow to Set a Background Image in HTML

POSSIBLE QUESTIONS

PART-B

1. How to set the width and height of image size?
2. What is the use of alt?
3. What is src attribute?
4. What are the attributes of <img> tag?
5. Define <img> tag.

PART-C

1. Elaborate in detail about server side image map with an example.
2. Explain about the different steps to insert image in the background page.
3. List out any five types of attributes used in the <img> tag and explain it.
4. Write a HTML program to insert an image in the table.
5. Elaborate in detail about client side image map with an example.
6. Explain about the different steps to insert image in the background page.
7. Discuss about the two ways of image maps to create a link with suitable example.

KARPAGAM ACADEMY OF HIGHER EDUCATION

COIMBATORE - 21

DEPARTMENT OF CS,CA & IT

CLASS : II B.Sc COMPUTER TECHNOLOGY

BATCH : 2017-2019

Part -A Online Examinations **(1 mark questions)**

SUBJECT: HTML Programming **SUBJECT CODE: 17CTU404A**

S.No	QUESTION	OPTION 1	OPTION 2	OPTION 3	OPTION 4	ANSWER
1	Images in GIF format is commonly used in	Image format	Web pages	PNG images	obtaining images	web pages
2	To place an image in an HTML document use the	<Title>	<Body>	<Img>	 	<img>
3	The _____attributes specifies the source of the image using a URL	ID	SVC	Style	Title	SVC
4	The _____attribute is the perphaps the most important because it provides alternate text	alt	id	SVC	title	alt
5	In recent browser _____text also displays as a tppl tip when the cursor passes over the image	alt	id	SVC	tltle	alt
6	The _____and _____attributes also be used to resize images	Height,width	SVC,URL	KB OR MB	Aspect ration	height and width

7	The _____attributes determines an images position relative to text flow and other content	id	svc	align	title	align
8	The _____and _____ attributes creates harizontal and vertical space around the images	pixels	vspace,hspace	id,img	img,br	vspace,hspace
9	Images may also be used as background images for html documents by using the _____attributes	style	title	background	href	background
10	The _____elements can be placed within the<a> element to create graphic hyperlink	<p>	<hi>		<img>	<img>
11	A nonlinked images will not display a border unless the _____to the desired width	border	pixels	align	PNG	border
12	Images can be used to the create multiple links in a _____	single image	double image	bg image	image source	single image
13	Background color by using the tag called_____	BG Color	 	<HTML>	<head>	BG Color
14	To define an image as an image map use the _____attributes	<map>	<object>	usemap	imagemap	usemap
15	The image format are _____	JPEG,PNG, APNG	JPEG,GIF,PNG	AVI,CSS, DOC	EXE,HTML, MIDI	JPEG,GIF,PNG
16	_____ are used in the ONG or GIF	smallest dimension	height and width	max width	C SS image scale	smallest dimension

17	_____attributes is used to control the background of an HTML element	<bg color>	<HTML>	href	id	BG Color
18	_____is described mathematically as a set of curves	vector image	GIF	moving images	JPEG compression	vector image
19	Image compression depends on the _____	EXE,HTML, MIDI	File format	image file format	img,br	image file format
20	Complex background image tend to be _____.	good design	poor design	bgcolor	web page	poor design
21	You can give space on both sides of the image using the tags called_____and _____.	pixels	id.img	img.br	vspace and nepace	vspace and nepace
22	We can change the height and width of the image in terms of _____.	pixels	title	layout	webpages	pixels
23	To wrap the text around image we use the tag called _____.	align	srcset	wemap	vspace	align
24	_____is an empty element and it used to insert and incrisible region.	cheek box	force layout	<hidden>	browser	force layout
25	The _____attributes may also be set to provide adivsory text about what the image is.	<body>	<title>	<img>	 	<title>
26	The <figcaption> tag defines a caption for a _____element.	<tagname>	<figure>	start tag	content	<figure>

27	The background color set a _____ for the entire document.	page color	solid color	bgcolor attribute	background color property	solid color
28	The background color of HTML page is_____.	blue	green	white	black	white
29	BGcolor is the _____.	HTML attribute	web address	default funtionality	attribute	HTML attribute
30	_____sets whether the background image is forced or scrool with rest of the page.	background attachment	form attachment	input accept attachment	attachment property.	background attachment
31	_____are very important to give good look and feel to website.	color	image	design	background	color
32	_____sets a color for linked list.	Alink	link	Vlink	text	link
33	_____sets a color for active link.	Alink	link	Vlink	text	Alink
34	_____set a color for body text.	Alink	link	Vlink	text	text
35	_____set a color for a visited linkes.	Alink	link	Vlink	text	Vlink

UNIT-IV

SYLLABUS

Creating: Table, Table Headers, Captions, Spanning Multiple Columns, Styling Table

The HTML tables allow web authors to arrange data like text, images, links, other tables, etc. into rows and columns of cells.

The HTML tables are created using the **<table>** tag in which the **<tr>** tag is used to create table rows and **<td>** tag is used to create data cells.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Tables</title>
</head>
<body>
<table border="1">
<tr>
<td>Row 1, Column 1</td>
<td>Row 1, Column 2</td>
</tr>
<tr>
<td>Row 2, Column 1</td>
<td>Row 2, Column 2</td>
</tr>
</table>
</body>
</html>
```

This will produce the following result:
Row 1, Column 1 Row 1, Column 2
Row 2, Column 1 Row 2, Column 2

Table Heading

Table heading can be defined using **<th>** tag. This tag will be put to replace <td> tag, which is used to represent actual data cell. Normally you will put your top row as table heading as shown below, otherwise you can use <th> element in any row.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Header</title>
</head>
<body>
<table border="1">
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
<tr>
<td>Ramesh Raman</td>
<td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
</tr>
</table>
```

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

This will produce the following result:

Name	Salary
Ramesh Raman	5000
Shabbir Hussein	7000

Cellpadding and Cellspacing Attributes

There are two attributes called *cellpadding* and *cellspacing* which you will use to adjust the white space in your table cells. The cellspacing attribute defines the width of the border, while cellpadding represents the distance between cell borders and the content within a cell.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Cellpadding</title>
</head>
<body>
<table border="1" cellpadding="5" cellspacing="5">
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
<tr>
<td>Ramesh Raman</td>
<td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
```

```
</tr>
</table>
</body>
</html>
```

This will produce the following result:

Name	Salary
Ramesh Raman	5000
Shabbir Hussein	7000

Colspan and Rowspan Attributes

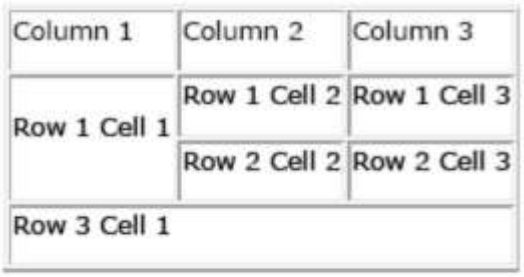
You will use **colspan** attribute if you want to merge two or more columns into a single column. Similar way you will use **rowspan** if you want to merge two or more rows.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Colspan/Rowspan</title>
</head>
<body>
<table border="1">
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
<tr><td rowspan="2">Row 1 Cell 1</td><td>Row 1 Cell 2</td><td>Row 1
Cell 3</td></tr>
<tr><td>Row 2 Cell 2</td><td>Row 2 Cell 3</td></tr>
<tr><td colspan="3">Row 3 Cell 1</td></tr>
</table>
</body>
```

</html>

This will produce the following result:



Tables Backgrounds

You can set table background using one of the following two ways:

- bgcolor attribute - You can set background color for whole table or just for one cell.
- background attribute - You can set background image for whole table or just for one cell.

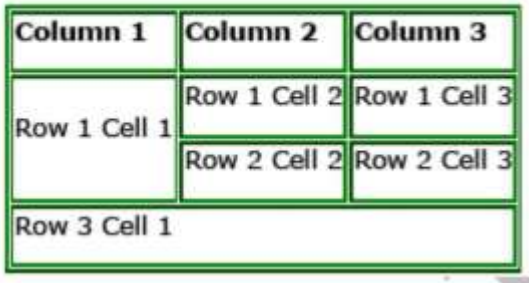
You can also set border color also using **bordercolor** attribute.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Background</title>
</head>
<body>
<table border="1" bordercolor="green" bgcolor="yellow">
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
<tr><td rowspan="2">Row 1 Cell 1</td><td>Row 1 Cell 2</td><td>Row 1
Cell 3</td></tr>
```

```
<tr><td>Row 2 Cell 2</td><td>Row 2 Cell 3</td></tr>
<tr><td colspan="3">Row 3 Cell 1</td></tr>
</table>
</body>
</html>
```

This will produce the following result:



Here is an example of using background attribute. Here we will use an image available in /images directory.

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Background</title>
</head>
<body>
<table border="1" bordercolor="green"
background="/images/test.png"> <tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
```

```
<tr><td rowspan="2">Row 1 Cell 1</td><td>Row 1 Cell 2</td><td>Row 1
Cell 3</td></tr>
<tr><td>Row 2 Cell 2</td><td>Row 2 Cell 3</td></tr>
<tr><td colspan="3">Row 3 Cell 1</td></tr>
</table>
</body>
</html>
```

This will produce the following result. Here background image did not apply to table's header.

Column 1	Column 2	Column 3
Row 1 Cell 1	Row 1 Cell 2	Row 1 Cell 3
	Row 2 Cell 2	Row 2 Cell 3
Row 3 Cell 1		

Table Height and Width

You can set a table width and height using **width** and **height** attributes. You can specify table width or height in terms of pixels or in terms of percentage of available screen area.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Width/Height</title>
</head>
<body>
<table border="1" width="400" height="150">
<tr>
<td>Row 1, Column 1</td>
<td>Row 1, Column 2</td>
</tr>
```

```
<tr>
<td>Row 2, Column 1</td>
<td>Row 2, Column 2</td>
</tr>
</table>
</body>
</html>
```

This will produce the following result:

Row 1, Column 1	Row 1, Column 2
Row 2, Column 1	Row 2, Column 2

Table Caption

The **caption** tag will serve as a title or explanation for the table and it shows up at the top of the table. This tag is deprecated in newer version of HTML/XHTML.

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table Caption</title>
</head>
<body>
<table border="1" width="100%">
<caption>This is the caption</caption>
<tr>
<td>row 1, column 1</td><td>row 1, column 2</td>
</tr>
<tr>
<td>row 2, column 1</td><td>row 2, column 2</td>
</tr>
</table>
```

</body>

</html>

This will produce the following result:

This is the caption	
row 1, column 1	row 1, column 2
row 2, column 1	row 2, column 2

Table Header, Body, and Footer

Tables can be divided into three portions: a header, a body, and a foot. The head and foot are rather similar to headers and footers in a word-processed document that remain the same for every page, while the body is the main content holder of the table. The three elements for separating the head, body, and foot of a table are:

- <thead> - to create a separate table header.
- <tbody> - to indicate the main body of the table.
- <tfoot> - to create a separate table footer.

A table may contain several <tbody> elements to indicate different pages or groups of data. But it is notable that <thead> and <tfoot> tags should appear before <tbody>

Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Table</title>
</head>
<body>
<table border="1" width="100%">
<thead>
<tr>
<td colspan="4">This is the head of the table</td>
```

```
</tr>
</thead>
<tfoot>
<tr>
<td colspan="4">This is the foot of the table</td>
</tr>
</tfoot>
<tbody>
<tr>
<td>Cell 1</td>
<td>Cell 2</td>
<td>Cell 3</td>
<td>Cell 4</td>
</tr>
</tbody>
</table>
</body>
</html>
```

This will produce the following result:

This is the head of the table			
This is the foot of the table			
Cell 1	Cell 2	Cell 3	Cell 4

Nested Tables

You can use one table inside another table. Not only tables you can use almost all the tags inside table data tag <td>.

Example

Following is the example of using another table and other tags inside a table cell.

```
<!DOCTYPE html>
<html>
```

```
<head>
<title>HTML Table</title>
</head>
<body>
<table border="1" width="100%">
<tr>
<td>
<table border="1" width="100%">
<tr>
<th>Name</th>
<th>Salary</th>
</tr>
<tr>
<td>Ramesh Raman</td>
<td>5000</td>
</tr>
<tr>
<td>Shabbir Hussein</td>
<td>7000</td>
</tr>
</table>
</td>
</tr>
</table>
</body>
</html>
```

This will produce the following result:

Name	Salary
Ramesh Raman	5000
Shabbir Hussein	7000

Styling Table

Styling an HTML table isn't the most glamourous job in the world, but sometimes we have to do it

```
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
   border: 1px solid black;
   border-collapse: collapse;
}
th, td {
   padding: 5px;
   text-align: left;
}
table#t01 {
   width: 100%;
   background-color: #f1f1c1;
}
</style>
</head>
<body>

<table style="width:100%">
  <tr>
```

```
  <th>Firstname</th>
  <th>Lastname</th>
  <th>Age</th>
 </tr>
 <tr>
  <td>Jill</td>
  <td>Smith</td>
  <td>50</td>
 </tr>
 <tr>
  <td>Eve</td>
  <td>Jackson</td>
  <td>94</td>
 </tr>
 <tr>
  <td>John</td>
  <td>Doe</td>
  <td>80</td>
 </tr>
</table>
<br>

<table id="t01">
 <tr>
  <th>Firstname</th>
  <th>Lastname</th>
  <th>Age</th>
 </tr>
 <tr>
  <td>Jill</td>
```

```
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
  <tr>
    <td>John</td>
    <td>Doe</td>
    <td>80</td>
  </tr>
</table>
</body>
</html>
```

OUTPUT:

Firstname	**Lastname**	**Age**
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

Firstname	**Lastname**	**Age**
Jill	Smith	50
Eve	Jackson	94
John	Doe	80

POSSIBLE QUESTIONS

PART-B

1. Write the syntax for creating the table.
2. What is <thead>tag?
3. Write syntax for creating table.
4. Write the syntax for row span.
5. What is tfoot?

PART-C

1. What are all the tags used in creating a table?
2. Create a table for staffs' salary package and perform some manipulations in it accordingly.
3. Illustrate the creation and manipulation of table with examples accordingly
4. Explain about styling table.
5. Describe the process of dividing the table into rows and columns.
6. Write a program to create a table using HTML which consists of columns for Roll No., Student's name and grade.
7. Explain about creating a table header with a program.
8. Explain in detail about spanning multiple columns.

KARPAGAM ACADEMY OF HIGHER EDUCATION

COIMBATORE - 21

DEPARTMENT OF CS,CA & IT

CLASS : II B.Sc COMPUTER TECHNOLOGY

BATCH : 2017-2020

Part -A Online Examinations (1 mark questions)

SUBJECT: HTML Programming SUBJECT CODE: 17CTU404A

Question	opt 1	opt 2	opt 3	opt 4	ANSWER
The HTML table allow	text,image,links.	image,text,links.	links	text,links,image	text,image,links.
The HTML table are created by using the _____tag.	<thread>	<caption>.	<table>.	<sub>	<table>
._____tag is used to create table rows.	<th>.	<tr>.	<td>.	<table>	<tr>
.If the table content is ambiguous or has	id	script	scope.	style	scope
Table can be devided into _____portions .	two.	one.	seven	three	three
What are the three main parts of a table?.	rows,columns,cells.	header,body,footer	columns,rows,cells	footer,header,body	header,body,footer
_____using to create a separate table header.	<thead>.	<th>.	<td>.	<tr>	<thead>

_____using to indicate the main body of the table.	<table>.	<thead>.	<tbody>.	< tfoot>	<tbody>
._____using to create a separate table footer.	<table>.	<thead>.	<tbody>.	<tfoot>	<tfoot>
A table may be contain a several _____element to indicate different pages or Groups of data.	<table>	<thead>.	<tbody>.	<tfoot>	<tbody>
An HTML table contain a set of _____	rows and columns	tags.	cells.	attributes	rows and columns
Each rows consist of one or more_____	tables	co lumns	cells.	tags	cells
Header information table in a table is defined with the _____tag.	<th>.	<tr>.	<td>.	<table>	<th>
The <th> elements are contained within a _____element.	<th>.	<tr>.	<td>.	<table>	<tr>

Most_____make <th> cells content centered and bold.	web pages	table.	attributes	browser	browser
Use the HTML_____ element to define a table.	<table>	<tr>	<td>	<th>	<table>
Use the HTML _____ element to define a table row.	<table>	<tr>	<td>	<th>	<tr>
UsetheHTML _____ elementtodefineatabledata	<table>	<tr>	<td>	<th>	<td>
UsetheHTML _____ elementtodefineatableheading	<table>	<tr>	<td>	<th>	<th>
The _____ property sets whether the table borders should be collapsed into a single border	coloum-collapse	row-collapse	both a and b	border-collapse	border-collapse
Usethe _____propertytodefineaborder.	tableborder	CSSborder	border	header	CSSborder

Thetechniquewe'rego ingtouseisexplainedin detailat _____	CSS tricks	query	explain	noneofthese	CSS tricks
Weusedthe _____ selectortopickoutthet ablebodyrowswhichs houldreceivethebackg roundcolor.	odd	even	bothaandb	noneofthese	even
Wehaveusedthe_____ selectortoidentifythef ooterrowsthatshouldr eceivethebackground color.	odd	even	bothaandb	noneofthese	odd
Itwashorrendously tedious sincethe elementhadtobeadde dtoeachandeveryTabl ecell.	<body>	<p>	<dt>	<font>	<font>
We can clean up that table HTML, add a single class to the table element, and control all of our table's fontstyles with a single _____	CSS tricks	attribute	constraints	CSSruleset	CSSruleset

Words like _____ can be used to target every other child element.	odd	even	oddoreven	none of these	oddoreven
Next,create a new file called _____and save it in the same directory as your other files.	font.css	stylesheet	style.css	noneofthese	style.css
_____	hidenting	letter-spacing	defaultspacing	noneofthese	letter-spacing
defines a table	<table>	<caption>	<style>	none of these	<caption>
The <caption> tag must be inserted immediately after the _____tag.	<caption>	<head>	<table>	<title>	<table>
The css properties _____and _____can be used to align and place the caption.	text-align,caption-side	caption-side,text-align	align-text,side-caption	both a&b	both a&b
Header information in a table is defined with the _____tag.	<td>	.<th>	</td>	<tr>	<th>

The caption element can only be used once per table and must immediately follow the table _____tag.	continue	start	end	paused	start
The _____end tag may always be safely omitted.	TFOOT	THEAD	TBODY	TITLE	TBODY
The _____tag is not supported in HTML5.	<head>	<title>	<body>		
The _____tag is a phrase tag. It defines a piece of computer code.			<code>	<samp>	<code>
The _____tag defines a important text.	<code>		<var>	<kbd>	
The _____tag defines a variable.	<samp>	<kbd>	<var>		<var>
The _____tag defines a sample output from a computer program.	<code>	<samp>			<samp>

CLASS: II BSC CT **COURSE NAME: HTML**
PROGRAMMING COURSE CODE: 17CTU404A **UNIT: V (FORMS)**
BATCH-2017-2020

UNIT-V

SYLLABUS

Forms: Basic Input and Attributes, Other Kinds of Inputs, Styling forms with CSS, Where to Go from Here

HTML Forms are required, when you want to collect some data from the site visitor. For example, during user registration you would like to collect information such as name, email address, credit card, etc.

A form will take input from the site visitor and then will post it to a back-end application such as CGI, ASP Script or PHP script etc. The back-end application will perform required processing on the passed data based on defined business logic inside the application.

There are various form elements available like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.

The HTML **<form>** tag is used to create an HTML form and it has following syntax:

```
<form action="Script URL" method="GET|POST">
form elements like input, textarea etc.
</form>
```

Form Attributes

Apart from common attributes, following is a list of the most frequently used form attributes:

Attribute	**Description**
action	Backend script ready to process your passed data.
method	Method to be used to upload data. The most frequently used are GET and POST methods.

target	Specify the target window or frame where the result of the script will be displayed. It takes values like _blank, _self, _parent etc.
enctype	You can use the enctype attribute to specify how the browser encodes the data before it sends it to the server. Possible values are: application/x-www-form-urlencoded - This is the standard method most forms use in simple scenarios. mutlipart/form-data - This is used when you want to upload binary data in the form of files like image, word file etc.

HTML Form Controls

There are different types of form controls that you can use to collect data using HTML form:

- Text Input Controls
- Checkboxes Controls
- Radio Box Controls
- Select Box Controls
- File Select boxes
- Hidden Controls

- Clickable Buttons
- Submit and Reset Button

Text Input Controls

There are three types of text input used on forms:

- **Single-line text input controls -** This control is used for items that require only one line of user input, such as search boxes or names. They are created using HTML **<input>** tag.
- **Password input controls -** This is also a single-line text input but it masks the character as soon as a user enters it. They are also created using HTMl <input> tag.
- **Multi-line text input controls -** This is used when the user is required to give details that may be longer than a single sentence. Multi-line input controls are created using HTML **<textarea>** tag.

Single-line text input controls

This control is used for items that require only one line of user input, such as search boxes or names. They are created using HTML <input> tag.

Example

Here is a basic example of a single-line text input used to take first name and last name:

```
<!DOCTYPE html>
<html>
<head>
<title>Text Input Control</title>
</head>
<body>
<form >
First name: <input type="text" name="first_name" />
```

```
<br>
Last name: <input type="text" name="last_name" />
</form>
</body>
</html>
```

This will produce the following result:

Attributes

Following is the list of attributes for <input> tag for creating text field.

Attribute	Description
type	Indicates the type of input control and for text input control it will be set totext.
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
value	This can be used to provide an initial value inside the control.
size	Allows to specify the width of the text-input control in terms of characters.
maxlength	Allows to specify the maximum number of characters a user can enter into the text box.

Password Input controls

This is also a single-line text input but it masks the character as soon as a user enters it. They are also created using HTML <input> tag but type attribute is set to password.

Example

Here is a basic example of a single-line password input used to take user password:

```
<!DOCTYPE html>
<html>
<head>
<title>Password Input Control</title>
</head> <body>
<form >
User ID : <input type="text" name="user_id" />
<br>
Password: <input type="password" name="password" />
</form>
</body>
</html>
```

This will produce the following result:

Attributes

Following is the list of attributes for <input> tag for creating password field.

Attribute	Description
type	Indicates the type of input control and for password input control it will be set to password.

name	Used to give a name to the control which is sent to the server to be recognized and get the value.
value	This can be used to provide an initial value inside the control.
size	Allows to specify the width of the text-input control in terms of characters.
maxlength	Allows to specify the maximum number of characters a user can enter into the text box.

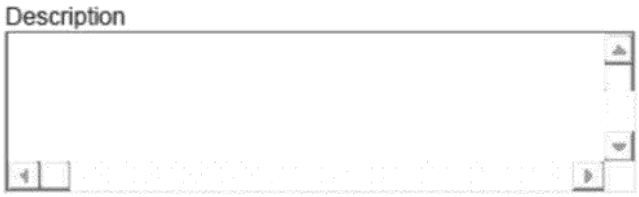
Multiple-Line Text Input Controls

This is used when the user is required to give details that may be longer than a single sentence. Multi-line input controls are created using HTML <textarea> tag. Example

Here is a basic example of a multi-line text input used to take item description:

```
<!DOCTYPE html>
<html>
<head>
<title>Multiple-Line Input Control</title>
</head>
<body>
<form>
Description: <br />
<textarea rows="5" cols="50" name="description">
Enter description here...
</textarea>
</form>
</body>
</html>
```

This will produce the following result:



Attributes

Following is the list of attributes for <textarea> tag.

Attribute	Description
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
rows	Indicates the number of rows of text area box.
cols	Indicates the number of columns of text area box

Checkbox Control

Checkboxes are used when more than one option is required to be selected. They are also created using HTML <input> tag but type attribute is set to checkbox. Example

Here is an example HTML code for a form with two checkboxes:

```
<!DOCTYPE html>
<html>
<head>
<title>Checkbox Control</title>
</head>
<body>
<form>
```

```
<input type="checkbox" name="maths" value="on"> Maths
<input type="checkbox" name="physics" value="on"> Physics
</form>
</body>
</html>
```

This will produce the following result:

Attributes

Following is the list of attributes for <checkbox> tag.

Attribute	Description
type	Indicates the type of input control and for checkbox input control it will be set to checkbox.
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
value	The value that will be used if the checkbox is selected.
checked	Set to *checked* if you want to select it by default.

Radio Button Control

Radio buttons are used when out of many options, just one option is required to be selected. They are also created using HTML <input> tag but type attribute is set to radio.

Example

Here is example HTML code for a form with two radio buttons:

```
<!DOCTYPE html>
<html>
<head>
<title>Radio Box Control</title>
</head>
<body>
<form>
<input type="radio" name="subject" value="maths"> Maths
<input type="radio" name="subject" value="physics"> Physics
</form>
</body>
</html>
```

This will produce the following result:

Attributes

Following is the list of attributes for radio button.

Attribute	**Description**
type	Indicates the type of input control and for checkbox input control it will be set to radio.
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
value	The value that will be used if the radio box is selected.
checked	Set to *checked* if you want to select it by default.

Select Box Control

A select box, also called drop down box which provides option to list down various options in the form of drop down list, from where a user can select one or more options.

Example

Here is example HTML code for a form with one drop down box

```
<!DOCTYPE html>
<html>
<head>
<title>Select Box Control</title>
</head>
<body>
<form>
<select name="dropdown">
<option value="Maths" selected>Maths</option>
<option value="Physics">Physics</option>
</select>
</form>
</body>
</html>
```

This will produce the following result:

Attributes

Following is the list of important attributes of <select> tag:

Attribute	Description
name	Used to give a name to the control which is sent to the server to be recognized and get

	the value.
size	This can be used to present a scrolling list box.
multiple	If set to "multiple" then allows a user to select multiple items from the menu.

Following is the list of important attributes of <option> tag:

Attribute	**Description**
value	The value that will be used if an option in the select box box is selected.
selected	Specifies that this option should be the initially selected value when the page loads.
label	An alternative way of labeling options

File Upload Box

If you want to allow a user to upload a file to your web site, you will need to use a file upload box, also known as a file select box. This is also created using the <input> element but type attribute is set to **file**.

Example

Here is example HTML code for a form with one file upload box:

```
<!DOCTYPE html>
<html>
<head>
<title>File Upload Box</title>
</head>
<body>
<form>
<input type="file" name="fileupload" accept="image/*" />
```

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

This will produce the following result:

Attributes

Following is the list of important attributes of file upload box:

Attribute	Description
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
accept	Specifies the types of files that the server accepts.

Button Controls

There are various ways in HTML to create clickable buttons. You can also create a clickable button using <input> tag by setting its type attribute to **button**. The type attribute can take the following values:

Type	Description
submit	This creates a button that automatically submits a form.
reset	This creates a button that automatically resets form controls to their initial values.
button	This creates a button that is used to trigger a client-side script when the user clicks that button.

image	This creates a clickable button but we can use an image as background of the button.

Example

Here is example HTML code for a form with three types of buttons:

```
<!DOCTYPE html>
<html>
<head>
<title>File Upload Box</title>
</head>
<body>
<form>
<input type="submit" name="submit" value="Submit"
/> <input type="reset" name="reset" value="Reset" />
<input type="button" name="ok" value="OK" />
<input type="image" name="imagebutton" src="/html/images/logo.png" />
</form>
</body>
</html>
```

This will produce the following result:

Hidden Form Controls

Hidden form controls are used to hide data inside the page which later on can be pushed to the server. This control hides inside the code and does not appear on the

actual page. For example, following hidden form is being used to keep current page number. When a user will click next page then the value of hidden control will be sent to the web server and there it will decide which page will be displayed next based on the passed current page.

Example

Here is example HTML code to show the usage of hidden control:

```
<!DOCTYPE html>
<html>
<head>
<title>File Upload Box</title>
</head>
<body>
<form>
<p>This is page 10</p>
<input type="hidden" name="pagename" value="10" />
<input type="submit" name="submit" value="Submit" />
<input type="reset" name="reset" value="Reset" />
</form>
</body>
</html>
```

This will produce the following result:

Top of Form

This is page 10

Style Web Forms Using CSS

A big part of our work as website designers is the ability to make things look good and function well. We spend hours taking the time to make every aspect of our site visually compelling, intuitive, user friendly, accessible and overall beautiful. Our

forms are no exception! Our forms should be beautiful, easy to use, and should look consistent with the rest of our website. We can do this easily with CSS.

The process isn't difficult, you just can to know what each tag does, and how to style it. The first thing we need to do is bring in our HTML. Below is the HTML found in our sample form.

```
<form>
 <div>
  <h1>Contact Form :</h1>
  <label>
   <span>Your name</span><input id="name" type="text" name="name" />
  </label>

  <label>
   <span>Email Address</span><input id="email" type="text" name="email" />
  </label>

  <label>
   <span>Subject</span><input id="subject" type="text" name="subject" />
  </label>

  <label>
   <span>Message</span><textarea id="feedback" name="feedback"></textarea>
   <input type="button" value="Submit Form" />
```

```
</label>

</div>
</form>
```

You will notice that in the HTML, I used words, names, and ids that make sense. They are consistent with what you'd expect each field to be called. Each Field is wrapped in a label tag to make things easy for us to style. Our form looks pretty plain without any styling, as you can see from the sample below:

Our form has no structure, no color, and no personality. We can change that with a little bit of code. First, we are going to style the form tag itself.

```
form {
  background: -webkit-linear-gradient(bottom, #CCCCCC, #EEEEEE 175px);
  background: -moz-linear-gradient(bottom, #CCCCCC, #EEEEEE 175px);
  background: linear-gradient(bottom, #CCCCCC, #EEEEEE 175px);
  margin: auto;
  position: relative;
```

```
  width: 550px;
  height: 450px;
  font-family: Tahoma, Geneva, sans-serif;
  font-size: 14px;
  font-style: italic;
  line-height: 24px;
  font-weight: bold;
  color: #09C;
  text-decoration: none;
  border-radius: 10px;
  padding: 10px;
  border: 1px solid #999;
  border: inset 1px solid #333;
  -webkit-box-shadow: 0px 0px 8px rgba(0, 0, 0, 0.3);
  -moz-box-shadow: 0px 0px 8px rgba(0, 0, 0, 0.3);
  box-shadow: 0px 0px 8px rgba(0, 0, 0, 0.3);
}
```

The code above can look like a mouthful, but it is fairly simple when broken down. Flat colors can be really boring, so adding a slight gradient can break up the monotony and give your design some dimension. That is done with the background style. When using this property and gradients, you have to include the specific prefixes for certain browsers such as Firefox, or they won't show up. Both are saying the same thing. Create a linear gradient, start from the bottom, and use a medium gray and a light gray and blend it over 175px.

Since this is where you entire form is going to be contained, I decided to center the form in the browser by setting margin to auto. Setting the Position to Relative is intended for aligning an element later, so that explanation is to come. I specified the width and the height of the form, the fonts used, and styled it to be bold, italic, 14px in size and a line height (spacing between each line of text) of 24px.

Border radius gives us rounded corners for our boxes. Increase the number for more rounded corners. Padding gives some space between the text and the edge of the form, so that your text doesn't run outside the bounds of your form and its rounded corners.

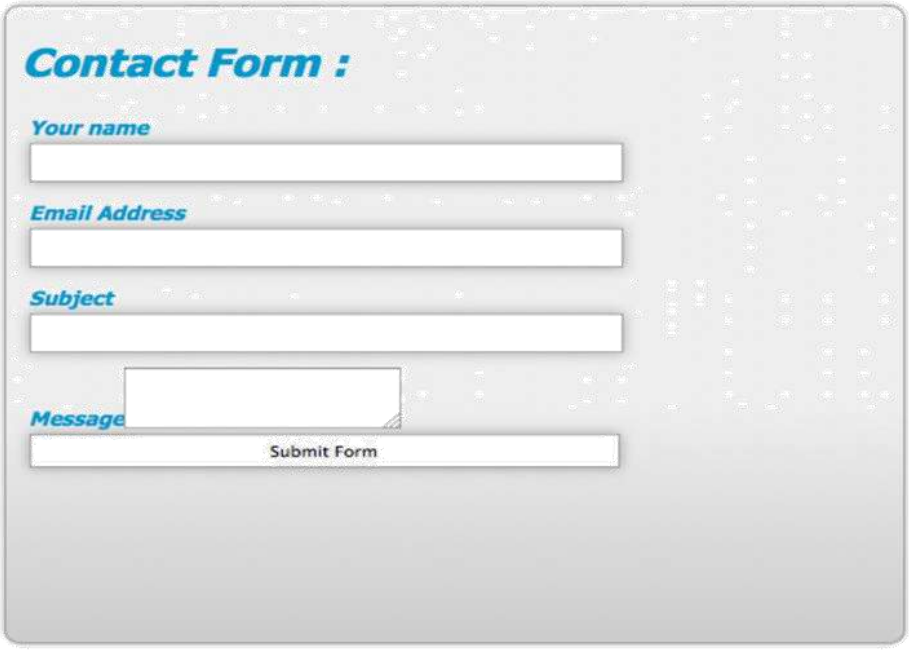
You can create subtle borders for contrast and dimension. I also added box shadows to the overall form, so if this becomes a popup form, it will add dimension and make the form look like it is floating over the rest of the site. This is a popular technique right now. This is yet another style that needs you to specify the proper prefix in order to get it to show up. You form should look something like this:

Next, we should style the input area. That is where the text is actually entered into each field.

```
input {
  width: 375px;
  display: block;
  border: 1px solid #999;
  height: 25px;
  -webkit-box-shadow: 0px 0px 8px rgba(0, 0, 0, 0.3);
  -moz-box-shadow: 0px 0px 8px rgba(0, 0, 0, 0.3);
  box-shadow: 0px 0px 8px rgba(0, 0, 0, 0.3);}
```

The code shown above selects all of the text input areas, and styles them to be 375px wide, and setting the display to block stacks them vertically. Adding a 1px border helps to emphasize each input area, and setting the height to 25px gives the user plenty of room visually to enter their text.

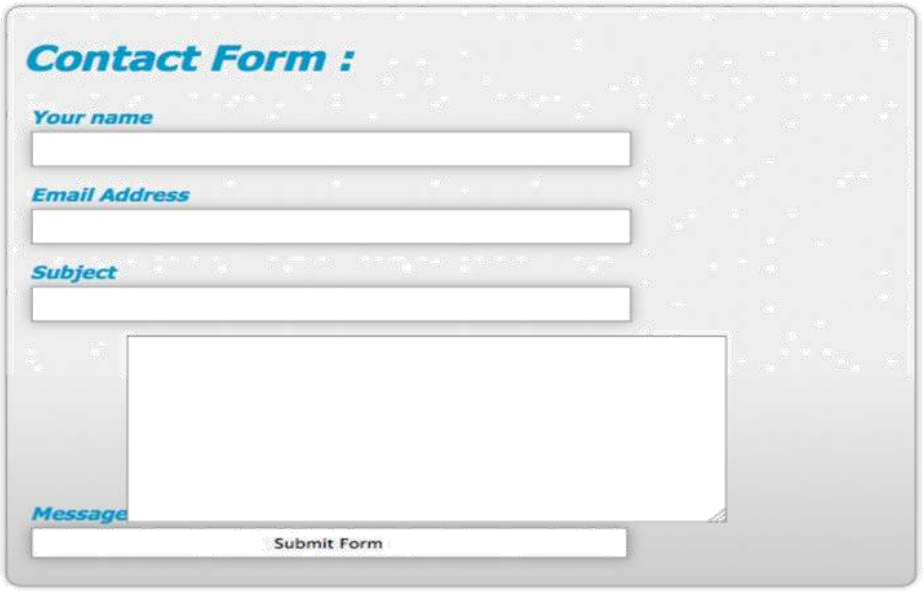
I added a box shadow for dimension, but remember to include the prefix for each browser. The first 2 digits control the offset for the shadow. Positive numbers push the shadow to the right and up, and negative numbers push it to the left and down. The 3rd number determines how much the shadow is blurred. The higher the number, the larger the blur. Inside of the parenthesis, the 1st three numbers determine the red, green, and blue values of the shadow, and the decimal number determines the opacity of the shadow itself. 1 is 100% opacity and 0.1 is 10% opacity. With these style added, your form should begin to take shape, and look like the image below:



Everything is aligned, but notice that the submit button has been affected b the width styling. We will fix this later. The message area doesn't look right, but we can fix this easily.

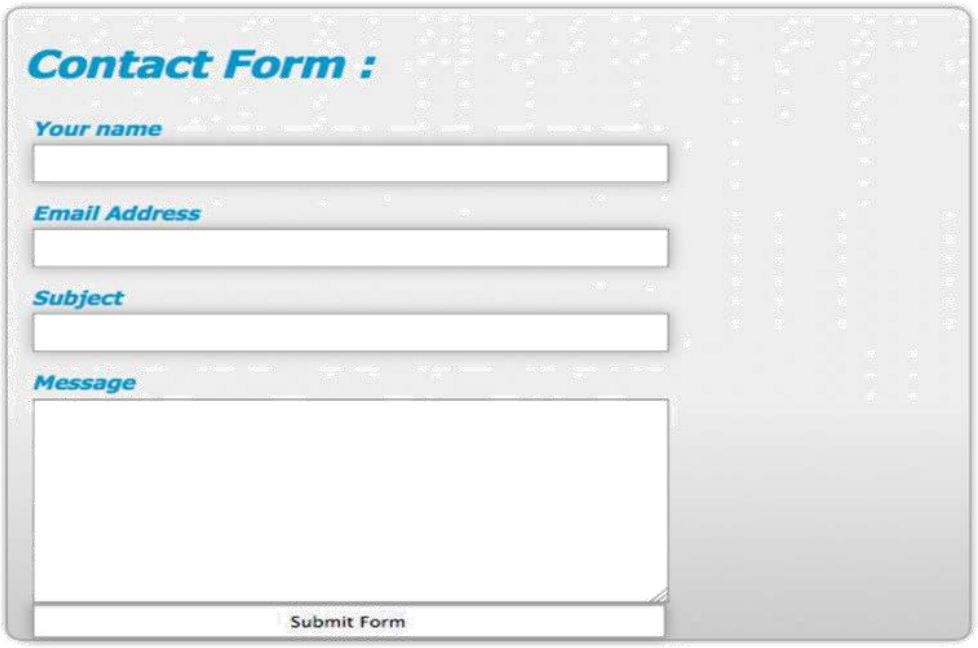
```
textarea#feedback {
  width: 375px;
  height: 150px;
}
```

You can specify the width and the height directly, but this still doesn't make the textarea fall in line with the other fields.



We have to set the display property to block manually, so that it performs the same way as the input areas.

```
textarea#feedback {
  width: 375px;
  height: 150px;
  display: block;
}
```



Now that everything is aligned properly, we can get down to fixing the submit button. The CSS that we need to fix this is fairly simple:

```
button {
  width: 100px;
  position: absolute;
  right: 20px;
  bottom: 20px;
  background: #09C;
  color: #fff;
  font-family: Tahoma, Geneva, sans-serif;
  height: 30px;
  border-radius: 15px;
```

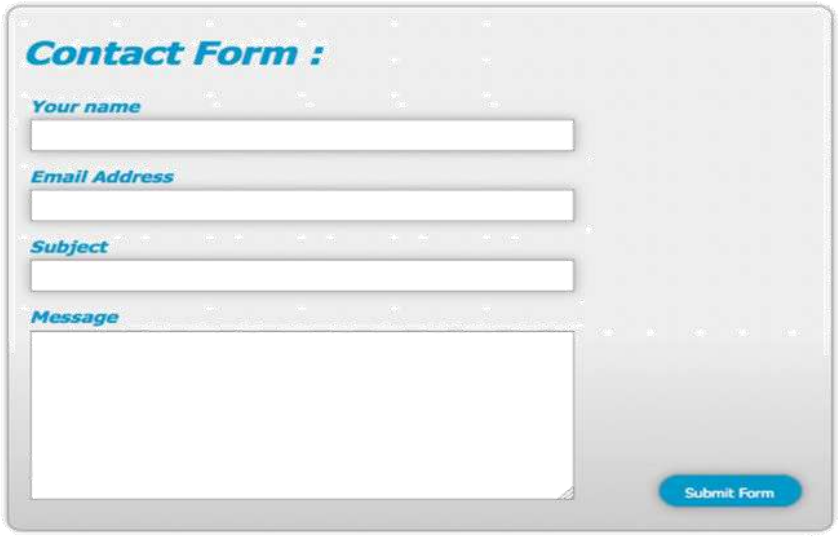
```
 border: 1p solid #999;
}

input.button:hover {
 background: #fff;
 color: #09C;
}
```

We select the button named submit and define its width to 100px and set its position to absolute. As we mentioned earlier, we had styled the form to have a relative position. The way this works is that when you set something to have a absolute position, it looks for the last element that has its position set to relative. If that element is nested inside of the element with a position of relative, its absolute position is relative to that element. In other words, the submit button will be positioned somewhere inside of the bounds of the form container. I defined that it will be 20px from the right and from the bottom with those respective styles.

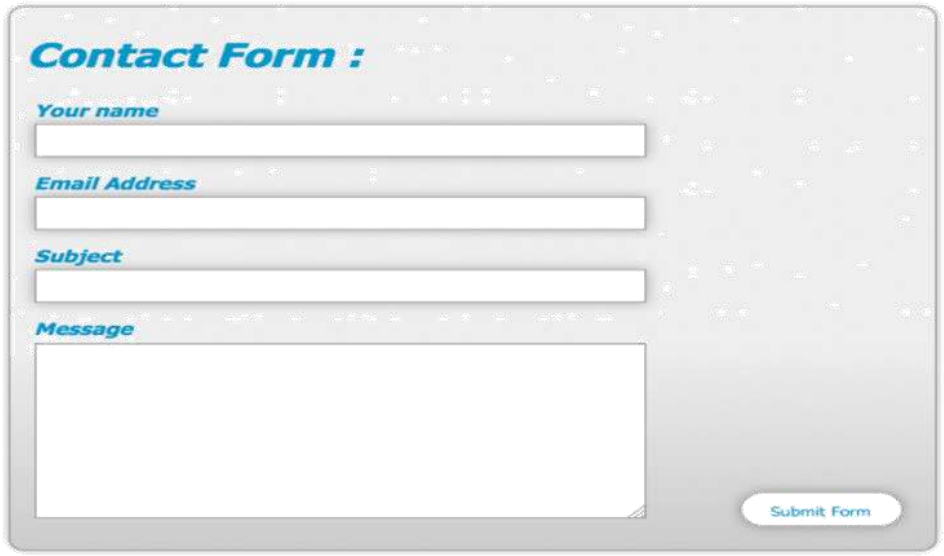
I set the background to blue and the text to white. I gave it a definite height of 30px and rounded corners. I also have it a 1px gray border. This is the normal state for your submit button.

You will notice that I defined a hover state for the submit button. The styles defined here override the original styling once the user hovers over the button. I changed the background to white and the text to blue, giving the user a highly contrasting effect when they mouse over the button.

Here is the normal state:



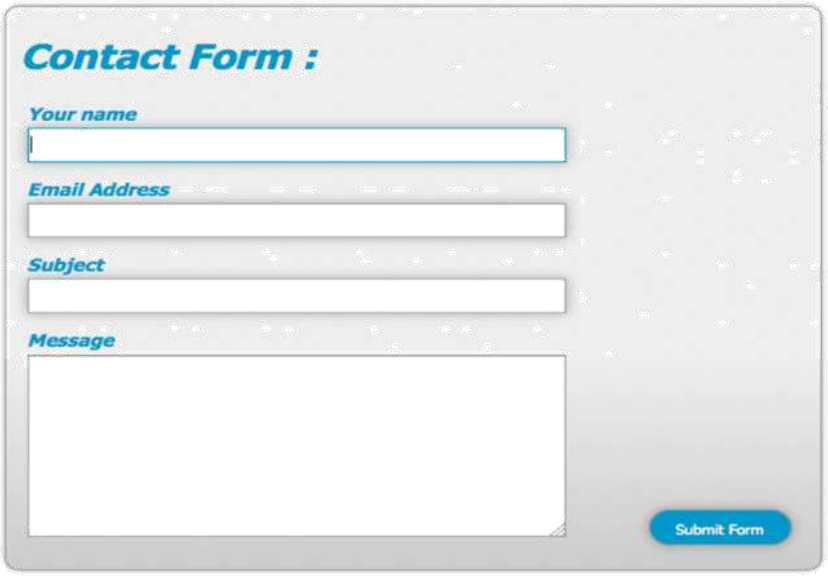
Here is the hover state:



Our form's structure is done. You could stop here and you would have a great form, all styled with CSS. However, you could take it one step further, by adding a little user friendly styling to the text input areas, so that the user can tell where they are typing. You can do this with a small amount of CSS:

```
textarea:focus, input:focus {
  border: 1px solid #09C;
}
```

What this does is it tells the browser that if a person has a text input or text area selected, that it needs to add a 1px blue border around the active input area, so the user knows where they are visually in the form. This is just a little extra something that is much appreciated by many users.



.

POSSIBLE QUESTIONS

PART-B

1. Write the CSS syntax.
2. What is a form?
3. What are the values of method attribute?
4. What is CGI?
5. Define CSS

PART-C

1. Explain about basic input and attributes of forms.
2. Explain about styling forms with CSS.
3. Discuss about different form controls in detail.
4. Write a program to create a form using HTML which has the following types of controls:
   I. Text Box
   II. Option/radio buttons III. Check boxes
   IV. Reset and Submit buttons
5. Describe the 5 main tags used in creating HTML form.
6. Display an advertisement with the CSS styling in it.
7. Expand and illuminate different tasks in CSS.
8. What are the other kinds of input in forms

KARPAGAM ACADEMY OF HIGHER EDUCATION

COIMBATORE - 21

DEPARTMENT OF CS,CA & IT

CLASS : II B.Sc COMPUTER TECHNOLOGY

BATCH : 2017-2020

Part -A Online Examinations **(1 mark questions)**

SUBJECT: HTML Programming **SUBJECT CODE: 17CTU404A**

S.No	QUESTIONS	OPTION1	OPTION2	OPTION3	OPTION4	ANSWER
1	_____is an area that can contain form elements.	table	form	lists	none	form
2	_____are used when you want the user to select one of a limited number of choices.	Check Buttons	buttons	Radio Buttons	list box	Radio Buttons
3	_____are used when you want the user to select one or more options of a limited number of choices.	Checkboxes	buttons	Radio Buttons	list box	Checkboxes
4	_____is the tag used to define an input.	<input>	<read>	<inputs>	<get>	<input>
5	what is the correct HTML for making a text	<input type="textfield">	<input type="text">	<textfield>	<textinput type="text">	<input type="text">
6	_____is used to get information from visitor	Table	Frame	document	form	form

7	_____element allows the visitor to write text	texbox	checkbox	radio button	button	texbox
8	_____is used to clear the contents of the form	submit	clear	reset	post	reset
9	Large text can be given in forms using	text	large	largetext	textarea	textarea
10	To avoid users from changing the size of browser window _____tag is used	resize	noresize	nochange	change	noresize
11	A website can be made interactive with the help of ____	tables	frames	text	forms	forms
12	There are ____main parts in a form	1	2	3	4	3
13	_____tag is used initially to create a form	<FORM>	<CREATE>	<INITIAL>	<CREATEFORM>	<FORM>
14	____is the end tag of a form	</FORM>	</END>	</FINAL>	</LAST>	</FORM>
15	_____method is used to submit user information to the server	GET	SUBMIT	POST	RESET	POST
16	_____method is used to get information from the server	GET	RETRIEVE	POST	RESET	GET
17	What tag is used to give the visitors the option of selecting one of the few options?	select	option	give	value	option
18	In <select size="n"> ____represents the number of options that should be initially visible	size	n	select	no	n

19	_____are form elements that provides user to select one of the option	check box	text box	radio buttons	buttons	radio buttons
20	_____is used to make the radio button active by default	active	on	value	pressed	pressed
21	Radio buttons have _____	square boxes	lines	rectangle boxes	rounded hollow buttons	rounded hollow buttons
22	_____are used to make users to select more than one option	check box	text box	radio buttons	buttons	check box
23	_____elements allow users to fill up the information	check box	text box	radio buttons	buttons	text box
24	A ____is a door within a window where each door shows different information	tables	frames	text	forms	frames
25	Name the attribute used to provide frame spacing.	frame	space	framespacing	framespc	framespacing
26	To show the scroll bar for a frame _____is used	scrolling	scroll	scr	src	scrolling
27	What tag is used to display an alternate text if the browser does not support frames	frameset	scrolling=no	noresize	noframes	noframes
28	A _____is a set of one or more rules that apply to an HTML document	tables	frames	stylesheet	forms	stylesheet
29	Which tag creates a check box for a form in HTML?	<checkbox>	<input type="checkbox">	<input=checkbox>	<input checkbox>	<input type="checkbox">

30	To create a combo box (drop down box) which tag will you use?	<select>	<list>	<input type="drop down">	<dp>	<select>
31	_____tag defines one particular window within a frameset	<frame>	<noframes>	<frameset>	<framest>	<frame>
32	In <frameset> tag ____specifies the remaining space to use for the frame	+	/	*	\	*
33	____method is used to pass data to server that is not displayed on form.	type="method"	type="hidden"	type="pass"	type="server"	type="hidden"
34	____in Input tag allows users to upload files of certain type	type="file"	type="upload"	type="load"	type="fileupload"	type="file"
35	Which among the following is not a form control	Text boxes	Password fields	Check boxes	Scroll bar	Scroll bar
36	To create menus with HTML _____ element is used	Text boxes	Password fields	Select	Menu	Select
37	____element will only affect the data that is sent along with the submitted form	Option	Select	Input	Div	Option
38	Radio buttons with the same name are treated as a	single element	group element	Radio group	none	group element
39	____setting of a checkbox adds an internal name to the field	internal name	field	name	value	name
40	Which is not a valid entry for align attribute of a checkbox	Top	Middle	Bottom	TopBottom	TopBottom
41	_____setting defines in which order the different fields should be activated when the visitor clicks the	align	tabindex	tab	index	tabindex
42	What formatting can be done for a textbox	change color	add border	add background	all of the above	all of the above

43	Textareas have	only opening tag	only closing tag	both opening and closing	no opening and closing tag	both opening and closing tag
44	Adjusting the size of the appearance of the text area requires two attributes	top and bottom	left and right	rows and cols	top left and bottom right	rows and cols
45	Concept that is used to make the website or webpage to be interactive is called as	table	form	lists	none	form
46	Basically the form tag/element contains	2 attributes	3 attributes	1 attributes	none	2 attributes
47	The length of the URL is limited to characters.	2500	2800	2950	3000	3000
48	The attribute specifies that the input field is disabled.	none	disabled	readonly	value	disabled
49	Radio buttons let a user select of a limited number of choices	ONLY ONE	TWO	THREE	FOUR	ONLYONE