



# HTML

hypertext markup language

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## About the Tutorial

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HTML stands for Hyper Text Markup Language, which is the most widely used language on Web to develop web pages.

HTML was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995. HTML 4.01 was a major version of HTML and it was published in late 1999. Though HTML 4.01 version is widely used but currently we are having HTML-5 version which is an extension to HTML 4.01, and this version was published in 2012.

## Audience

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This tutorial is designed for the aspiring Web Designers and Developers with a need to understand the HTML in enough detail along with its simple overview, and practical examples. This tutorial will give you enough ingredients to start with HTML from where you can take yourself at higher level of expertise.

## Prerequisites

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Before proceeding with this tutorial you should have a basic working knowledge with Windows or Linux operating system, additionally you must be familiar with:

- Experience with any text editor like notepad, notepad++, or Edit plus etc.
- How to create directories and files on your computer.
- How to navigate through different directories.
- How to type content in a file and save them on a computer.
- Understanding about images in different formats like JPEG, PNG format.

## Copyright & Disclaimer

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# 1. HTML – OVERVIEW

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.

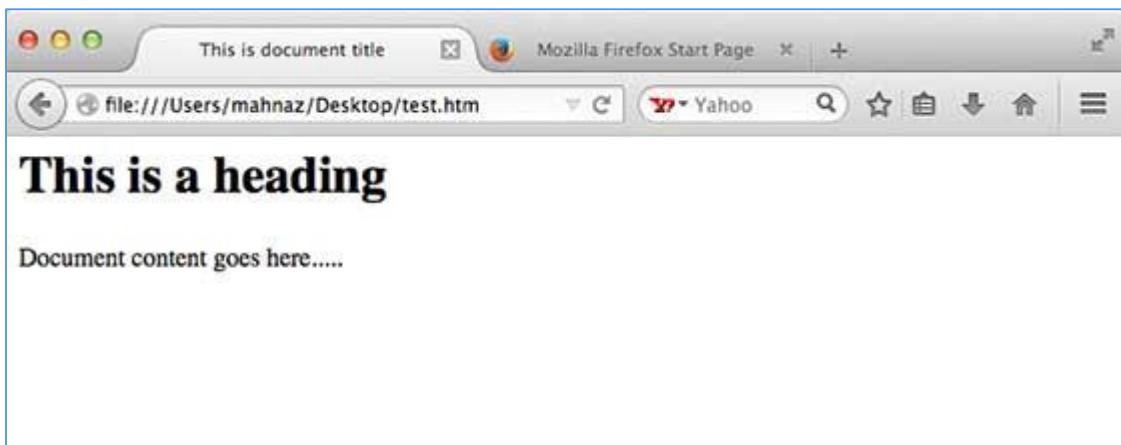
## Basic HTML Document

---

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>
<p>Document content goes here.....</p>
</body>
</html>
```

Either you can use **Try it** option available at the top right corner of the code box to check the result of this HTML code, or let's save it in an HTML file **test.htm** using your favorite text editor. Finally open it using a web browser like Internet Explorer or Google Chrome, or Firefox etc. It must show the following output:



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

To learn HTML, you will need to study various tags and understand how they behave, while formatting a textual document. Learning HTML is simple as users have to learn the usage of different tags in order to format the text or images to make a beautiful webpage.

World Wide Web Consortium (W3C) recommends to use lowercase tags starting from HTML 4.

## 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.

## 2. HTML – BASIC TAGS

### Heading Tags

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>
```

This will produce the following result:

**This is heading 1**

**This is heading 2**

**This is heading 3**

**This is heading 4**

**This is heading 5**

**This is heading 6**

## Paragraph Tag

---

The **<p>** tag offers a way to structure your text into different paragraphs. Each paragraph of text should go in between an opening **<p>** and a closing **</p>** 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>
```

This will produce the following result:

```
Here is a first paragraph of text.
Here is a second paragraph of text.
Here is a third paragraph of text.
```

## Line Break Tag

---

Whenever you use the **<br />** 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 **<br />** 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 **<br>** 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>
```

This will produce the following result:

```
Hello
You delivered your assignment on time.
Thanks
Mahnaz
```

## Centering Content

---

You can use **<center>** tag to put any content in the center of the page or any table cell.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Centring Content Example</title>
</head>
<body>
<p>This text is not in the center.</p>
<center>
<p>This text is in the center.</p>
</center>
</body>
</html>
```

This will produce the following result:

This text is not in the center.

This text is in the center.

## 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>
```

This will produce the following result:

---

This is paragraph one and should be on top

This is paragraph two and should be at bottom

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

## **Nonbreaking Spaces**

---

Suppose you want to use the phrase "12 Angry Men." Here, you would not want a browser to split the "12, Angry" and "Men" across two lines:

An example of this technique appears in the movie "12 Angry Men."

In cases, where you do not want the client browser to break text, you should use a nonbreaking space entity **&nbsp;** instead of a normal space. For example, when coding the "12 Angry Men" in a paragraph, you should use something similar to the following code:

### **Example**

```
<!DOCTYPE html>
<html>
<head>
<title>Nonbreaking Spaces Example</title>
</head>
<body>
<p>An example of this technique appears in the movie
"12&nbsp;Angry&nbsp;Men."</p>
</body>
</html>
```

### 3. HTML – ELEMENTS

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
<p>	This is paragraph content.	</p>
<h1>	This is heading content.	</h1>
<div>	This is division content.	</div>

So here **<p>....</p>** 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 **<br />** 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, **<p>** is starting tag of a paragraph and **</p>** is closing tag of the same paragraph but **<p>This is paragraph</p>** is a paragraph element.

#### **Nested HTML Elements**

It is very much allowed to keep one HTML element inside another HTML element:

#### **Example**

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

```
<title>Nested Elements Example</title>
</head>
<body>
<h1>This is <i>italic</i> heading</h1>
<p>This is <u>underlined</u> paragraph</p>
</body>
</html>
```

This will display the following result:

# This is *italic* heading

This is underlined paragraph

## 4. 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

This is center aligned

This is right 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. Their 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 dir="rtl">
<head>
<title>Display Directions</title>
</head>
<body>
This is how IE 5 renders right-to-left directed text.
</body>
</html>
```

This will produce the following result:

This is how IE 5 renders right-to-left directed text.

When *dir* attribute is used within the `<html>` tag, it determines how text will be presented within the entire document. When used within another tag, it controls the text's direction for just the content of that tag.

## The **lang** Attribute

The **lang** attribute allows you to indicate the main language used in a document, but this attribute was kept in HTML only for backwards compatibility with earlier versions of HTML. This attribute has been replaced by the **xml:lang** attribute in new XHTML documents.

The values of the *lang* attribute are ISO-639 standard two-character language codes. Check [HTML Language Codes: ISO 639](#) for a complete list of language codes.

## 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.

width	Numeric Value	Specifies the width of tables, images, or table cells.
height	Numeric Value	Specifies the height of tables, images, or table cells.
title	User Defined	"Pop-up" title of the elements.

We will see related examples as we will proceed to study other HTML tags. For a complete list of HTML Tags and related attributes please check reference to [HTML Tags List](#).

# 5. HTML – FORMATTING

If you use a word processor, you must be familiar with the ability to make text bold, italicized, or underlined; these are just three of the ten options available to indicate how text can appear in HTML and XHTML.

## Bold Text

Anything that appears within **<b>...</b>** element, is displayed in bold as shown below:

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Bold Text Example</title>
</head>
<body>
<p>The following word uses a <b>bold</b> typeface.</p>
</body>
</html>
```

This will produce the following result:

```
The following word uses a bold typeface.
```

## Italic Text

Anything that appears within *<i>...</i>* element is displayed in italicized as shown below:

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Italic Text Example</title>
</head>
<body>
<p>The following word uses a <i>italicized</i> typeface.</p>
```

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

This will produce the following result:

The following word uses an *italicized* typeface.

## Underlined Text

---

Anything that appears within **<u>...</u>** element, is displayed with underline as shown below:

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Underlined Text Example</title>
</head>
<body>
<p>The following word uses a <u>underlined</u> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses an underlined typeface.

## Strike Text

---

Anything that appears within **<strike>...</strike>** element is displayed with strikethrough, which is a thin line through the text as shown below:

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Strike Text Example</title>
</head>
<body>
<p>The following word uses a <strike>strikethrough</strike> typeface.</p>
</body>
```

```
</html>
```

This will produce the following result:

The following word uses a ~~strikethrough~~ typeface.

## Monospaced Font

The content of a **<tt>...</tt>** element is written in monospaced font. Most of the fonts are known as variable-width fonts because different letters are of different widths (for example, the letter 'm' is wider than the letter 'i'). In a monospaced font, however, each letter has the same width.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Monospaced Font Example</title>
</head>
<body>
<p>The following word uses a <tt>monospaced</tt> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses a monospaced typeface.

## Superscript Text

The content of a **<sup>...</sup>** element is written in superscript; the font size used is the same size as the characters surrounding it but is displayed half a character's height above the other characters.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Superscript Text Example</title>
</head>
<body>
<p>The following word uses a <sup>superscript</sup> typeface.</p>
```

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

This will produce the following result:

The following word uses a <sup>superscript</sup> typeface.

## Subscript Text

The content of a **<sub>...</sub>** element is written in subscript; the font size used is the same as the characters surrounding it, but is displayed half a character's height beneath the other characters.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Subscript Text Example</title>
</head>
<body>
<p>The following word uses a <sub>subscript</sub> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses a <sub>subscript</sub> typeface.

## Inserted Text

Anything that appears within **<ins>...</ins>** element is displayed as inserted text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Inserted Text Example</title>
</head>
<body>
<p>I want to drink <del>cola</del> <ins>wine</ins></p>
</body>
```

```
</html>
```

This will produce the following result:

I want to drink ~~cola~~ wine

## Deleted Text

Anything that appears within **<del>...</del>** element, is displayed as deleted text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Deleted Text Example</title>
</head>
<body>
<p>I want to drink <del>cola</del> <ins>wine</ins></p>
</body>
</html>
```

This will produce the following result:

I want to drink ~~cola~~ wine

## Larger Text

The content of the **<big>...</big>** element is displayed one font size larger than the rest of the text surrounding it as shown below:

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Larger Text Example</title>
</head>
<body>
<p>The following word uses a <big>big</big> typeface.</p>
</body>
```

```
</html>
```

This will produce the following result:

The following word uses a **big** typeface.

## Smaller Text

The content of the **<small>...</small>** element is displayed one font size smaller than the rest of the text surrounding it as shown below:

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Smaller Text Example</title>
</head>
<body>
<p>The following word uses a <small>small</small> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses a small typeface.

## Grouping Content

The **<div>** and **<span>** elements allow you to group together several elements to create sections or subsections of a page.

For example, you might want to put all of the footnotes on a page within a **<div>** element to indicate that all of the elements within that **<div>** element relate to the footnotes. You might then attach a style to this **<div>** element so that they appear using a special set of style rules.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Div Tag Example</title>
</head>
<body>
```

```

<div id="menu" align="middle" >
<a href="/index.htm">HOME</a> |
<a href="/about/contact_us.htm">CONTACT</a> |
<a href="/about/index.htm">ABOUT</a>
</div>

<div id="content" align="left" bgcolor="white">
<h5>Content Articles</h5>
<p>Actual content goes here.....</p>
</div>
</body>
</html>

```

This will produce the following result:

HOME | CONTACT | ABOUT

CONTENT ARTICLES

Actual content goes here.....

The `<span>` element, on the other hand, can be used to group inline elements only. So, if you have a part of a sentence or paragraph which you want to group together, you could use the `<span>` element as follows

## Example

```

<!DOCTYPE html>
<html>
<head>
<title>Span Tag Example</title>
</head>
<body>
<p>This is the example of <span style="color:green">span tag</span> and the
<span style="color:red">div tag</span> alongwith CSS</p>
</body>
</html>

```

This will produce the following result:

This is the example of **span tag** and the **div tag** along with CSS

These tags are commonly used with CSS to allow you to attach a style to a section of a page.

# 6. HTML – PHRASE TAGS

The phrase tags have been designed for specific purposes, though they are displayed in a similar way as other basic tags like **<b>**, *<i>*, 

```
<pre>
```

, and <tt>, you have seen in previous chapter. This chapter will take you through all the important phrase tags, so let's start seeing them one by one.

## Emphasized Text

Anything that appears within **<em>...</em>** element is displayed as emphasized text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Emphasized Text Example</title>
</head>
<body>
<p>The following word uses a <em>emphasized</em> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses an *emphasized* typeface.

## Marked Text

Anything that appears within **<mark>...</mark>** element, is displayed as marked with yellow ink.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Marked Text Example</title>
</head>
<body>
<p>The following word has been <mark>marked</mark> with yellow</p>
</body>
```

```
</html>
```

This will produce the following result:

The following word has been marked with yellow.

## Strong Text

---

Anything that appears within **<strong>...</strong>** element is displayed as important text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Strong Text Example</title>
</head>
<body>
<p>The following word uses a <strong>strong</strong> typeface.</p>
</body>
</html>
```

This will produce the following result:

The following word uses a **strong** typeface.

## Text Abbreviation

---

You can abbreviate a text by putting it inside opening **<abbr>** and closing **</abbr>** tags. If present, the title attribute must contain this full description and nothing else.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Text Abbreviation</title>
</head>
<body>
<p>My best friend's name is <abbr title="Abhishek">Abhy</abbr>.</p>
</body>
</html>
```

This will produce the following result:

My best friend's name is Abhy.

## Acronym Element

---

The **<acronym>** element allows you to indicate that the text between `<acronym>` and `</acronym>` tags is an acronym.

At present, the major browsers do not change the appearance of the content of the `<acronym>` element.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Acronym Example</title>
</head>
<body>
<p>This chapter covers marking up text in <acronym>XHTML</acronym>.</p>
</body>
</html>
```

This will produce the following result:

This chapter covers marking up text in XHTML.

## Text Direction

---

The **<bdo>...</bdo>** element stands for Bi-Directional Override and it is used to override the current text direction.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Text Direction Example</title>
</head>
<body>
<p>This text will go left to right.</p>
<p><bdo dir="rtl">This text will go right to left.</bdo></p>
</body>
</html>
```

This will produce the following result:

This text will go left to right.

This text will go right to left.

## **Special Terms**

---

The **<dfn>...</dfn>** element (or HTML Definition Element) allows you to specify that you are introducing a special term. Its usage is similar to italic words in the midst of a paragraph.

Typically, you would use the **<dfn>** element the first time you introduce a key term. Most recent browsers render the content of a **<dfn>** element in an italic font.

### **Example**

```
<!DOCTYPE html>
<html>
<head>
<title>Special Terms Example</title>
</head>
<body>
<p>The following word is a <dfn>special</dfn> term.</p>
</body>
</html>
```

This will produce the following result:

The following word is a *special* term.

## **Quoting Text**

---

When you want to quote a passage from another source, you should put it in between **<blockquote>...</blockquote>** tags.

Text inside a **<blockquote>** element is usually indented from the left and right edges of the surrounding text, and sometimes uses an italicized font.

### **Example**

```
<!DOCTYPE html>
<html>
<head>
<title>Blockquote Example</title>
</head>
<body>
```

```
<p>The following description of XHTML is taken from the W3C Web site:</p>

<blockquote>XHTML 1.0 is the W3C's first Recommendation for XHTML, following on
from earlier work on HTML 4.01, HTML 4.0, HTML 3.2 and HTML 2.0.</blockquote>
</body>
</html>
```

This will produce the following result:

The following description of XHTML is taken from the W3C Web site:

```
XHTML 1.0 is the W3C's first Recommendation for XHTML, following on from
earlier work on HTML 4.01, HTML 4.0, HTML 3.2 and HTML 2.0.
```

## Short Quotations

---

The **<q>...</q>** element is used when you want to add a double quote within a sentence.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Double Quote Example</title>
</head>
<body>
<p>Amit is in Spain, <q>I think I am wrong</q>.</p>
</body>
</html>
```

This will produce the following result:

Amit is in Spain, I think I am wrong.

## Text Citations

---

If you are quoting a text, you can indicate the source placing it between an opening **<cite>** tag and closing **</cite>** tag

As you would expect in a print publication, the content of the **<cite>** element is rendered in italicized text by default.

### Example

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

```

<head>
<title>Citations Example</title>
</head>
<body>
<p>This HTML tutorial is derived from <cite>W3 Standard for HTML</cite>.</p>
</body>
</html>

```

This will produce the following result:

This HTML tutorial is derived from *W3 Standard for HTML*.

## **Computer Code**

---

Any programming code to appear on a Web page should be placed inside **<code>...</code>**tags. Usually the content of the  `element is presented in a monospaced font, just like the code in most programming books.`

### **Example**

```

<!DOCTYPE html>
<html>
<head>
<title>Computer Code Example</title>
</head>
<body>
<p>Regular text. <code>This is code.</code> Regular text.</p>
</body>
</html>

```

This will produce the following result:

Regular text. This is code. Regular text.

## **Keyboard Text**

---

When you are talking about computers, if you want to tell a reader to enter some text, you can use the **<kbd>...</kbd>** element to indicate what should be typed in, as in this example.

### **Example**

```

<!DOCTYPE html>
<html>

```

```

<head>
<title>Keyboard Text Example</title>
</head>
<body>
<p>Regular text. <kbd>This is inside kbd element</kbd> Regular text.</p>
</body>
</html>

```

This will produce the following result:

Regular text. This is inside kbd element Regular text.

## Programming Variables

---

This element is usually used in conjunction with the **<pre>** and **<code>** elements to indicate that the content of that element is a variable.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>Variable Text Example</title>
</head>
<body>
<p><code>document.write("<var>user-name</var>")</code></p>
</body>
</html>

```

This will produce the following result:

`document.write("user-name")`

## Program Output

---

The **<samp>...</samp>** element indicates sample output from a program, and script etc. Again, it is mainly used when documenting programming or coding concepts.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>Program Output Example</title>

```

```
</head>
<body>
<p>Result produced by the program is <samp>Hello World!</samp></p>
</body>
</html>
```

This will produce the following result:

Result produced by the program is Hello World!

## Address Text

---

The **<address>...</address>** element is used to contain any address.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Address Example</title>
</head>
<body>
<address>388A, Road No 22, Jubilee Hills - Hyderabad</address>
</body>
</html>
```

This will produce the following result:

*388A, Road No 22, Jubilee Hills - Hyderabad*

# 7. HTML – META TAGS

HTML lets you specify metadata - additional important information about a document in a variety of ways. The META elements can be used to include name/value pairs describing properties of the HTML document, such as author, expiry date, a list of keywords, document author etc.

The **<meta>** tag is used to provide such additional information. This tag is an empty element and so does not have a closing tag but it carries information within its attributes.

You can include one or more meta tags in your document based on what information you want to keep in your document but in general, meta tags do not impact physical appearance of the document so from appearance point of view, it does not matter if you include them or not.

## Adding Meta Tags to Your Documents

---

You can add metadata to your web pages by placing **<meta>** tags inside the header of the document which is represented by **<head>** and **</head>** tags. A meta tag can have following attributes in addition to core attributes:

Attribute	Description
Name	Name for the property. Can be anything. Examples include, keywords, description, author, revised, generator etc.
content	Specifies the property's value.
scheme	Specifies a scheme to interpret the property's value (as declared in the content attribute).
http-equiv	Used for http response message headers. For example, http-equiv can be used to refresh the page or to set a cookie. Values include content-type, expires, refresh and set-cookie.

## Specifying Keywords

---

You can use **<meta>** tag to specify important keywords related to the document and later these keywords are used by the search engines while indexing your webpage for searching purpose.

### Example

Following is an example, where we are adding HTML, Meta Tags, Metadata as important keywords about the document.

```
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

This will produce the following result:

Hello HTML5!

## Document Description

---

You can use `<meta>` tag to give a short description about the document. This again can be used by various search engines while indexing your webpage for searching purpose.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

## Document Revision Date

---

You can use `<meta>` tag to give information about when last time the document was updated. This information can be used by various web browsers while refreshing your webpage.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="revised" content="Tutorialspoint, 3/7/2014" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

## Document Refreshing

A `<meta>` tag can be used to specify a duration after which your web page will keep refreshing automatically.

## Example

If you want your page keep refreshing after every 5 seconds then use the following syntax.

```
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="revised" content="Tutorialspoint, 3/7/2014" />
<meta http-equiv="refresh" content="5" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

## Page Redirection

---

You can use <meta> tag to redirect your page to any other webpage. You can also specify a duration if you want to redirect the page after a certain number of seconds.

### Example

Following is an example of redirecting current page to another page after 5 seconds. If you want to redirect page immediately then do not specify *content* attribute.

```
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="revised" content="Tutorialspoint, 3/7/2014" />
<meta http-equiv="refresh" content="5; url=http://www.tutorialspoint.com" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>
```

## Setting Cookies

---

Cookies are data, stored in small text files on your computer and it is exchanged between web browser and web server to keep track of various information based on your web application need.

You can use <meta> tag to store cookies on client side and later this information can be used by the Web Server to track a site visitor.

### Example

Following is an example of redirecting current page to another page after 5 seconds. If you want to redirect page immediately then do not specify *content* attribute.

```
<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="revised" content="Tutorialspoint, 3/7/2014" />
```

```

<meta http-equiv="cookie" content="userid=xyz; expires=Wednesday, 08-Aug-15
23:59:59 GMT;" />

</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>

```

If you do not include the expiration date and time, the cookie is considered a session cookie and will be deleted when the user exits the browser.

**Note:** You can check [PHP and Cookies](#) tutorial for a complete detail on Cookies.

## Setting Author Name

---

You can set an author name in a web page using meta tag. See an example below:

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="author" content="Mahnaz Mohtashim" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>

```

## Specify Character Set

---

You can use <meta> tag to specify character set used within the webpage.

### Example

By default, Web servers and Web browsers use ISO-8859-1 (Latin1) encoding to process Web pages. Following is an example to set UTF-8 encoding:

```

<!DOCTYPE html>
<html>
<head>

```

```

<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="author" content="Mahnaz Mohtashim" />
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>

```

To serve the static page with traditional Chinese characters, the webpage must contain a <meta> tag to set Big5 encoding:

```

<!DOCTYPE html>
<html>
<head>
<title>Meta Tags Example</title>
<meta name="keywords" content="HTML, Meta Tags, Metadata" />
<meta name="description" content="Learning about Meta Tags." />
<meta name="author" content="Mahnaz Mohtashim" />
<meta http-equiv="Content-Type" content="text/html; charset=Big5" />
</head>
<body>
<p>Hello HTML5!</p>
</body>
</html>

```

# 8. HTML – COMMENTS

Comment is a piece of code which is ignored by any web browser. It is a good practice to add comments into your HTML code, especially in complex documents, to indicate sections of a document, and any other notes to anyone looking at the code. Comments help you and others understand your code and increases code readability.

HTML comments are placed in between `<!-- ... -->` tags. So, any content placed within `<!-- ... -->` tags will be treated as comment and will be completely ignored by the browser.

## Example

```
<!DOCTYPE html>
<html>
<head> <!-- Document Header Starts -->
<title>This is document title</title>
</head> <!-- Document Header Ends -->
<body>
<p>Document content goes here.....</p>
</body>
</html>
```

This will produce the following result without displaying the content given as a part of comments:

Document content goes here.....

## Valid vs Invalid Comments

Comments do not nest which means a comment cannot be put inside another comment. Second the double-dash sequence "–" may not appear inside a comment except as part of the closing `-->` tag. You must also make sure that there are no spaces in the start-of-comment string.

## Example

Here, the given comment is a valid comment and will be wiped off by the browser.

```
<!DOCTYPE html>
<html>
<head>
<title>Valid Comment Example</title>
</head>
<body>
```

```
<!-- This is valid comment -->
<p>Document content goes here.....</p>
</body>
</html>
```

But, following line is not a valid comment and will be displayed by the browser. This is because there is a space between the left angle bracket and the exclamation mark.

```
<!DOCTYPE html>
<html>
<head>
<title>Invalid Comment Example</title>
</head>
<body>
<!-- This is not a valid comment -->
<p>Document content goes here.....</p>
</body>
</html>
```

This will produce the following result:

```
<!-- This is not a valid comment -->
Document content goes here.....
```

## Multiline Comments

So far we have seen single line comments, but HTML supports multi-line comments as well.

You can comment multiple lines by the special beginning tag `<!--` and ending tag `-->` placed before the first line and end of the last line as shown in the given example below.

### Example

```
<!DOCTYPE html><html>
<head>
<title>Multiline Comments</title>
</head>
<body>
<!--
This is a multiline comment and it can
span through as many as lines you like.
-->
```

```
<p>Document content goes here.....</p>
</body>
</html>
```

This will produce the following result:

Document content goes here.....

## Conditional Comments

---

Conditional comments only work in Internet Explorer (IE) on Windows but they are ignored by other browsers. They are supported from Explorer 5 onwards, and you can use them to give conditional instructions to different versions of IE.

### Example

```
<!DOCTYPE html><html>
<head>
<title>Conditional Comments</title>

<!--[if IE 6]>
    Special instructions for IE 6 here
<![endif]-->

</head>
<body>
<p>Document content goes here.....</p>
</body>
</html>
```

You will come across a situation where you will need to apply a different style sheet based on different versions of Internet Explorer, in such situation conditional comments will be helpful.

## Using Comment Tag

---

There are few browsers that support <comment> tag to comment a part of HTML code.

### Example

```
<!DOCTYPE html><html>
<head>
<title>Using Comment Tag</title>
</head>
```

```
<body>
<p>This is <comment>not</comment> Internet Explorer.</p>
</body>
</html>
```

If you are using IE, then it will produce following result:

This is Internet Explorer.

But if you are not using IE, then it will produce following result:

This is Internet Explorer.

## Commenting Script Code

Though you will learn JavaScript with HTML, in a separate tutorial, but here you must make a note that if you are using Java Script or VB Script in your HTML code then it is recommended to put that script code inside proper HTML comments so that old browsers can work properly.

### Example

```
<!DOCTYPE html><html>
<head>
<title>Commenting Script Code</title>
<script>
<!--
    document.write("Hello World!")
//-->
</script>
</head>
<body>
<p>Hello , World!</p>
</body>
</html>
```

This will produce the following result:

```
Hello World!
Hello , World!
```

## Commenting Style Sheets

Though you will learn using style sheets with HTML in a separate tutorial, but here you must make a note that if you are using Cascading Style Sheet (CSS) in your HTML code

then it is recommended to put that style sheet code inside proper HTML comments so that old browsers can work properly.

## Example

```
<!DOCTYPE html><html>
<head>
<title>Commenting Style Sheets</title>
<style>
<!--
.example {
    border:1px solid #4a7d49;
}
//-->
</style>
</head>
<body>
<div class="example">Hello , World!</div>
</body>
</html>
```

This will produce the following result:

```
Hello, World!
```

# 9. HTML – IMAGES

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

To try following example, let's keep our HTML file test.htm and image file test.png in the same directory:

```
<!DOCTYPE html>
<html>
<head>
<title>Using Image in Webpage</title>
</head>
<body>
<p>Simple Image Insert</p>

</body>
</html>
```

This will produce the following result:

Simple Image Insert



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.

## 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>

</body>
</html>
```

This will produce the following result:



## 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>

</body>
</html>
```

This will produce the following result:



## Set Image Border

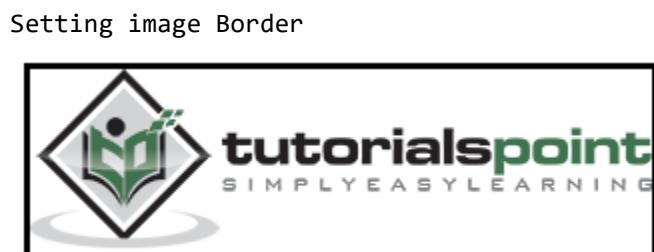
By default, image will have a border around it, you can specify border thickness in terms of pixels using border attribute. A thickness of 0 means, no border around the picture.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Set Image Border</title>
</head>
<body>
<p>Setting image Border</p>

</body>
</html>
```

This will produce the following result:



## 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>

</body>
</html>
```

This will produce the following result:

Setting image Alignment



## Free Web Graphics

For Free Web Graphics including patterns you can look into [Free Web Graphics](#)

# 10. HTML – TABLES

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

Here, the **border** is an attribute of **<table>** tag and it is used to put a border across all the cells. If you do not need a border, then you can use **border="0"**.

## 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:

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		

## 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:

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>
Row 1 Cell 1	Row 1 Cell 2	Row 1 Cell 3
	Row 2 Cell 2	Row 2 Cell 3
Row 3 Cell 1		

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

# 11. 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:

- Beetroot
- Ginger
- Potato
- 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

## The start Attribute

You can use **start** attribute for `<ol>` tag to specify the starting point of numbering you need. Following are the possible options:

```
<ol type="1" start="4">      - Numerals starts with 4.
<ol type="I" start="4">      - Numerals starts with IV.
<ol type="i" start="4">      - Numerals starts with iv.
<ol type="a" start="4">      - Letters starts with d.
<ol type="A" start="4">      - Letters starts with D.
```

### Example

Following is an example where we used `<ol type="i" start="4" >`

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Ordered List</title>
</head>
<body>
<ol type="i" start="4">
<li>Beetroot</li>
<li>Ginger</li>
<li>Potato</li>
<li>Radish</li>
</ol>
</body>
</html>
```

This will produce the following result:

- iv. Beetroot
- v. Ginger
- vi. Potato
- vii. 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

# 12. HTML – TEXT LINKS

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.

**Note:** I recommend you to go through a short tutorial on [Understanding URL](#)

## 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 `</a>` 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

Let's try following example which links <http://www.tutorialspoint.com> at your page:

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

This will produce the following result, where you can click on the link generated to reach to the home page of Tutorials Point (in this example).

Click following link

[Tutorial Point](http://www.tutorialspoint.com)

### 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:

Option	Description
_blank	Opens the linked document in a new window or tab.
_self	Opens the linked document in the same frame.
_parent	Opens the linked document in the parent frame.
_top	Opens the linked document in the full body of the window.
targetframe	Opens the linked document in a named <i>targetframe</i> .

## Example

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

```
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Example</title>
<base href="http://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>
```

This will produce the following result, where you can click on different links to understand the difference between various options given for target attribute.

Click any of the following links

[Opens in New](#) | [Opens in Self](#) | [Opens in Parent](#) | [Opens in Body](#)

## Use of Base Path

When you link HTML documents related to the same website, it is not required to give a complete URL for every link. You can get rid of it if you use **<base>** tag in your HTML

document header. This tag is used to give a base path for all the links. So your browser will concatenate given relative path to this base path and will make a complete URL.

## Example

Following example makes use of <base> tag to specify base URL and later we can use relative path to all the links instead of giving complete URL for every link.

```
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Example</title>
<base href="http://www.tutorialspoint.com/">
</head>
<body>
<p>Click following link</p>
<a href="/html/index.htm" target="_blank">HTML Tutorial</a>
</body>
</html>
```

This will produce the following result, where you can click on the link generated **HTML Tutorial** to reach to the HTML tutorial.

Now given URL <a href="/html/index.htm" is being considered as <a href="http://www.tutorialspoint.com/html/index.htm"

Click following link

[HTML Tutorial](#)

## 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.

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](#)

## 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.

```
<!DOCTYPE html>
<html>
<head>
<title>Hyperlink Example</title>
<base href="http://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:

```
<!DOCTYPE html>
<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](#)

## File Download Dialog Box

Sometimes it is desired that you want to give an option where a user will click a link and it will pop up a "File Download" box to the user instead of displaying actual content. This is very easy and can be achieved using an HTTP header in your HTTP response.

For example, if you want make a **Filename** file downloadable from a given link then its syntax will be as follows.

```
#!/usr/bin/perl

# Additional HTTP Header
print "Content-Type:application/octet-stream; name=\"FileName\"\r\n";
print "Content-Disposition: attachment; filename=\"FileName\"\r\n\r\n";

# Open the target file and list down its content as follows
open( FILE, "<FileName" );
while(read(FILE, $buffer, 100)){
    print("$buffer");
}
```

**Note:** For more detail on PERL CGI programs, go through tutorial [PERL and CGI](#).

# 13. 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">
    
</a>
</body>
</html>
```

This will produce the following result, where you can click on the images to reach to the home page of Tutorialspoint.

Click following link



This was the simplest way of creating hyperlinks using images. Next we will see how we can create Mouse-Sensitive Image Links.

## 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.

For example, if a user clicks 20 pixels over and 30 pixels down from the upper-left corner of the following image:

Click following link



Which has been generated by the following code snippet:

```
<!DOCTYPE html>
<html>
<head>
<title>ISMAP Hyperlink Example</title>
</head>
<body>
<p>Click following link</p>
<a href="/cgi-bin/ismap.cgi" target="_self">
    
</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:

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

```
</html>
```

## Coordinate System

---

The actual value of coords is totally dependent on the shape in question. Here is a summary, to be followed by detailed examples:

**rect = x<sub>1</sub>, y<sub>1</sub>, x<sub>2</sub>, y<sub>2</sub>**

x<sub>1</sub> and y<sub>1</sub> are the coordinates of the upper left corner of the rectangle; x<sub>2</sub> and y<sub>2</sub> are the coordinates of the lower right corner.

**circle = x<sub>c</sub>, y<sub>c</sub>, radius**

x<sub>c</sub> and y<sub>c</sub> are the coordinates of the center of the circle, and radius is the circle's radius. A circle centered at 200,50 with a radius of 25 would have the attribute *coords="200,50,25"*

**poly = x<sub>1</sub>, y<sub>1</sub>, x<sub>2</sub>, y<sub>2</sub>, x<sub>3</sub>, y<sub>3</sub>, ... x<sub>n</sub>, y<sub>n</sub>**

The various x-y pairs define vertices (points) of the polygon, with a "line" being drawn from one point to the next point. A diamond-shaped polygon with its top point at 20,20 and 40 pixels across at its widest points would have the attribute *coords="20,20,40,40,20,60,0,40"*.

All coordinates are relative to the upper-left corner of the image (0,0). Each shape has a related URL. You can use any image software to know the coordinates of different positions.

# 14. HTML – EMAIL LINKS

It is not difficult to put an HTML email link on your webpage but it can cause unnecessary spamming problem for your email account. There are people, who can run programs to harvest these types of emails and later use them for spamming in various ways.

You can have another option to facilitate people to send you emails. One option could be to use HTML forms to collect user data and then use PHP or CGI script to send an email.

A simple example, check our [Contact Us](#) Form. We take user feedback using this form and then we are using one CGI program which is collecting this information and sending us email to the one given email ID.

**Note:** You will learn about HTML Forms in [HTML Forms](#) and you will learn about CGI in our another tutorial [Perl CGI Programming](#).

## 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.

```
<a href= "mailto: abc@example.com">Send Email</a>
```

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.

## Default Settings

You can specify a default *email subject* and *email body* along with your email address. Following is the example to use default subject and body.

```
<a href="mailto:abc@example.com?subject=Feedback&body=Message">  
Send Feedback  
</a>
```

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

```
Send Feedback
```

# 15. HTML – FRAMES

HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document. A collection of frames in the browser window is known as a frameset. The window is divided into frames in a similar way the tables are organized: into rows and columns.

## **Disadvantages of Frames**

---

There are few drawbacks with using frames, so it's never recommended to use frames in your webpages:

- Some smaller devices cannot cope with frames often because their screen is not big enough to be divided up.
- Sometimes your page will be displayed differently on different computers due to different screen resolution.
- The browser's *back button* might not work as the user hopes.
- There are still few browsers that do not support frame technology.

## **Creating Frames**

---

To use frames on a page we use `<frameset>` tag instead of `<body>` tag. The `<frameset>` tag defines, how to divide the window into frames. The **rows** attribute of `<frameset>` tag defines horizontal frames and **cols** attribute defines vertical frames. Each frame is indicated by `<frame>` tag and it defines which HTML document shall open into the frame.

### **Example**

Following is the example to create three horizontal frames:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Frames</title>
</head>
<frameset rows="10%,80%,10%">
<frame name="top" src="/html/top_frame.htm" />
<frame name="main" src="/html/main_frame.htm" />
<frame name="bottom" src="/html/bottom_frame.htm" />
<noframes>
</body>
```

```

Your browser does not support frames.

</body>
</noframes>
</frameset>
</html>

```

This will produce the following result:



## Example

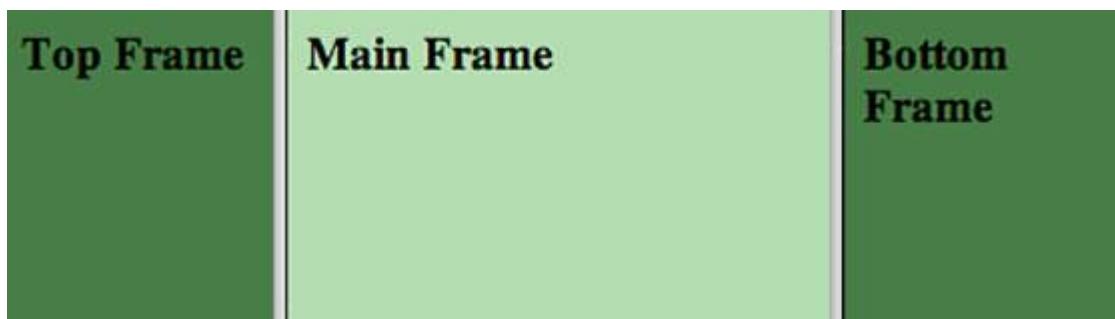
Let's put the above example as follows, here we replaced rows attribute by cols and changed their width. This will create all the three frames vertically:

```

<!DOCTYPE html>
<html>
<head>
<title>HTML Frames</title>
</head>
<frameset cols="25%,50%,25%">
    <frame name="left" src="/html/top_frame.htm" />
    <frame name="center" src="/html/main_frame.htm" />
    <frame name="right" src="/html/bottom_frame.htm" />
<noframes>
<body>
    Your browser does not support frames.
</body>
</noframes>
</frameset>
</html>

```

This will produce the following result:



## The <frameset> Tag Attributes

Following are important attributes of the <frameset> tag:

Attribute	Description
cols	<p>Specifies how many columns are contained in the frameset and the size of each column. You can specify the width of each column in one of the four ways:</p> <p>Absolute values in pixels. For example, to create three vertical frames, use <code>cols="100, 500,100"</code>.</p> <p>A percentage of the browser window. For example, to create three vertical frames, use <code>cols="10%, 80%,10%"</code>.</p> <p>Using a wildcard symbol. For example, to create three vertical frames, use <code>cols="10%, *,10%"</code>. In this case wildcard takes remainder of the window.</p> <p>As relative widths of the browser window. For example, to create three vertical frames, use <code>cols="3*,2*,1*"</code>. This is an alternative to percentages. You can use relative widths of the browser window. Here the window is divided into sixths: the first column takes up half of the window, the second takes one third, and the third takes one sixth.</p>
rows	This attribute works just like the cols attribute and takes the same values, but it is used to specify the rows in the frameset. For example, to create two horizontal frames, use <code>rows="10%, 90%"</code> . You can specify the height of each row in the same way as explained above for columns.
border	This attribute specifies the width of the border of each frame in pixels. For example, <code>border="5"</code> . A value of zero means no border.
frameborder	This attribute specifies whether a three-dimensional border should be displayed between frames. This attribute takes value either 1 (yes) or 0 (no). For example <code>frameborder="0"</code> specifies no border.

framespacing	This attribute specifies the amount of space between frames in a frameset. This can take any integer value. For example framespacing="10" means there should be 10 pixels spacing between each frames.
--------------	--

## The <frame> Tag Attributes

---

Following are the important attributes of <frame> tag:

Attribute	Description
src	This attribute is used to give the file name that should be loaded in the frame. Its value can be any URL. For example, src="/html/top_frame.htm" will load an HTML file available in html directory.
name	This attribute allows you to give a name to a frame. It is used to indicate which frame a document should be loaded into. This is especially important when you want to create links in one frame that load pages into an another frame, in which case the second frame needs a name to identify itself as the target of the link.
frameborder	This attribute specifies whether or not the borders of that frame are shown; it overrides the value given in the frameborder attribute on the <frameset> tag if one is given, and this can take values either 1 (yes) or 0 (no).
marginwidth	This attribute allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example marginwidth="10".
marginheight	This attribute allows you to specify the height of the space between the top and bottom of the frame's borders and its contents. The value is given in pixels. For example marginheight="10".
noresize	By default, you can resize any frame by clicking and dragging on the borders of a frame. The noresize attribute prevents a user from being able to resize the frame. For example noresize="noresize".
scrolling	This attribute controls the appearance of the scrollbars that appear on the frame. This takes values either "yes", "no" or "auto". For example scrolling="no" means it should not have scroll bars.

longdesc	This attribute allows you to provide a link to another page containing a long description of the contents of the frame. For example longdesc="framedescription.htm"
----------	---

## Browser Support for Frames

---

If a user is using any old browser or any browser, which does not support frames then <noframes> element should be displayed to the user.

So you must place a <body> element inside the <noframes> element because the <frameset> element is supposed to replace the <body> element, but if a browser does not understand <frameset> element then it should understand what is inside the <body> element which is contained in a <noframes> element.

You can put some nice message for your user having old browsers. For example, *Sorry!! your browser does not support frames*, as shown in the above example.

## Frame's name and target attributes

---

One of the most popular uses of frames is to place navigation bars in one frame and then load main pages into a separate frame.

Let's see following example where a test.htm file has following code:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Target Frames</title>
</head>
<frameset cols="200, *">
    <frame src="/html/menu.htm" name="menu_page" />
    <frame src="/html/main.htm" name="main_page" />
    <noframes>
        <body>
            Your browser does not support frames.
        </body>
    </noframes>
</frameset>
</html>
```

Here, we have created two columns to fill with two frames. The first frame is 200 pixels wide and will contain the navigation menu bar implemented by **menu.htm** file. The second column fills in remaining space and will contain the main part of the page and it is implemented by **main.htm** file. For all the three links available in menu bar, we have

mentioned target frame as **main\_page**, so whenever you click any of the links in menu bar, available link will open in main page.

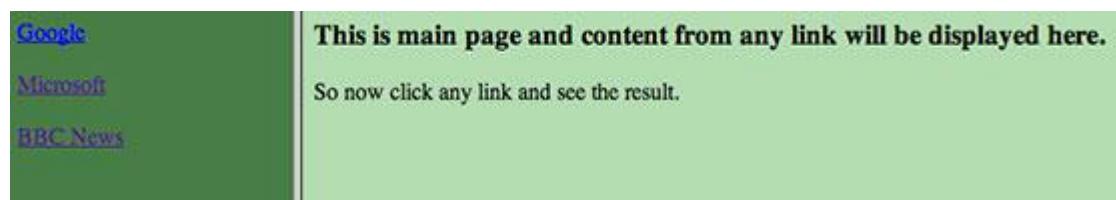
Following is the content of menu.htm file

```
<!DOCTYPE html>
<html>
<body bgcolor="#4a7d49">
<a href="http://www.google.com" target="main_page">Google</a>
<br /><br />
<a href="http://www.microsoft.com" target="main_page">Microsoft</a>
<br /><br />
<a href="http://news.bbc.co.uk" target="main_page">BBC News</a>
</body>
</html>
```

Following is the content of main.htm file:

```
<!DOCTYPE html>
<html>
<body bgcolor="#b5dcb3">
<h3>This is main page and content from any link will be displayed here.</h3>
<p>So now click any link and see the result.</p>
</body>
</html>
```

When we load **test.htm** file, it produces following result:



Now you can try to click links available in the left panel and see the result. The *target* attribute can also take one of the following values:

Option	Description
_self	Loads the page into the current frame.
_blank	Loads a page into a new browser window.opening a new window.

_parent	Loads the page into the parent window, which in the case of a single frameset is the main browser window.
_top	Loads the page into the browser window, replacing any current frames.
targetframe	Loads the page into a named targetframe.

# 16. HTML – IFRAMES

You can define an inline frame with HTML tag **<iframe>**. The **<iframe>** tag is not somehow related to **<frameset>** tag, instead, it can appear anywhere in your document. The **<iframe>** tag defines a rectangular region within the document in which the browser can display a separate document, including scrollbars and borders.

The **src** attribute is used to specify the URL of the document that occupies the inline frame.

## Example

Following is the example to show how to use the **<iframe>**:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Iframes</title>
</head>
<body>
<p>Document content goes here...</p>
<iframe src="/html/menu.htm" width="555" height="200">
    Sorry your browser does not support inline frames.
</iframe>
<p>Document content also go here...</p>
</body>
</html>
```

This will produce the following result:

Document content goes here...

[Google](#)

[Microsoft](#)

[BBC News](#)

Document content can also go here...

## The <iframe> Tag Attributes

Most of the attributes of the `<iframe>` tag, including `name`, `class`, `frameborder`, `id`, `longdesc`, `marginheight`, `marginwidth`, `name`, `scrolling`, `style`, and `title` behave exactly like the corresponding attributes for the `<frame>` tag.

Attribute	Description
src	This attribute is used to give the file name that should be loaded in the frame. Its value can be any URL. For example, <code>src="/html/top_frame.htm"</code> will load an HTML file available in html directory.
name	This attribute allows you to give a name to a frame. It is used to indicate which frame a document should be loaded into. This is especially important when you want to create links in one frame that load pages into another frame, in which case the second frame needs a name to identify itself as the target of the link.
frameborder	This attribute specifies whether or not the borders of that frame are shown; it overrides the value given in the <code>frameborder</code> attribute on the <code>&lt;frameset&gt;</code> tag if one is given, and this can take values either 1 (yes) or 0 (no).
marginwidth	This attribute allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example <code>marginwidth="10"</code> .
marginheight	This attribute allows you to specify the height of the space between the top and bottom of the frame's borders and its contents. The value is given in pixels. For example <code>marginheight="10"</code> .
noresize	By default, you can resize any frame by clicking and dragging on the borders of a frame. The <code>noresize</code> attribute prevents a user from being able to resize the frame. For example <code>noresize="noresize"</code> .
scrolling	This attribute controls the appearance of the scrollbars that appear on the frame. This takes values either "yes", "no" or "auto". For example <code>scrolling="no"</code> means it should not have scroll bars.
longdesc	This attribute allows you to provide a link to another page containing a long description of the contents of the frame. For example <code>longdesc="framedescription.htm"</code>

# 17. HTML – BLOCKS

All the HTML elements can be categorized into two categories **(a)** Block Level Elements **(b)** Inline Elements.

## Block Elements

---

Block elements appear on the screen as if they have a line break before and after them. For example, the `<p>`, `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`, `<ul>`, `<ol>`, `<dl>`, `<pre>`, `<hr />`, `<blockquote>`, and `<address>` elements are all block level elements. They all start on their own new line, and anything that follows them appears on its own new line.

## Inline Elements

---

Inline elements, on the other hand, can appear within sentences and do not have to appear on a new line of their own. The `<b>`, `<i>`, `<u>`, `<em>`, `<strong>`, `<sup>`, `<sub>`, `<big>`, `<small>`, `<li>`, `<ins>`, `<del>`, `<code>`, `<cite>`, `<dfn>`, `<kbd>`, and `<var>` elements are all inline elements.

## Grouping HTML Elements

---

There are two important tags which we use very frequently to group various other HTML tags (i) `<div>` tag and (ii) `<span>` tag

### The `<div>` tag

---

This is the very important block level tag which plays a big role in grouping various other HTML tags and applying CSS on group of elements. Even now `<div>` tag can be used to create webpage layout where we define different parts (Left, Right, Top etc.) of the page using `<div>` tag. This tag does not provide any visual change on the block but this has more meaning when it is used with CSS.

### Example

Following is a simple example of `<div>` tag. We will learn Cascading Style Sheet (CSS) in a separate chapter but we used it here to show the usage of `<div>` tag:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML div Tag</title>
</head>
<body>
```

```

<!-- First group of tags -->
<div style="color:red">
  <h4>This is first group</h4>
  <p>Following is a list of vegetables</p>
  <ul>
    <li>Beetroot</li>
    <li>Ginger</li>
    <li>Potato</li>
    <li>Radish</li>
  </ul>
</div>

<!-- Second group of tags -->
<div style="color:green">
  <h4>This is second group</h4>
  <p>Following is a list of fruits</p>
  <ul>
    <li>Apple</li>
    <li>Banana</li>
    <li>Mango</li>
    <li>Strawberry</li>
  </ul>
</div>

</body>
</html>

```

This will produce the following result:

**THIS IS FIRST GROUP**

Following is a list of vegetables

- **Beetroot**
- **Ginger**
- **Potato**
- **Radish**

**THIS IS SECOND GROUP**

Following is a list of fruits

- Apple
- Banana
- Mango
- Strawberry

## The tag

---

The HTML `<span>` is an inline element and it can be used to group inline-elements in an HTML document. This tag also does not provide any visual change on the block but has more meaning when it is used with CSS.

The difference between the `<span>` tag and the `<div>` tag is that the `<span>` tag is used with inline elements whereas the `<div>` tag is used with block-level elements.

### Example

Following is a simple example of `<span>` tag. We will learn Cascading Style Sheet (CSS) in a separate chapter but we used it here to show the usage of `<span>` tag:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML span Tag</title>
</head>
<body>

<p>This is <span style="color:red">red</span> and this is <span
style="color:green">green</span></p>

</body>
</html>
```

This will produce the following result:

This is red, and this is green

# 18. HTML – BACKGROUNDS

By default, your webpage background is white in color. You may not like it, but no worries. HTML provides you following two good ways to decorate your webpage background.

- Html Background with Colors
- Html Background with Images

Now let's see both the approaches one by one using appropriate examples.

## **Html Background with Colors**

The **bgcolor** attribute is used to control the background of an HTML element, specifically page body and table backgrounds. Following is the syntax to use bgcolor attribute with any HTML tag.

```
<tagname bgcolor="color_value" ...>
```

This color\_value can be given in any of the following formats:

```
<!-- Format 1 - Use color name -->
<table bgcolor="lime" >

<!-- Format 2 - Use hex value -->
<table bgcolor="#f1f1f1" >

<!-- Format 3 - Use color value in RGB terms -->
<table bgcolor="rgb(0,0,120)" >
```

## **Example**

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

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Background Colors</title>
</head>
<body>

<!-- Format 1 - Use color name -->
<table bgcolor="yellow" width="100%">
```

```

<tr><td>
This background is yellow
</td></tr>
</table>

<!-- Format 2 - Use hex value --&gt;
&lt;table bgcolor="#6666FF" width="100%"&gt;
&lt;tr&gt;&lt;td&gt;
This background is sky blue
&lt;/td&gt;&lt;/tr&gt;
&lt;/table&gt;

<!-- Format 3 - Use color value in RGB terms --&gt;
&lt;table bgcolor="rgb(255,0,255)" width="100%"&gt;
&lt;tr&gt;&lt;td&gt;
This background is green
&lt;/td&gt;&lt;/tr&gt;
&lt;/table&gt;

&lt;/body&gt;
&lt;/html&gt;
</pre>

```

This will produce the following result:

This background is yellow  
This background is sky blue  
This background is green

## Html Background with Images

The **background** attribute can also be used to control the background of an HTML element, specifically page body and table backgrounds. You can specify an image to set background of your HTML page or table. Following is the syntax to use background attribute with any HTML tag.

**Note:** The *background* attribute is deprecated and it is recommended to use Style Sheet for background setting.

```
<tagname background="Image URL" . . . >
```

The most frequently used image formats are JPEG, GIF and PNG images.

## Example

Here are the examples to set background images of a table.

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Background Images</title>
</head>
<body>

<!-- Set table background -->
<table background="/images/html.gif" width="100%" height="100">
<tr><td>
This background is filled up with HTML image.
</td></tr>
</table>

</body>
</html>
```

This will produce the following result:

This background is filled up with HTML image.



## Patterned & Transparent Backgrounds

You might have seen many pattern or transparent backgrounds on various websites. This simply can be achieved by using patterned image or transparent image in the background.

It is suggested that while creating patterns or transparent GIF or PNG images, use the smallest dimensions possible even as small as 1x1 to avoid slow loading.

## Example

Here are the examples to set background pattern of a table:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Background Images</title>
</head>
<body>

<!-- Set a table background using pattern -->
<table background="/images/pattern1.gif" width="100%" height="100">
<tr><td>
This background is filled up with a pattern image.
</td></tr>
</table>

<!-- Another example on table background using pattern -->
<table background="/images/pattern2.gif" width="100%" height="100">
<tr><td>
This background is filled up with a pattern image.
</td></tr>
</table>

</body>
</html>
```

This will produce the following result:



# 19. 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 **`bcolor`** attribute.

The `<body>` tag has following attributes which can be used to set different colors:

- **`bcolor`** - 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**

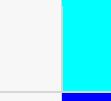
---

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.

**Note:** Check a complete list of [HTML Color Name](#).

## W3C 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 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	Color HEX
Black	#000000
Red	#FF0000
Green	#00FF00
Blue	#0000FF
Yellow	#FFFF00
Cyan	#00FFFF
Magenta	#FF00FF
Grey	#C0C0C0
White	#FFFFFF

## Example

Here are the examples to set background of an HTML tag by color code in hexadecimal:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Colors by Hex</title>
</head>
<body text="#0000FF" bgcolor="#00FF00">
<p>Use different color hexa for for body and table and see the result.</p>
<table bgcolor="#000000">
<tr>
<td>
<font color="#FFFFFF">This text will appear white on black background.</font>
</td>
</tr>
</table>
</body>
</html>
```

## 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	Color RGB
Black	rgb(0,0,0)
Red	rgb(255,0,0)
Green	rgb(0,255,0)
Blue	rgb(0,0,255)
Yellow	rgb(255,255,0)
Cyan	rgb(0,255,255)
Magenta	rgb(255,0,255)
Grey	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 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>
```

## Browser Safe Colors

---

Here is the list of 216 colors which are supposed to be safest and computer independent colors. These colors vary from hexa code 000000 to FFFFFF and they will be supported by all the computers having 256 color palette.

000000	000033	000066	000099	0000CC	0000FF
003300	003333	003366	003399	0033CC	0033FF
006600	006633	006666	006699	0066CC	0066FF
009900	009933	009966	009999	0099CC	0099FF
00CC00	00CC33	00CC66	00CC99	00CCCC	00CCFF
00FF00	00FF33	00FF66	00FF99	00FFCC	00FFFF
330000	330033	330066	330099	3300CC	3300FF
333300	333333	333366	333399	3333CC	3333FF
336600	336633	336666	336699	3366CC	3366FF
339900	339933	339966	339999	3399CC	3399FF
33CC00	33CC33	33CC66	33CC99	33CCCC	33CCFF

33FF00	33FF33	33FF66	33FF99	33FFCC	33FFFF
660000	660033	660066	660099	6600CC	6600FF
663300	663333	663366	663399	6633CC	6633FF
666600	666633	666666	666699	6666CC	6666FF
669900	669933	669966	669999	6699CC	6699FF
66CC00	66CC33	66CC66	66CC99	66CCCC	66CCFF
66FF00	66FF33	66FF66	66FF99	66FFCC	66FFFF
990000	990033	990066	990099	9900CC	9900FF
993300	993333	993366	993399	9933CC	9933FF
996600	996633	996666	996699	9966CC	9966FF
999900	999933	999966	999999	9999CC	9999FF
99CC00	99CC33	99CC66	99CC99	99CCCC	99CCFF
99FF00	99FF33	99FF66	99FF99	99FFCC	99FFFF
CC0000	CC0033	CC0066	CC0099	CC00CC	CC00FF
CC3300	CC3333	CC3366	CC3399	CC33CC	CC33FF
CC6600	CC6633	CC6666	CC6699	CC66CC	CC66FF
CC9900	CC9933	CC9966	CC9999	CC99CC	CC99FF
CCCC00	CCCC33	CCCC66	CCCC99	CCCCCC	CCCCFF

CCFF00	CCFF33	CCFF66	CCFF99	CCFFCC	CCFFFF
FF0000	FF0033	FF0066	FF0099	FF00CC	FF00FF
FF3300	FF3333	FF3366	FF3399	FF33CC	FF33FF
FF6600	FF6633	FF6666	FF6699	FF66CC	FF66FF
FF9900	FF9933	FF9966	FF9999	FF99CC	FF99FF
FFCC00	FFCC33	FFCC66	FFCC99	FFCCCC	FFCCFF
FFFF00	FFFF33	FFFF66	FFFF99	FFFFCC	FFFFFF

# 20. HTML – FONTS

Fonts play a very important role in making a website more user friendly and increasing content readability. Font face and color depends entirely on the computer and browser that is being used to view your page but you can use HTML **<font>** tag to add style, size, and color to the text on your website. You can use a **<basefont>** tag to set all of your text to the same size, face, and color.

The font tag is having three attributes called **size**, **color**, and **face** to customize your fonts. To change any of the font attributes at any time within your webpage, simply use the **<font>** tag. The text that follows will remain changed until you close with the **</font>** tag. You can change one or all of the font attributes within one **<font>** tag.

**Note:** The font and basefont tags are deprecated and it is supposed to be removed in a future version of HTML. So they should not be used rather, it's suggested to use CSS styles to manipulate your fonts. But still for learning purpose, this chapter will explain font and basefont tags in detail.

## Set Font Size

You can set content font size using **size** attribute. The range of accepted values is from 1(smallest) to 7(largest). The default size of a font is 3.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Setting Font Size</title>
</head>
<body>
<font size="1">Font size="1"</font><br />
<font size="2">Font size="2"</font><br />
<font size="3">Font size="3"</font><br />
<font size="4">Font size="4"</font><br />
<font size="5">Font size="5"</font><br />
<font size="6">Font size="6"</font><br />
<font size="7">Font size="7"</font>
</body>
</html>
```

This will produce the following result:

```
Font size="1"
Font size="2"
Font size="3"
Font size="4"
Font size="5"
Font size="6"
Font size="7"
```

## **Relative Font Size**

---

You can specify how many sizes larger or how many sizes smaller than the preset font size should be. You can specify it like **<font size="+n">** or **<font size="-n">**

### **Example**

```
<!DOCTYPE html>
<html>
<head>
<title>Relative Font Size</title>
</head>
<body>
<font size="-1">Font size="-1"</font><br />
<font size="+1">Font size="+1"</font><br />
<font size="+2">Font size="+2"</font><br />
<font size="+3">Font size="+3"</font><br />
<font size="+4">Font size="+4"</font>
</body>
</html>
```

This will produce the following result:

```
Font size="-1"
Font size="+1"
Font size="+2"
Font size="+3"
Font size="+4"
```

## Setting Font Face

---

You can set font face using `face` attribute but be aware that if the user viewing the page doesn't have the font installed, they will not be able to see it. Instead user will see the default font face applicable to the user's computer.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Font Face</title>
</head>
<body>
<font face="Times New Roman" size="5">Times New Roman</font><br />
<font face="Verdana" size="5">Verdana</font><br />
<font face="Comic sans MS" size="5">Comic Sans MS</font><br />
<font face="WildWest" size="5">WildWest</font><br />
<font face="Bedrock" size="5">Bedrock</font><br />
</body>
</html>
```

This will produce the following result:

Times New Roman  
 Verdana  
 Comic Sans MS  
 WildWest  
 Bedrock

### Specify alternate font faces

---

A visitor will only be able to see your font if they have that font installed on their computer. So, it is possible to specify two or more font face alternatives by listing the font face names, separated by a comma.

```
<font face="arial,helvetica">
<font face="Lucida Calligraphy,Comic Sans MS,Lucida Console">
```

When your page is loaded, their browser will display the first font face available. If none of the given fonts are installed, then it will display the default font face *Times New Roman*.

**Note:** Check a complete list of [HTML Standard Fonts](#).

## Setting Font Color

---

You can set any font color you like using *color* attribute. You can specify the color that you want by either the color name or hexadecimal code for that color.

**Note:** You can check a complete list of [HTML Color Name with Codes](#).

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Setting Font Color</title>
</head>
<body>
<font color="#FF00FF">This text is in pink</font><br />
<font color="red">This text is red</font>
</body>
</html>
```

This will produce the following result:

This text is in pink

This text is red

## The <basefont> Element:

---

The <basefont> element is supposed to set a default font size, color, and typeface for any parts of the document that are not otherwise contained within a <font> tag. You can use the <font> elements to override the <basefont> settings.

The <basefont> tag also takes color, size and face attributes and it will support relative font setting by giving size a value of +1 for a size larger or -2 for two sizes smaller.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Setting Basefont Color</title>
</head>
<body>
<basefont face="arial, verdana, sans-serif" size="2" color="#ff0000">
<p>This is the page's default font.</p>

```

```
<h2>Example of the &lt;basefont&gt; Element</h2>
<p><font size="+2" color="darkgray">
This is darkgray text with two sizes larger
</font></p>

<p><font face="courier" size="-1" color="#000000">
It is a courier font, a size smaller and black in color.
</font></p>

</body>
</html>
```

This will produce the following result:

This is the page's default font.

## Example of the **<basefont>** Element

---

This is darkgray text with two sizes larger

It is a courier font, a size smaller and black in color.

# 21. HTML – FORMS

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.  multipart/form-data - This is used when you want to upload binary data in the form of files like image, word file etc.

**Note:** You can refer to [Perl & CGI](#) for a detail on how form data upload works.

## 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:

First  name:   
 Last name:

## 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 to <code>text</code> .
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:

User  ID :   
 Password:

## 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:

Description

## 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:

Maths  Physics

### 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 <i>checked</i> 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:

Maths  Physics

### 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 <i>checked</i> 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 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

## 22. HTML – EMBED MULTIMEDIA

Sometimes you need to add music or video into your web page. The easiest way to add video or sound to your web site is to include the special HTML tag called **<embed>**. This tag causes the browser itself to include controls for the multimedia automatically provided browser supports **<embed>** tag and given media type.

You can also include a **<noembed>** tag for the browsers which don't recognize the **<embed>** tag. You could, for example, use **<embed>** to display a movie of your choice, and **<noembed>** to display a single JPG image if browser does not support **<embed>** tag.

### Example

Here is a simple example to play an embedded midi file:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML embed Tag</title>
</head>
<body>
<embed src="/html/yourfile.mid" width="100%" height="60" >
<noembed></noembed>
</embed>
</body>
</html>
```

This will produce the following result:



You can put any media file in src attribute. You can try it yourself by giving various types of files.

## The <embed> Tag Attributes

---

Following is the list of important attributes which can be used with <embed> tag.

Attribute	Description
align	Determines how to align the object. It can be set to either <i>center</i> , <i>left</i> or <i>right</i> .
autoplay	This boolean attribute indicates if the media should start automatically. You can set it either true or false.
loop	Specifies if the sound should be played continuously (set loop to true), a certain number of times (a positive value) or not at all (false)
playcount	Specifies the number of times to play the sound. This is alternate option for <i>loop</i> if you are using IE.
hidden	Specifies if the multimedia object should be shown on the page. A false value means no and true values means yes.
width	Width of the object in pixels
height	Height of the object in pixels
name	A name used to reference the object.
src	URL of the object to be embedded.
volume	Controls volume of the sound. Can be from 0 (off) to 100 (full volume).

## Supported Video Types

---

You can use various media types like Flash movies (.swf), AVI's (.avi), and MOV's (.mov) file types inside embed tag.

- .swf files - are the file types created by Macromedia's Flash program.
- .wmv files - are Microsoft's Windows Media Video file types.
- .mov files - are Apple's Quick Time Movie format.
- .mpeg files - are movie files created by the Moving Pictures Expert Group.

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

```

<title>HTML embed Tag</title>
</head>
<body>
<embed src="/html/yourfile.swf" width="200" height="200" >
<noembed></noembed>
</embed>
</body>
</html>

```

This will produce the following result:



## Background Audio

You can use HTML **<bgsound>** tag to play a soundtrack in the background of your webpage. This tag is supported by Internet Explorer only and most of the other browsers ignore this tag. It downloads and plays an audio file when the host document is first downloaded by the user and displayed. The background sound file also will replay whenever the user refreshes the browser.

This tag is having only two attributes *loop* and *src*. Both these attributes have same meaning as explained above.

Here is a simple example to play a small midi file:

```

<!DOCTYPE html>
<html>
<head>
<title>HTML embed Tag</title>
</head>
<body>
<bgsound src="/html/yourfile.mid">
<noembed></noembed>
</bgsound>
</body>
</html>

```

This will produce the blank screen. This tag does not display any component and remains hidden.

Internet Explorer can also handle only three different sound format files: wav, the native format for PCs; au, the native format for most Unix workstations; and MIDI, a universal music-encoding scheme.

## HTML Object tag

---

HTML 4 introduces the **<object>** element, which offers an all-purpose solution to generic object inclusion. The **<object>** element allows HTML authors to specify everything required by an object for its presentation by a user agent.

Here are a few examples:

### Example - 1

You can embed an HTML document in an HTML document itself as follows:

```
<object data="data/test.htm" type="text/html" width="300" height="200">
  alt : <a href="data/test.htm">test.htm</a>
</object>
```

Here *alt* attribute will come into picture if browser does not support *object* tag.

### Example - 2

You can embed a PDF document in an HTML document as follows:

```
<object data="data/test.pdf" type="application/pdf" width="300" height="200">
  alt : <a href="data/test.pdf">test.htm</a>
</object>
```

### Example - 3

You can specify some parameters related to the document with the **<param>** tag. Here is an example to embed a wav file:

```
<object data="data/test.wav" type="audio/x-wav" width="200" height="20">
  <param name="src" value="data/test.wav">
  <param name="autoplay" value="false">
  <param name="autoStart" value="0">
  alt : <a href="data/test.wav">test.wav</a>
</object>
```

### Example - 4

You can add a flash document as follows:

```
<object classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000" id="penguin"
codebase="someplace/swflash.cab" width="200" height="300">
<param name="movie" value="flash/penguin.swf" />
<param name="quality" value="high" />

</object>
```

### Example - 5

You can add a java applet into HTML document as follows:

```
<object classid="clsid:8ad9c840-044e-11d1-b3e9-00805f499d93"
width="200" height="200">
<param name="code" value="applet.class">
</object>
```

The **classid** attribute identifies which version of Java Plug-in to use. You can use the optional *codebase* attribute to specify if and how to download the JRE.

# 23. HTML – MARQUEES

An HTML marquee is a scrolling piece of text displayed either horizontally across or vertically down your webpage depending on the settings. This is created by using HTML <marquees> tag.

**Note:** The HTML <marquee> tag may not be supported by various browsers so it is not recommended to rely on this tag, instead you can use JavaScript and CSS to create such effects.

## Syntax

A simple syntax to use HTML <marquee> tag is as follows:

```
<marquee attribute_name="attribute_value"....more attributes>  
  
One or more lines or text message or image  
  
</marquee>
```

## The <marquee> Tag Attributes

Following is the list of important attributes which can be used with <marquee> tag.

Attribute	Description
width	This specifies the width of the marquee. This can be a value like 10 or 20% etc.
height	This specifies the height of the marquee. This can be a value like 10 or 20% etc.
direction	This specifies the direction in which marquee should scroll. This can be a value like <i>up</i> , <i>down</i> , <i>left</i> or <i>right</i> .
behavior	This specifies the type of scrolling of the marquee. This can have a value like <i>scroll</i> , <i>slide</i> and <i>alternate</i> .
scrolldelay	This specifies how long to delay between each jump. This will have a value like 10 etc.

scrollamount	This specifies the speed of marquee text. This can have a value like 10 etc.
loop	This specifies how many times to loop. The default value is INFINITE, which means that the marquee loops endlessly.
bgcolor	This specifies background color in terms of color name or color hex value.
hspace	This specifies horizontal space around the marquee. This can be a value like 10 or 20% etc.
vspace	This specifies vertical space around the marquee. This can be a value like 10 or 20% etc.

Below are few examples to demonstrate the usage of marquee tag.

## Examples - 1

```
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
<marquee>This is basic example of marquee</marquee>
</body>
</html>
```

This will produce the following result:

This is basic example of marquee

## Examples - 2

```
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
<marquee width="50%">This example will take only 50% width</marquee>
```

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

This will produce the following result:

This is basic example of marquee

### Examples - 3

```
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
<marquee direction="right">This text will scroll from left to right</marquee>
</body>
</html>
```

This will produce the following result:

This is basic example of marquee

### Examples - 4

```
<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>
<marquee direction="up">This text will scroll from bottom to up</marquee>
</body>
</html>
```

This will produce the following result:

This text will scroll from bottom to up

# 24. HTML – HEADER

We have learnt that a typical HTML document will have following structure:

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

This chapter will give a little more detail about header part which is represented by HTML `<head>` tag. The `<head>` tag is a container of various important tags like `<title>`, `<meta>`, `<link>`, `<base>`, `<style>`, `<script>`, and `<noscript>` tags.

## The HTML `<title>` Tag

The HTML `<title>` tag is used for specifying the title of the HTML document. Following is an example to give a title to an HTML document:

```
<!DOCTYPE html>  
<html>  
  <head>  
    <title>HTML Title Tag Example</title>  
  </head>  
  <body>  
    <p>Hello, World!</p>  
  </body>  
</html>
```

This will produce the following result:

```
Hello, World!
```

## The HTML <meta> Tag

---

The HTML <meta> tag is used to provide metadata about the HTML document which includes information about page expiry, page author, list of keywords, page description etc.

Following are few of the important usages of <meta> tag inside an HTML document:

```

<!DOCTYPE html>
<html>
<head>
<title>HTML Meta Tag Example</title>

<!-- Provide list of keywords -->
<meta name="keywords" content="C, C++, Java, PHP, Perl, Python">

<!-- Provide description of the page -->
<meta name="description" content="Simply Easy Learning by Tutorials Point">

<!-- Author information -->
<meta name="author" content="Tutorials Point">

<!-- Page content type -->
<meta http-equiv="content-type" content="text/html; charset=UTF-8">

<!-- Page refreshing delay -->
<meta http-equiv="refresh" content="30">

<!-- Page expiry -->
<meta http-equiv="expires" content="Wed, 21 June 2006 14:25:27 GMT">

<!-- Tag to tell robots not to index the content of a page -->
<meta name="robots" content="noindex,nofollow">

</head>
<body>
<p>Hello, World!</p>
</body>
</html>
```

This will produce the following result:

```
Hello, World!
```

## The HTML <base> Tag

The HTML <base> tag is used for specifying the base URL for all relative URLs in a page, which means all the other URLs will be concatenated into base URL while locating for the given item.

For example, all the given pages and images will be searched after prefixing the given URLs with base URL <http://www.tutorialspoint.com/> directory:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Base Tag Example</title>
<base href="http://www.tutorialspoint.com/" />
</head>
<body>


<a href="/html/index.htm" title="HTML Tutorial">HTML Tutorial</a>

</body>
</html>
```

This will produce the following result:



But if you change base URL to something else, for example, if base URL is <http://www.tutorialspoint.com/home> then image and other given links will become like <http://www.tutorialspoint.com/home/images/logo.png> and <http://www.tutorialspoint.com/home/html/index.htm>

## The HTML <link> Tag

The HTML <link> tag is used to specify relationships between the current document and external resource. Following is an example to link an external style sheet file available in **css** sub-directory within web root:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML link Tag Example</title>
<base href="http://www.tutorialspoint.com/" />
<link rel="stylesheet" type="text/css" href="/css/style.css">
</head>
<body>
<p>Hello, World!</p>
</body>
</html>
```

This will produce the following result:

Hello, World!

## The HTML <style> Tag

The HTML <style> tag is used to specify style sheet for the current HTML document. Following is an example to define few style sheet rules inside <style> tag:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML style Tag Example</title>
<base href="http://www.tutorialspoint.com/" />
<style type="text/css">
.myclass{
    background-color: #aaa;
    padding: 10px;
}
</style>
</head>
<body>
<p class="myclass">Hello, World!</p>
</body>
</html>
```

This will produce the following result:

Hello, World!

**Note:** To learn about how Cascading Style Sheet works, kindly check a separate tutorial available at <http://www.tutorialspoint.com/css>

## The HTML <script> Tag

The HTML <script> tag is used to include either external script file or to define internal script for the HTML document. Following is an example where we are using JavaScript to define a simple JavaScript function:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML script Tag Example</title>
<base href="http://www.tutorialspoint.com/" />
<script type="text/JavaScript">
function Hello(){
    alert("Hello, World");
}
</script>
</head>
<body>
<input type="button" onclick="Hello();" name="ok" value="OK" />
</body>
</html>
```

This will produce the following result, where you can try to click on the given button:

OK

**Note:** To learn about how JavaScript works, kindly check a separate tutorial available at: <http://www.tutorialspoint.com/javascript>

# 25. HTML – STYLE SHEET

Cascading Style Sheets (CSS) describe how documents are presented on screens, in print, or perhaps how they are pronounced. W3C has actively promoted the use of style sheets on the Web since the consortium was founded in 1994.

Cascading Style Sheets (CSS) provide easy and effective alternatives to specify various attributes for the HTML tags. Using CSS, you can specify a number of style properties for a given HTML element. Each property has a name and a value, separated by a colon (:). Each property declaration is separated by a semi-colon (;).

## Example

First let's consider an example of HTML document which makes use of `<font>` tag and associated attributes to specify text color and font size:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML CSS</title>
</head>
<body>
<p><font color="green" size="5">Hello, World!</font></p>
</body>
</html>
```

We can re-write above example with the help of Style Sheet as follows:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML CSS</title>
</head>
<body>
<p style="color:green;font-size:24px;">Hello, World!</p>
</body>
</html>
```

This will produce the following result:

Hello, World!

You can use CSS in three ways in your HTML document:

- **External Style Sheet:** Define style sheet rules in a separate .css file and then include that file in your HTML document using HTML <link> tag.
- **Internal Style Sheet:** Define style sheet rules in header section of the HTML document using <style> tag.
- **Inline Style Sheet:** Define style sheet rules directly along-with the HTML elements using **style** attribute.

Let's see all the three cases one by one with the help of suitable examples.

## **External Style Sheet**

---

If you need to use your style sheet to various pages, then its always recommended to define a common style sheet in a separate file. A cascading style sheet file will have extension as **.css** and it will be included in HTML files using <link> tag.

### **Example**

Consider we define a style sheet file **style.css** which has following rules:

```
.red{
    color: red;
}
.thick{
    font-size:20px;
}
.green{
    color:green;
}
```

Here we defined three CSS rules which will be applicable to three different classes defined for the HTML tags. I suggest you should not bother about how these rules are being defined because you will learn them while studying CSS. Now let's make use of the above external CSS file in our following HTML document:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML External CSS</title>
<link rel="stylesheet" type="text/css" href="/html/style.css">
</head>
<body>
<p class="red">This is red</p>
```

```
<p class="thick">This is thick</p>

<p class="green">This is green</p>

<p class="thick green">This is thick and green</p>
</body>
</html>
```

This will produce the following result:

**This is red**

**This is thick**

**This is green**

**This is thick and green**

## **Internal Style Sheet**

---

If you want to apply Style Sheet rules to a single document only, then you can include those rules in header section of the HTML document using `<style>` tag.

Rules defined in internal style sheet overrides the rules defined in an external CSS file.

### **Example**

Let's re-write above example once again, but here we will write style sheet rules in the same HTML document using `<style>` tag:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Internal CSS</title>
<style type="text/css">
.red{
    color: red;
}
.thick{
    font-size:20px;
}
.green{
```

```

    color:green;
}
</style>
</head>
<body>
<p class="red">This is red</p>

<p class="thick">This is thick</p>

<p class="green">This is green</p>

<p class="thick green">This is thick and green</p>
</body>
</html>

```

This will produce the following result:

This is red

This is thick

This is green

This is thick and green

## Inline Style Sheet

---

You can apply style sheet rules directly to any HTML element using **style** attribute of the relevant tag. This should be done only when you are interested to make a particular change in any HTML element only.

Rules defined inline with the element overrides the rules defined in an external CSS file as well as the rules defined in `<style>` element.

### Example

Let's re-write above example once again, but here we will write style sheet rules along with the HTML elements using **style** attribute of those elements.

```

<!DOCTYPE html>
<html>
<head>
<title>HTML Inline CSS</title>
</head>

```

```
<body>  
<p style="color:red;">This is red</p>  
  
<p style="font-size:20px;">This is thick</p>  
  
<p style="color:green;">This is green</p>  
  
<p style="color:green;font-size:20px;">This is thick and green</p>  
</body>  
</html>
```

This will produce the following result:

This is red

This is thick

This is green

This is thick and green

# 26. HTML JAVASCRIPT

A **script** is a small piece of program that can add interactivity to your website. For example, a script could generate a pop-up alert box message, or provide a dropdown menu. This script could be written using JavaScript or VBScript.

You can write various small functions, called event handlers using any of the scripting language and then you can trigger those functions using HTML attributes.

Now-a-days, only **JavaScript** and associated frameworks are being used by most of the web developers, VBScript is not even supported by various major browsers.

You can keep JavaScript code in a separate file and then include it wherever it's needed, or you can define functionality inside HTML document itself. Let's see both the cases one by one with suitable examples.

## External JavaScript

If you are going to define a functionality which will be used in various HTML documents then it's better to keep that functionality in a separate JavaScript file and then include that file in your HTML documents. A JavaScript file will have extension as **.js** and it will be included in HTML files using `<script>` tag.

### Example

Consider we define a small function using JavaScript in **script.js** which has following code:

```
function Hello()
{
    alert("Hello, World");
}
```

Now let's make use of the above external JavaScript file in our following HTML document:

```
<!DOCTYPE html>
<html>
<head>
<title>JavaScript External Script</title>
<script src="/html/script.js" type="text/JavaScript"/></script>
</head>
<body>
<input type="button" onclick="Hello();" name="ok" value="Click Me" />
</body>
</html>
```

This will produce the following result, where you can try to click on the given button:

**Click Me**

The page at [www.tutorialspoint.com](http://www.tutorialspoint.com) says:

Hello, World

**OK**

## Internal Script

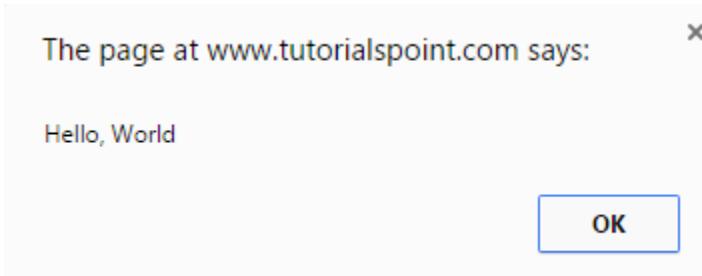
You can write your script code directly into your HTML document. Usually we keep script code in header of the document using `<script>` tag, otherwise there is no restriction and you can put your source code anywhere in the document but inside `<script>` tag.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>JavaScript Internal Script</title>
<base href="http://www.tutorialspoint.com/" />
<script type="text/JavaScript">
function Hello(){
    alert("Hello, World");
}
</script>
</head>
<body>
<input type="button" onclick="Hello();" name="ok" value="Click Me" />
</body>
</html>
```

This will produce the following result, where you can try to click on the given button:

**Click Me**



## Event Handlers

Event handlers are nothing but simply defined functions which can be called against any mouse or keyboard event. You can define your business logic inside your event handler which can vary from a single to 1000s of line code.

Following example explains how to write an event handler. Let's write one simple function `EventHandler()` in the header of the document. We will call this function when any user brings mouse over a paragraph.

```
<!DOCTYPE html>
<html>
<head>
<title>Event Handlers Example</title>
<base href="http://www.tutorialspoint.com/" />
<script type="text/JavaScript">
function EventHandler(){
    alert("I'm event handler!!");
}
</script>
</head>
<body>
<p onmouseover="EventHandler();">Bring your mouse here to see an alert</p>
</body>
</html>
```

Now This will produce the following result. Bring your mouse over this line and see the result:

Bring your mouse here to see an alert

## Hide Scripts from Older Browsers

Although most (if not all) browsers these days support JavaScript, but still some older browsers don't. If a browser doesn't support JavaScript, instead of running your script, it would display the code to the user. To prevent this, you can simply place HTML comments around the script as shown below.

```
JavaScript Example:  

<script type="text/JavaScript">  

<!--  

document.write("Hello JavaScript!");  

//-->  

</script>
```

```
VBScript Example:  

<script type="text/vbscript">  

<!--  

document.write("Hello VBScript!")  

' -->  

</script>
```

## The <noscript> Element

You can also provide alternative info to the users whose browsers don't support scripts and for those users who have disabled script option their browsers. You can do this using the <noscript> tag.

```
JavaScript Example:  

<script type="text/JavaScript">  

<!--  

document.write("Hello JavaScript!");  

//-->  

</script>  

<noscript>Your browser does not support JavaScript!</noscript>  

VBScript Example:  

<script type="text/vbscript">  

<!--  

document.write("Hello VBScript!")  

' -->  

</script>  

<noscript>Your browser does not support VBScript!</noscript>
```

## Default Scripting Language

There may be a situation when you will include multiple script files and ultimately using multiple <script> tags. You can specify a default scripting language for all your *script* tags.

This saves you from specifying the language every time you use a script tag within the page. Below is the example:

```
<meta http-equiv="Content-Script-Type" content="text/JavaScript" />
```

Note that you can still override the default by specifying a language within the script tag.

# 27. HTML – LAYOUTS

A webpage layout is very important to give better look to your website. It takes considerable time to design a website's layout with great look and feel.

Now- a-days, all modern websites are using CSS and JavaScript based framework to come up with responsive and dynamic websites but you can create a good layout using simple HTML tables or division tags in combination with other formatting tags. This chapter will give you few examples on how to create a simple but working layout for your webpage using pure HTML and its attributes.

## **HTML Layout - Using Tables**

---

The simplest and most popular way of creating layouts is using HTML <table> tag. These tables are arranged in columns and rows, so you can utilize these rows and columns in whatever way you like.

### **Example**

For example, the following HTML layout example is achieved using a table with 3 rows and 2 columns but the header and footer column spans both columns using the colspan attribute:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Layout using Tables</title>
</head>
<body>
<table width="100%" border="0">
<tr>
<td colspan="2" bgcolor="#b5dcb3">
<h1>This is Web Page Main title</h1>
</td>
</tr>
<tr valign="top">
<td bgcolor="#aaa" width="50">
<b>Main Menu</b><br />
HTML<br />
PHP<br />
PERL...
</td>
<td>
</td>
</tr>
</table>
</body>
</html>
```

```

</td>
<td bgcolor="#eee" width="100" height="200">
    Technical and Managerial Tutorials
</td>
</tr>
<tr>
    <td colspan="2" bgcolor="#b5dcb3">
        <center>
            Copyright © 2007 Tutorialspoint.com
        </center>
    </td>
</tr>
</table>
</body>
</html>

```

This will produce the following result:

## This is Web Page Main title

<b>Main</b>	<b>Menu</b> Technical and Managerial Tutorials
HTML	
PHP	
PERL...	

Copyright © 2007 Tutorialspoint.com

## Multiple Columns Layout - Using Tables

You can design your webpage to put your web content in multiple pages. You can keep your content in middle column and you can use left column to use menu and right column can be used to put advertisement or some other stuff. This layout will be very similar to what we have at our website tutorialspoint.com.

## Example

Here is an example to create three column layout:

```
<!DOCTYPE html>
<html>
<head>
<title>Three Column HTML Layout</title>
</head>
<body>
<table width="100%" border="0">
<tr valign="top">
<td bgcolor="#aaa" width="20%">
<b>Main Menu</b><br />
HTML<br />
PHP<br />
PERL...
</td>
<td bgcolor="#b5dcb3" height="200" width="60%">
Technical and Managerial Tutorials
</td>
<td bgcolor="#aaa" width="20%">
<b>Right Menu</b><br />
HTML<br />
PHP<br />
PERL...
</td>
</tr>
<table>
</body>
</html>
```

This will produce the following result:

<b>Main Menu</b>	Technical and Managerial Tutorials	<b>Right Menu</b>
HTML PHP PERL...		HTML PHP PERL...

## HTML Layouts - Using DIV, SPAN

The `<div>` element is a block level element used for grouping HTML elements. While the `<div>` tag is a block-level element, the HTML `<span>` element is used for grouping elements at an inline level.

Although we can achieve pretty nice layouts with HTML tables, but tables weren't really designed as a layout tool. Tables are more suited to presenting tabular data.

**Note:** This example makes use of Cascading Style Sheet (CSS), so before understanding this example you need to have a better understanding on how CSS works.

### Example

Here we will try to achieve same result using `<div>` tag along with CSS, whatever you have achieved using `<table>` tag in previous example.

```

<!DOCTYPE html>
<html>
<head>
<title>HTML Layouts using DIV, SPAN</title>
</head>
<body>
<div style="width:100%">
    <div style="background-color:#b5dcb3; width:100%">
        <h1>This is Web Page Main title</h1>
    </div>
    <div style="background-color:#aaa; height:200px; width:100px; float:left;">
        <div><b>Main Menu</b></div>
        HTML<br />
        PHP<br />
        PERL...
    </div>
</div>

```

# 28.

```
<div style="background-color:#eee; height:200px; width:350px; float:left;">
  <p>Technical and Managerial Tutorials</p>
</div>

<div style="background-color:#aaa; height:200px; width:100px; float:right;">
  <div><b>Right Menu</b></div>
  HTML<br />
  PHP<br />
  PERL...
</div>

<div style="background-color:#b5dcb3; clear:both">
<center>
  Copyright © 2007 Tutorialspoint.com
</center>
</div>
</div>
</body>
</html>
```

This will produce the following result:

## This is Web Page Main title

<b>Main Menu</b>	Technical and Managerial Tutorials	<b>Right Menu</b>
HTML		HTML
PHP		PHP
PERL...		PERL...
Copyright © 2007 Tutorialspoint.com		

You can create better layout using DIV, SPAN along with CSS. For more information on CSS, please refer to CSS Tutorial.

## 28. HTML – TAG REFERENCE

Following tags have been introduced in older versions of HTML but all the tags marked with  are part of **HTML-5**.

Tag	Description	Version
<!--...-->	Specifies a comment	
<!DOCTYPE>	Specifies the document type	
<a>	Specifies an anchor	
<abbr>	Specifies an abbreviation	
<acronym>	Specifies an acronym	
<address>	Specifies an address element	
<applet>	Deprecated. Specifies an applet	
<area>	Specifies an area inside an image map	
<article>	Specifies an article	
<aside>	Specifies some content loosely related to the page content. If it is removed, the remaining content still makes sense	
<audio>	Specifies a sound content	
<b>	Specifies bold text	
<base>	Specifies a base URL for all the links in a page	
<basefont>	Deprecated. Specifies a base font	

<bdo>	Specifies the direction of text display	
<bdi>	Represents text that must be isolated from its surrounding for bidirectional text formatting. It allows embedding a span of text with a different, or unknown, directionality	5
<bgsound>	Specifies background music	
<big>	Specifies big text	
<blink>	Specifies a text which blinks	
<blockquote>	Specifies a long quotation	
<body>	Specifies the body element	
 	Inserts a single line break	
<button>	Specifies a push button	
<canvas>	For making graphics with a script	5
<caption>	Specifies a table caption	
<center>	Deprecated. Specifies centered text	
<cite>	Specifies a citation	
<code>	Specifies computer code text	
<col>	Specifies attributes for table columns	
<colgroup>	Specifies groups of table columns	
<comment>	Puts a comment in the document	
<datalist>	A list of options for input values	5

<dd>	Specifies a definition description	
<del>	Specifies deleted text	
<dfn>	Specifies a definition term	
<dialog>	Specifies a dialog box or window	5
<dir>	Deprecated. Specifies a directory list	
<div>	Specifies a section in a document	
<dl>	Specifies a definition list	
<dt>	Specifies a definition term	
<em>	Specifies emphasized text	
<embed>	Specifies a container for an external (non-HTML) application	5
<fieldset>	Specifies a fieldset	
<figcaption>	Specifies a caption for a <figure> element	5
<figure>	Specifies self-contained content	5
<font>	Deprecated. Specifies text font, size, and color	
<footer>	Specifies a footer for a document or section	5
<form>	Specifies a form	
<frame>	Specifies a sub window (a frame)	
<frameset>	Specifies a set of frames	
<h1> to <h6>	Specifies header 1 to header 6	

<head>	Specifies information about the document	
<header>	Specifies a header for a document or section	5
<hr>	Specifies a horizontal rule	
<html>	Specifies an html document	
<i>	Specifies italic text	
<iframe>	Specifies an inline sub window (frame)	
<ilayer>	Specifies an inline layer	
<img>	Specifies an image	
<input>	Specifies an input field	
<ins>	Specifies inserted text	
<isindex>	Deprecated. Specifies a single-line input field	
<kbd>	Specifies keyboard text	
<keygen>	Generate key information in a form	5
<label>	Specifies a label for a form control	
<layer>	Specifies a layer	
<legend>	Specifies a title in a fieldset	
<li>	Specifies a list item	
<link>	Specifies a resource reference	

<main>	Specifies the main or important content in the document. There is only one element in the document	
<map>	Specifies an image map	
<mark>	Specifies a text highlighted for reference purposes, that is for its relevance in another context	
<marquee>	Creates a scrolling-text marquee	
<menu>	Deprecated. Specifies a menu list	
<menuitem>	Specifies a command/menu item that the user can invoke from a popup menu	
<meta>	Specifies meta data of an html document which is not displayed on the page	
<meter>	Specifies a scalar measurement within a known range (a gauge)	
<multicol>	Specifies a multicolumn text flow	
<nav>	Specifies a section that contains only navigation links	
<nobr>	No breaks allowed in the enclosed text	
<noembed>	Specifies content to be presented by browsers that do not support the <embed> tag	
<noframes>	Specifies a noframe section	
<noscript>	Specifies a noscript section	
<object>	Specifies an embedded object	
<ol>	Specifies an ordered list	

<optgroup>	Specifies an option group	
<option>	Specifies an option in a drop-down list	
<output>	Specifies the result of a calculation	5
<p>	Specifies a paragraph	
<param>	Specifies a parameter for an object	
<plaintext>	Deprecated. Render the remainder of the document as preformatted plain text	
<pre>	Specifies preformatted text	
<progress>	Specifies a completion progress of a task	5
<q>	Specifies a short quotation	
<rp>	Specifies to show browsers that do not support the ruby element	5
<rt>	Specifies an text ruby annotation	5
<ruby>	Specifies an ruby annotation	5
<s>	Deprecated. Specifies strikethrough text	
<samp>	Specifies sample computer code	
<script>	Specifies a script	
<section>	Specifies a section in a document	5
<select>	Specifies a selectable list	
<spacer>	Specifies a white space	
<small>	Specifies small text	

<source>	Specifies a media resources for media elements, defined inside video or audio elements	
<span>	Specifies a section in a document	
<strike>	Deprecated. Specifies strikethrough text	
<strong>	Specifies strong text	
<style>	Specifies a style definition	
<sub>	Specifies subscripted text	
<summary>	Specifies a summary, caption, or legend for a given <details>	
<sup>	Specifies superscripted text	
<table>	Specifies a table	
<tbody>	Specifies a table body	
<td>	Specifies a table cell	
<textarea>	Specifies a text area	
<tfoot>	Specifies a table footer	
<th>	Specifies a table heading	
<thead>	Specifies a table header	
<time>	Specifies a date and time <details>	
<title>	Specifies the document title	
<tr>	Specifies a table row	

<track>	Specifies a text tracks used in mediaplayers	
<tt>	Specifies teletype text	
<u>	Deprecated. Specifies underlined text	
<ul>	Specifies an unordered list	
<var>	Specifies a variable	
<video>	Specifies a text tracks used in media players	
<wbr>	Indicates a potential word break point within a <nobr> section	
<xmp>	Deprecated. Specifies preformatted text	

## HTML <comment> and <!--...--> Tag

---

### Description

The HTML <comment> tag allows authors to comment their HTML code. This tag is supported by IE only.

It is recommended to use <!--...--> to comment your tags. This tag is compatible to all browsers.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML <!--...--> Tag</title>
</head>
<body>
<comment>This is a commented line in IE</comment>
<!-- This is a commented line supported by almost every browser. It will not
appear in output as its a comment. -->
</body>
```

```
</html>
```

This will produce the following result:

This is a commented line in IE

## Browser Support

---

Browser Support for <comment> tag

Chrome	Firefox	IE	Opera	Safari	Android
Not Supported	Not Supported	Yes	Not Supported	Not Supported	Not Supported

Browser Support for <!--...--> tag

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <doctype> Tag

---

### Description

The HTML <doctype> tag is used for specifying which version of HTML the document is using. This is referred to as the document type declaration (DTD).

**NOTE:** The <!DOCTYPE> tag does not have an end tag!.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML doctype Tag</title>
</head>
<body>
<p>doctype declaration <doctype> is mentioned at the starting of every HTML
document.</p>
</body>
```

```
</html>
```

This will produce the following result:

```
doctype declaration <doctype> is mentioned at the starting of every HTML document.
```

## Declaration

HTML 4.01 has 3 possible doctypes: HTML 4 Strict, HTML 4 Transitional, and HTML 4 Frameset. Every HTML document you create should have one of these three DTDs.

### HTML 4 Strict

This document type includes all HTML elements except those that have been deprecated, and those that appear in frameset documents.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"
 "http://www.w3.org/TR/html4/strict.dtd">
```

### HTML 4 Transitional

This document type includes all HTML elements including those that have been deprecated.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
 "http://www.w3.org/TR/html4/loose.dtd">;
```

### HTML 4 Frameset

This document type includes all HTML elements in the transitional DTD as well as those in framed document.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
 "http://www.w3.org/TR/html4/frameset.dtd">
```

### HTML 5 Declaration

In HTML5 there is only one declaration i.e.

```
<!DOCTYPE html>
```

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <a> Tag

---

### Description

The HTML <a> tag is used for creating a hyperlink to either another document, or somewhere within the current document.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML a Tag</title>
</head>
<body>
<p>
This is a link to <a href="http://www.amrood.com">AMROOD.com</a>
</p>
</body>
</html>
```

This will produce the following result:

This is a link to AMROOD.com

### Global Attributes

---

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

---

The HTML <a> tag also supports the following additional attributes:

Attribute	Value	Description
charset	character_encoding	Defines the character encoding of the linked document.
coords	if shape="rect" coords="left,top,right,bottom" if shape="circ" coords="centerx,centery,radius" shape="poly" coords="x1,y1,x2,y2,..,xn,yn"	then then if then Specifies the coordinates appropriate to the shape attribute to define a region of an

		image for image maps.
download 	filename	This downloads the target when user clicks on the hyperlink.
href	URL	Specifies the URL of a page or the name of the anchor that the link goes to.
hreflang	language_code	Language code of the destination URL.
media 	media_query	It specifies what media the linked document is optimized for
name	section name	Marks an area of the page that a link jumps to.
rel	alternate designates stylesheet start next prev contents index glossary copyright chapter section subsection appendix help bookmark	Describes the relationship between the current document and the destination URI.
rev	alternate designates stylesheet start next	Specifies the relationship between the target URL and the current document.

	prev contents index glossary copyright chapter section subsection appendix help bookmark	
shape	rect circ circle poly polygon	rectangle  Specifies the shape of the image map
target	_blank _self _top	_parent  Where to open the target URL. _blank - the target URL will open in a new window _self - the target URL will open in the same frame as it was clicked _parent - the target URL will open in the parent frameset _top - the target URL will open in the full body of the window
type 	mime_type	Specifies the MIME (Multipurpose Internet Mail Extensions) type of the target URL

## Event Attributes

---

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <abbr> Tag

---

### Description

The HTML <abbr> tag is used for indicating an abbreviation like etc., pvt.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML abbr Tag</title>
</head>
<body>
<p>
<abbr title="Private">pvt.</abbr><br />
<abbr title="International Cricket Council">ICC.</abbr> promotes the global
game.<br />
</p>
</body>
</html>
```

This will produce the following result:

pvt.  
ICC promotes the global game.

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <acronym> Tag

---

### Description

The HTML <acronym> tag is used for indicating an acronym.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML acronym Tag</title>
</head>
<body>
<p>
<acronym title="HyperText Markup Language">HTML</acronym>
</p>
</body>
</html>
```

This will produce the following result:

HTML

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Not Supported

## HTML <address> Tag

---

### Description

The HTML <address> tag is used for indicating an address. The address usually renders in italic.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML address Tag</title>
</head>
<body>
<address>
600 Wisdom Apartments<br />
Filmcity, Kondiura<br />
New Delhi - 50027
</address>
</body>
</html>
```

This will produce the following result:

*600 Wisdom Apartments  
Filmcity, Kondiura  
New Delhi - 50027*

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <applet> Tag

---

### Description

The HTML <applet> tag specifies an applet. It is used for embedding a Java applet within an HTML document. It is not supported in HTML5.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML applet Tag</title>
</head>
<body>
<applet code="newClass.class" width="300" height="200">
</applet>
</body>
</html>
```

Here is the *newClass.java* file:

```
import java.applet.*;
import java.awt.*;

public class newClass extends Applet
{
    public void paint (Graphics gh)
    {
        gh.drawString("Tutorialspoint.com", 300, 150);
    }
}
```

This will produce the following result:

[Tutorialspoint.com](http://Tutorialspoint.com)

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <> tag also supports the following additional attributes:

Attribute	Value	Description
align	URL	<i>Deprecated</i> - Defines the text alignment around the applet
alt	URL	Alternate text to be displayed in case browser does not support applet
archive	URL	Applet path when it is stored in a Java Archive ie. jar file
code	URL	A URL that points to the class of the applet
codebase	URL	Indicates the base URL of the applet if the code attribute is relative
height	pixels	Height to display the applet
hspace	pixels	<i>Deprecated</i> - Defines the left and right spacing around the applet
name	name	Defines a unique name for the applet
object	name	Specifies the resource that contains a serialized representation of the applet's state.

title	text	Additional information to be displayed in tool tip of the mouse
vspace	pixels	<i>Deprecated</i> - Amount of white space to be inserted above and below the object.
width	pixels	Width to display the applet.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
No	Yes	Yes	No	Yes	No

## HTML <area> Tag

---

### Description

The HTML <area> tag is used for defining an area in an image map.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML area Tag</title>
</head>
<body>
<img src=/images/usemap.gif alt="usemap" border="0"
      usemap="#tutorials"/>
<map name="tutorials">
  <area shape="poly"
        coords="74,0,113,29,98,72,52,72,38,27"
        href="/perl/index.htm"
        alt="Perl Tutorial"
        target="_blank" />
```

```

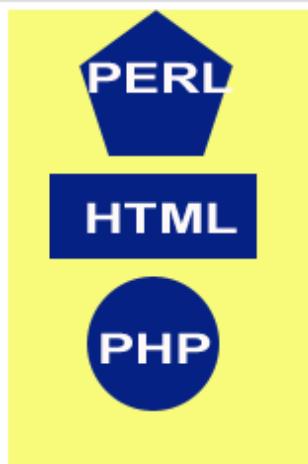
<area shape="rect"
      coords="22,83,126,125"
      alt="HTML Tutorial"
      href="/html/index.htm"
      target="_blank" />

<area shape="circle"
      coords="73,168,32"
      alt="PHP Tutorial"
      href="/php/index.htm"
      target="_blank" />

</map>
</body>
</html>

```

This will produce the following result:



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <area> tag also supports the following additional attributes:

Attribute	Value	Description
alt	text	Specifies an alternate text for the area.
coords	if shape="rect" then coords="left,top,right,bottom" if shape="circ" then coords="centerx,centery,radius" if shape="poly" then coords="x1,y1,x2,y2,..,xn,yn"	Specifies the coordinates appropriate to the shape attribute to define a region of an image for image maps.
download 	filename	Specifies that the target gets downloaded when hyperlink is clicked by user.
href	URL	Specifies the URL of a page or the name of the anchor that the link goes to.
hreflang 	language_code	Specifies the language of the target URL.
media 	media query	Specifies media/device the target URL is optimized for.
nohref	true/false	Excludes an area from the image map
rel 	alternate author bookmark help license next nofollow noreferrer prefetch prev search tag	Specifies relationship between the current document and the target URL
shape	rect rectangle circ circle	Specifies the shape of the image map

	poly polygon	
target	_blank _parent _self _top	Where to open the target URL. _blank - the target URL will open in a new window _self - the target URL will open in the same frame as it was clicked _parent - the target URL will open in the parent frameset _top - the target URL will open in the full body of the window
type 	mime_type	Specifies the MIME (Multipurpose Internet Mail Extensions) type of the target URL.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <article> Tag

---

### Description

The HTML <article> tag is used in a blog post, forum post, newspaper article etc. It specifies self-contained composition in a site, document, page or application.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Article Tag</title>
</head>
<body>
```

```
<article>
<h2>PHP</h2>
<p>PHP is PHP Hypertext Preprocessor</p>
</article>
</body>
</html>
```

This will produce the following result:

## PHP

PHP is PHP Hypertext Preprocessor.

## Global Attributes

---

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

---

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

---

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <aside> Tag

---

### Description

The HTML <aside> tag is used to specify a section of a page aside from the related section. This tag can be used for glossary definitions, author biography, author profile etc.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML aside Tag</title>
</head>
```

```
<body>
<aside>
<h3>Java History</h3>
<p>Java is a programming language developed by James Gosling in 1994.</p>
</aside>
</body>
</html>
```

This will produce the following result:

```
Java History
Java is a programming language developed by James Gosling in 1994.
```

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <audio> Tag

---

### Description

The HTML <audio> tag is used to embed audio in web pages.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML audio Tag</title>
</head>
<body>
```

```

<p>Click on Play button...</p>
<p>(Song: Kalimba which is provided as a Sample Music in Windows)</p>
<audio controls>
  <source src="/html/Kalimba.mp3" type="audio/mpeg">
</audio>
</body>
</html>

```

This will produce the following result:

**Click on Play button...**

(Song: Kalimba which is provided as a Sample Music in Windows)

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Mobile
Yes	Yes	Yes	Yes	Yes	Yes

## HTML **<b>** Tag

---

### Description

The HTML **<b>** tag specifies bold text.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>HTML b Tag</title>
</head>
<body>
This web page gives explanation on <b>bold</b> tag.
</body>
</html>

```

This will produce the following result:

This web page gives explanation on **bold** tag.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <base> Tag

---

### Description

The HTML <base> tag is used to specify a base URI, or URL, for relative links.

For example, you can set the base URL once at the top of your page in header section, then all subsequent relative links will use that URL as a starting point.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML base Tag</title>
<base href="http://www.tutorialspoint.com" />
</head>
<body>
HTML: 
</body>
</html>
```

This will produce the following result:

HTML:



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <base> tag also supports the following additional attributes:

Attribute	Value	Description
href	URL	Specifies the URL of a page or the name of the anchor that the link goes to.
target	_blank _parent _self _top	Where to open the target URL. _blank - the target URL will open in a new window. _self - the target URL will open in the same frame as it was clicked. _parent - the target URL will open in the parent frameset _top - the target URL will open in the full body of the window

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <basefont> Tag

### Description

169

The HTML <basefont> tag is used to specify a base font for the document to use. This base font is applied to complete document. This tag is deprecated now.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML basefont Tag</title>
</head>
<body>
<basefont face="cursive,serif" color="#ff9900" size="4"/>
<p>The HTML basefont tag is now deprecated. You should use CSS font to set font properties instead.</p>
</body>
</html>
```

This will produce the following result:

The HTML basefont tag is now deprecated. You should use CSS font to set font properties instead.

This result may vary browser to browser.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <basefont> tag also supports the following additional attributes:

Attribute	Value	Description
color	rgb(x,x,x) #xxxxxx colorname	<i>Deprecated</i> - Specifies the color of the text.
face	font names separated by comma	<i>Deprecated</i> - Specifies the font family of the text.
size	1 to 7	<i>Deprecated</i> - Specifies the font size of the text.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Not Supported	Not Supported	Yes	Not Supported	Not Supported	Not Supported

## HTML <bdo> Tag

---

### Description

The HTML <bdo> tag is used to override the default text direction.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML bdo Tag</title>
</head>
<body>
<bdo dir="rtl">Here's some English embedded in text in another language
requiring a right-to-left presentation.</bdo>
</body>
</html>
```

This will produce the following result:

tfel-ot-thgir a gniriuer egaugnal rehtona ni txet ni deddebme hsilgnE emos s'ereH  
.noitatneserp

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <bdo> tag also supports the following additional attributes:

Attribute	Value	Description

dir	ltr rtl	Defines the text direction.
-----	---------	-----------------------------

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <bdi> Tag

---

### Description

The HTML <bdi> tag is Bi-directional isolation element which is used to embed text with a different direction from another text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML bdi Tag</title>
</head>
<body>
<p>Tutorials point list of tutorials:</p>
<ul>
    <li>Web: HTML</li>
    <li>Programming: <bdi>Java</bdi></li>
    <li>Scripting: <bdi>VBScript</bdi></li>
    <li>Mobile: <bdi>Android</bdi></li>
</ul>
</body>
</html>
```

This will produce the following result:

Tutorials point list of tutorials:

- Web: HTML
- Programming: Java
- Scripting: VBScript
- Mobile: Android

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Not Supported	Not Supported	Not Supported	Not Supported

## HTML <bgsound> Tag

---

### Description

The HTML <bgsound> tag is used to play a soundtrack in the background. This tag is for Internet Explorer only.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML bgsound Tag</title>
</head>
<body>
<bgsound src="/html/yourfile.mdi"/>
<p>This does create any result on the screen but it plays sound file in the background.</p>
</body>
</html>
```

This will produce the following result:

This does not create any result on the screen but it plays sound file in the background.

## Specific Attributes

The HTML <bgsound> tag also supports the following additional attributes:

Attribute	Value	Description
loop	number	Lets you replay a background soundtrack a certain number of times.
src	URL	Specifies the path of the sound file.

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
No	No	Yes	No	No	No

## HTML <big> Tag

---

### Description

The HTML <big> tag increases the font size. *This tag is not supported in HTML5.*

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML big Tag</title>
</head>
<body>
<p><big>Website: compleionline.com</big>(Online Compiler)</p>
</body>
</html>
```

This will produce the following result:

Website: compleionline.com (Online Compiler)

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML blink Tag

---

### Description

The HTML <blink> tag is used to enclose a text to make it blink. This tag was supported by Netscape and now this is obsolete.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML blink Tag</title>
</head>
<body>
<blink>This text will blink in Netscape Version 5.0</blink>
</body>
</html>
```

This will produce the following result:

This text will blink in Netscape Version 5.0

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Not Supported					

## HTML <blockquote> Tag

---

### Description

The HTML <blockquote> tag is used for indicating long quotations (i.e. quotations that span multiple lines). It should contain only block-level elements within it, and not just plain text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML blockquote Tag</title>
</head>
<body>
<blockquote>Browsers generally render blockquote text as indented text. If your quoted text needs to display within a non-quoted paragraph, you should use the HTML q tag. Most browsers surround q text with quotation marks.</blockquote>
<q>Browsers generally render blockquote text as indented text. If your quoted text needs to display within a non-quoted paragraph, you should use the HTML q tag. Most browsers surround q text with quotation marks.</q>
</body>
</html>
```

This will produce the following result:

Browsers generally render blockquote text as indented text. If your quoted text needs to display within a non-quoted paragraph, you should use the HTML q tag. Most browsers surround q text with quotation marks.

“Browsers generally render blockquote text as indented text. If your quoted text needs to display within a non-quoted paragraph, you should use the HTML q tag. Most browsers surround q text with quotation marks”

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <blockquote> tag also supports the following additional attributes:

Attribute	Value	Description
cite 	URL	URL of the quote, if it is taken from the web.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <body> Tag

---

### Description

The HTML <body> tag is used for indicating the main content section of the HTML document.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML body Tag</title>
</head>
<body>
Body of the document...
</body>
</html>
```

This will produce the following result:

Body of the document...

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <body> tag also supports the following additional attributes:

Attribute	Value	Description
alink	rgb(x,x,x) #xxxxxx colorname	<i>Deprecated</i> - Specifies the color of the active links in the document.
background	URL	<i>Deprecated</i> - Specifies the background image file path.
bgcolor	rgb(x,x,x) #xxxxxx colorname	<i>Deprecated</i> - Specifies the background color.
link	rgb(x,x,x) #xxxxxx colorname	<i>Deprecated</i> - Specifies the color of all the links in the document.
text	rgb(x,x,x) #xxxxxx colorname	<i>Deprecated</i> - Specifies the color of the text in the document.
vlink	rgb(x,x,x) #xxxxxx colorname	<i>Deprecated</i> - Specifies the color of the visited links in the document.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <br> Tag

---

### Description

The HTML <br> tag is used to give a line break.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML br Tag</title>
</head>
<body>
<p>This is before the line break<br />
and this after the line break.</p>
</body>
</html>
```

This will produce the following result:

This is before the line break  
and this after the line break.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Button Tag

---

### Description

The HTML <button> tag is used for creating a button within HTML form. You can also use <input> tag to create similar buttons.

## Example

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

```
<title>HTML Button Tag</title>
</head>
<body>
<form>
<button name="button" value="OK" type="button">Click Me</button>
</form>
</body>
</html>
```

This will produce the following result:

Top of Form

Click Me

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <button> tag also supports the following additional attributes:

Attribute	Value	Description
autofocus 	autofocus	Specifies that the button should have input focus when the page loads.
disabled 	disabled	Specifies the button is disabled.
form 	form_id	Specifies the forms to which button belongs.
formaction 	URL	Specifies the link where the form submits.
formenctype 	application multipart/form-data text/plain	Specifies how the form data is encoded before sending it to server.
formmethod 	get post	Specifies how to send form data.
formnovalidate 	formnovalidate	Specifies that the form data should not be validated.

formtarget 	_blank _self _parent _top	Specifies where the response should be validated.
name	name	Specifies the button name.
type	button reset submit	Specifies the button type.
value	text	Specifies button's initial value.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari
Yes	Yes	Yes	Yes	Yes

## HTML <canvas> Tag

---

### Description

The HTML <canvas> tag is for drawing graphics, animations etc using scripting.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Canvas Tag</title>
</head>
<body>
<canvas id="newCanvas">Your browser does not support canvas tag.</canvas>
<script>
var c=document.getElementById('newCanvas');
var ctx=c.getContext('2d');
```

```

ctx.fillStyle='#00FD00';
ctx.fillRect(0,0,200,60);
</script>
</body>
</html>

```

This will produce the following result:

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <canvas> tag also supports the following additional attributes:

Attribute	Value	Description
height 	pixels	Specifies height of the canvas.
width 	pixels	Specifies width of the canvas.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	?

## HTML <caption> Tag

---

### Description

The HTML <caption> tag is used for creating a caption for a table. There could be only one caption per table.

### Example

```

<!DOCTYPE html>
<html>

```

```

<head>
<title>HTML caption Tag</title>
</head>
<body>
<h2>Cricketers List</h2>
<table width="100%">
    <caption>Indian Cricketers</caption>
    <th>Name</th>
    <tr><td>Sachin Tendulkar</td></tr>
    <tr><td>M S Dhoni</td></tr>
    <tr><td>Suresh Raina</td></tr>
    <tr><td>Virat Kohli</td></tr>
</table>
</body>
</html>

```

This will produce the following result:

## Cricketers List

Indian Cricketers

Name
Sachin Tendulkar
M S Dhoni
Suresh Raina
Virat Kohli

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <center> Tag

---

### Description

The HTML <center> tag is used for centering the content enclosed with this tag. *This tag is deprecated.*

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML center Tag</title>
</head>
<body>
<center>This text is centered</center>
</body>
</html>
```

This will produce the following result:

This text is centered

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

### Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	?

## HTML <cite> Tag

---

### Description

The HTML <cite> tag specifies a citation. It can be defined as title of a work.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML cite Tag</title>
</head>
<body>
<p>The learning content can be referred from <cite>Data Structures & Algorithms in Java</cite><p>
</body>
</html>
```

This will produce the following result:

The learning content can be referred from *Data Structures & Algorithms in Java*

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <code> Tag

---

### Description

The HTML <code> tag specifies computer code text.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML code Tag</title>
</head>
```

```
<body>
<p>The header file for C++ Program is :<code>#include<iostream.h></code>.</p>
</body>
</html>
```

This will produce the following result:

The header file for C++ Program is :#include<iostream.h>.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <col> Tag

---

### Description

The HTML <col> tag allows authors to group together attribute specifications for table columns. It does not group columns together structurally -- that is the role of the element.

The elements are empty and serve only as a support for attributes.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML col Tag</title>
</head>
<body>
<p>This example shows a colgroup that has three columns of different widths:</p>
<table border="1">
<colgroup span="3">
```

```

<col width="50"></col>
<col width="100"></col>
<col width="150"></col>
<col width="50"></col>
</colgroup>
<tr>
<td>col 1</td>
<td>col 2</td>
<td>col 3</td>
<td>col 4</td>
</tr>
</table>
</body>
</html>

```

This will produce the following result:

This example shows a colgroup that has three columns of different widths:

col 1	col 2	col 3	col 4
-------	-------	-------	-------

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <col> tag also supports the following additional attributes:

Attribute	Value	Description
align	right left center justify char	Defines horizontal alignment, <i>not supported in Html5.</i>
char	character	Defines a character to use to align text on (use with align="char"), <i>not supported in Html5.</i>
charoff	pixel	Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute, <i>not supported in Html5.</i>

span	number	Defines the number of columns the <col> should span, <i>not supported in Html5.</i>
valign	bottom middle top baseline	Defines vertical alignment, <i>not supported in Html5.</i>
width	pixels or %	Specifies a default width for each column spanned by the current col element, <i>not supported in Html5 .</i>

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	?

## HTML colgroup Tag

---

### Description

The HTML <colgroup> tag is used for specifying properties for a group of columns within a table.

If you need to apply different properties to a column within a colgroup, you can use the HTML col tag within the colgroup tag..

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML colgroup Tag</title>
</head>
<body>
<p>This example shows a colgroup that has three columns of different widths:</p>
<table border="1">
```

```

<colgroup span="3">
<col width="50"></col>
<col width="100"></col>
<col width="200"></col>
</colgroup>
<tr>
<td>col 1</td>
<td>col 2</td>
<td>col 3</td>
</tr>
</table>
</body>
</html>

```

This will produce the following result:

This example shows a colgroup that has three columns of different widths:

col 1	col 2	col 3
-------	-------	-------

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <colgroup> tag also supports the following additional attributes:

Attribute	Value	Description
<td>right left center justify char</td> <td>Defines horizontal alignment, <i>not supported in Html5.</i></td>	right left center justify char	Defines horizontal alignment, <i>not supported in Html5.</i>
char	character	Defines a character to use to align text on (use with align="char"), <i>not supported in Html5.</i>
charoff	pixel	Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute, <i>not supported in Html5.</i>

span	number	Defines the number of columns the <col> should span, <i>not supported in Html5.</i>
valign	bottom middle top baseline	Defines vertical alignment, <i>not supported in Html5.</i>
width	pixels or %	Specifies a default width for each column spanned by the current col element, <i>not supported in Html5 .</i>

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <comment> and <!--...--> Tag

---

### Description

The HTML <comment> tag allows authors to comment their HTML code. This tag is supported by IE only.

It is recommended to use <!--...--> to comment your tags. This tag is compatible with all browsers.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML <!--...--> Tag</title>
</head>
<body>
<comment>This is a commented line in IE</comment>
<!-- This is a commented line supported by almost every browser. It will not
appear in output as its a comment. -->
</body>
```

190

```
</html>
```

This will produce the following result:

## Browser Support

Browser Support for <comment> tag

Chrome	Firefox	IE	Opera	Safari	Android
Not Supported	Not Supported	Yes	Not Supported	Not Supported	Not Supported

Browser Support for <!------> tag

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <datalist> Tag

---

### Description

The HTML <datalist> tag specifies set of options for <input> element.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Datalist Tag</title>
</head>
<body>
<input list="tutorials" />
<datalist id="tutorials">
    <option value="Java">
    <option value="ASP">
    <option value="PHP">
    <option value="Ruby">
    <option value="jQuery">
</datalist>
```

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

This will produce the following result:



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Not Supported	Yes

## HTML <dd> Tag

---

### Description

The HTML <dd> tag is used for specifying a definition description in a definition list.

A definition list is similar to other lists but in a definition list, each list item contains two entries; a term and a description.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML dd Tag</title>
</head>
<body>
<dl>
<dt>Definition List</dt>
<dd>A list of terms and their definitions/descriptions.</dd>
<dt>HTML</dt>
<dd>An HTML tutorial.</dd>

```

```
<dt>PHP</dt>
<dd>An PHP tutorial.</dd>
</dl>
</body>
</html>
```

This will produce the following result:

### Definition List

A list of terms and their definitions/descriptions.

### HTML

An HTML tutorial.

### PHP

An PHP tutorial.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <del> Tag

---

### Description

The HTML <del> tag is used for markup of deleted text.

### Example

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

```

<head>
<title>HTML del Tag</title>
</head>
<body>
<p>Following text is deleted using <del>HTML del tag
</body>
</html>

```

This will produce the following result:

Following text is deleted using ~~HTML del tag~~

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML `<del>` tag also supports the following additional attributes:

Attribute	Value	Description
<code>cite</code>	URL	Defines a URL to another document which explains why the text was deleted.
<code>datetime</code>	YYYYMMDD HH:MM:SS	Defines the date and time the text was deleted.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML `<dfn>` Tag

---

### Description

The HTML `<dfn>` tag specifies a definition term.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML dfn Tag</title>
</head>
<body>
<dl>
<dt>
<dfn>
<abbr title="Java Server Pages">JSP</abbr>
</dfn>
</dt>
<dd>JSP is used to create dynamically generated web pages.</dd>
</dl>
</body>
</html>
```

This will produce the following result:

*JSP*

JSP is used to create dynamically generated web pages.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <dialog> tag

### Description

The HTML <dialog> tag is used for defining a dialog box.

```
<!Doctype html>
<html>
<head>
<title>HTML dialog Tag</title>
</head>
<body>
<dialog open>this will be shown in a dialog</dialog>
</body>
</html>
```

This will produce the following result:

this will be shown in a dialog

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <dialog> tag also supports the following additional attributes:

Attribute	Value	Description
open 	open	opens a dialog box and user can interact with it

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes (Canary)	No	No	No	6.0	No

## HTML <dir> Tag

---

### Description

The HTML <dir> tag is used for specifying a directory list. This is very similar to <ul> tag but now this is deprecated.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML dir Tag</title>
</head>
<body>
<dir>
<li>dir</li>
<li>menu</li>
<li>ul</li>
</dir>
</body>
</html>
```

This will produce the following result:

- dir
- menu
- ul

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <dir> tag also supports the following additional attributes:

Attribute	Value	Description
compact	compact	<i>Deprecated</i> - Specifies a compact rendering.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML div Tag

---

### Description

The HTML <div> tag is used for defining a section of your document. With the div tag, you can group large sections of HTML elements together and format them with CSS.

The difference between the div tag and the span tag is that the div tag is used with block-level elements whilst the span tag is used with inline elements.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML div Tag</title>
<link rel="stylesheet" href="style2.css">
</head>
<body>
<div id="contentinfo">
<p>Welcome to our website. We provide tutorials on various subjects.</p>
</div>
</body>
</html>
```

Here is the css file *style2.css*

```
#contentinfo p {
    line-height: 20px;
    margin: 30px;
    padding-bottom: 20px;
    text-align: justify;
    width: 140px;
    color: red;
}
```

This will produce the following result:

```
Welcome to our
website. We provide
tutorials on various
subjects.
```

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <div> tag also supports the following additional attributes:

Attribute	Value	Description
autofocus 	autofocus	Specifies

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <dl> Tag

---

### Description

The HTML <dl> tag is used for declaring a definition list. This tag is used within <dd> tag.

A definition list is similar to other lists but in a definition list, each list item contains two entries; a term and a description.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>HTML dl Tag</title>
</head>
<body>
<dl>
<dt>Definition List</dt>
<dd>A list of terms and their definitions/descriptions.</dd>
<dt>HTML</dt>
<dd>An HTML tutorial.</dd>
<dt>PHP</dt>
<dd>An PHP tutorial.</dd>
</dl>
</body>
</html>

```

This will produce the following result:

Definition List

A list of terms and their definitions/descriptions.

HTML

An HTML tutorial.

PHP

An PHP tutorial.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <dt> Tag

---

### Description

The HTML <dt> tag is used to define the start of a term in a definition list.

A definition list is similar to other lists but in a definition list, each list item contains two entries; a term and a description.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML dt Tag</title>
</head>
<body>
<dl>
<dt>Definition List</dt>
<dd>A list of terms and their definitions/descriptions.</dd>
<dt>JAVA</dt>
<dd>Tutorial on JAVA Programming Language.</dd>
<dt>Android</dt>
<dd>Tutorial on Android Operating System.</dd>
</dl>
</body>
</html>
```

This will produce the following result:

Definition List

A list of terms and their definitions/descriptions.

JAVA

Tutorial on JAVA Programming Language.

## Android

Tutorial on Android Operating System.

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

### Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <em> Tag

### Description

The HTML <em> tag formats the text in a document. It specifies emphasized text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML em Tag</title>
</head>
<body>
<p>Insert an image in a web page using <em>image</em> tag.</p>
</body>
</html>
```

This will produce the following result:

Insert an image in a web page using *image* tag.

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <embed> Tag

---

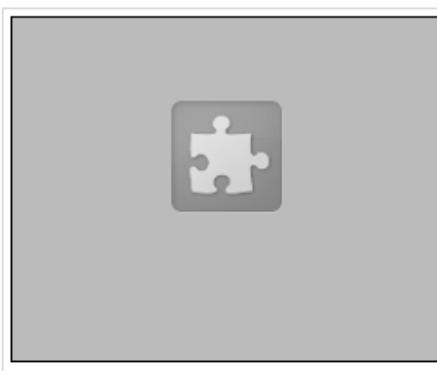
### Description

The HTML <embed> tag represents a container for external application or interactive content.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Embed Tag</title>
</head>
<body>
<embed src="/html/yourfile.mid" width="250" height="100" />
</body>
</html>
```

This will produce the following result:



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <video> tag also supports the following additional attributes:

Attribute	Value	Description
height <small>5</small>	pixels	Specifies the height.
src <small>5</small>	URL	Specifies the address of the source file.
type <small>5</small>	MIME_type	Specifies the MIME type.
width <small>5</small>	pixels	Specifies the width.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <fieldset> Tag

---

### Description

The HTML <fieldset> tag is used for grouping related form elements. By using the fieldset tag and the legend tag, you can make your forms much easier to understand for your users.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML fieldset Tag</title>
</head>
<body>
```

```

<form>
  <fieldset>
    <legend>Details</legend>
    Student Name: <input type="text"><br />
    MCA Subjects:<input type="text"><br />
    Course Link:<input type="url" name="websitelink">
  </fieldset>
</form>
</body>
</html>

```

This will produce the following result:

DetailsStudent

Name:

MCA

Subjects:

Course Link:

---

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <fieldset> tag also supports the following additional attributes:

Attribute	Value	Description
align	left right center top bottom	<i>Deprecated</i> - Specifies the content alignment.
disabled 	disabled	Specifies that a group of related form elements should be disabled.
form 	form_id	Specifies forms which belongs to fieldset.
name 	text	Specifies a name for fieldset.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Figcaption Tag

---

### Description

The HTML <figcaption> tag specifies a caption for an element.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Figcaption Tag</title>
</head>
<body>
<figure>
<figcaption>Tutorial Point Logo</figcaption>
</figure>
</body>
</html>
```

This will produce the following result:



Tutorialspoint Logo

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Figure Tag

---

### Description

The HTML <figure> tag specifies self-contained content.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Figure Tag</title>
</head>
<body>
<h2>Tutorials Point Logo</h2>
<figure>
</figure>
</body>
</html>
```

This will produce the following result:

### Tutorials Point Logo



### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <font> Tag

---

### Description

The HTML <font> tag is used to specify the font of the text. It is deprecated in HTML as well as in XHTML.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML font Tag</title>
</head>
<body>
<font face="cursive,serif" color="#ff9900" size="4">
The HTML font tag is now deprecated. You should use start using CSS to set font
size and family.
</font>
</body>
</html>
```

This will produce the following result:

The HTML font tag is now deprecated. You should use start using CSS to set font size and family.

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <font> tag also supports the following additional attributes:

Attribute	Value	Description
color	rgb(x,x,x) #hexcode colorname	<i>Deprecated</i> - Specifies the color of the text.
face	List of font names	<i>Deprecated</i> - Specifies the font families.
size	number	<i>Deprecated</i> - Specifies the font size from 1 to 7.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Footer Tag

---

### Description

The HTML <footer> tag specifies a footer for a document or section.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Footer Tag</title>
</head>
<body>
<header>
<h1>Simply Easy Learning</h1>
<p>You're visiting tutorialspoint.com - tutorial hub for simply easy learning.</p>
</header>
<footer>
© Copyright 2014, All Rights Reserved

```

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

This will produce the following result:

## Simply Easy Learning

You're visiting [tutorialspoint.com](http://tutorialspoint.com) - tutorial hub for simply easy learning.

© Copyright 2014, All Rights Reserved

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <form> Tag

---

### Description

The HTML <form> tag is used for creating a form for user input. A form can contain textfields, checkboxes, radio-buttons and more. Forms are used to pass user-data to a specified URL.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML form Tag</title>
</head>
<body>
<form action="/cgi-bin/hello_get.cgi" method="get">
First name:
<input type="text" name="first_name" value="" maxlength="100" />
```

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```

<br />
Last name:

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

```

This will produce the following result:

First  name:

Last name:

## Bottom of Form

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

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

Attribute	Value	Description
accept	MIME_type	Specifies a comma-separated list of content types that the server accepts.
accept-charset	charset list	Specifies a list of character encodings that the server accepts. The default value is "unknown".
action	URL	Specifies a URI/URL of the back-end script that will process the form
autocomplete <span style="color:red;">5</span>	on off	Specifies whether form should have autocomplete on or off
enctype	mimetypes	The mime type used to encode the content of the form.

method	get post	Specifies the HTTP method to use when the form is submitted. Possible values: get (the form data is appended to the URL when submitted) post (the form data is not appended to the URL)
name	form name	Defines a unique name for the form.
novalidate 	novalidate	Specifies that the form should not be validated when submitted.
target	_blank _self _parent _top	Target to open the given URL. _blank - the target URL will open in a new window _self - the target URL will open in the same frame as it was clicked _parent - the target URL will open in the parent frameset _top - the target URL will open in the full body of the window

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <frame> Tag

---

### Description

The HTML <frame> tag is used to specify each frame within a frameset tag. *This tag is not supported in HTML5.*

### Example

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

```

<title>HTML frame Tag</title>
</head>
<frameset cols="200, *">
    <frame src="/html/menu.htm" name="menu_page" />
    <frame src="/html/main.htm" name="main_page" />
    <noframes>
        <body>
            Your browser does not support frames.
        </body>
    </noframes>
</frameset>
</html>

```

This will produce the following result, refer the image given below. The left frame is menu.htm and the right one is main.htm:



## Specific Attributes

The HTML `<frame>` tag also supports the following additional attributes:

Attribute	Value	Description
frameborder	0 or 1	Specifies whether or not to display border around the frame.
marginheight	pixels	Allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example <code>marginwidth="10"</code> .

marginwidth	pixels	Specifies the margin, in pixels, between the frame's contents and its left and right margins.
name	frame name	Name of the frame.
noresize	noresize	When set to noresize the user cannot resize the frame.
scrolling	yes no auto	Determines scrollbar action.
src	URL	Location of the frame contents file.

## Browsers Supported

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <frameset> Tag

---

### Description

The HTML <frameset> tag is used to divide the window into frames. *This tag is not supported in HTML5.*

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML frameset Tag</title>
</head>
<body>
<frameset cols="200, *">
```

```

<frame src="/html/menu.htm" name="menu_page" />
<frame src="/html/main.htm" name="main_page" />
<noframes>
<body>
Your browser does not support frames.
</body>
</noframes>
</frameset>
</html>

```

This will produce the following result, refer the image given below. The left frame is menu.htm and the right one is main.htm:



## Specific Attributes

The HTML <frameset> tag also supports the following additional attributes:

Attribute	Value	Description
cols	column size	Specifies the number of columns and their width in either pixels, percentages, or relative lengths. Default is 100%.
rows	row size	Specifies the number of rows and their height in either pixels, percentages, or relative lengths. Default is 100%.

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <h1> to <h6> Tag

### Description

The HTML <h1> to <h6> tag is used to define headings in an HTML document. <h1> defines largest heading and <h6> defines smallest heading.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML <h1> to <h6> Tag</title>
</head>
<body>
<h1>Around the World</h1>
<h2>Asian Countries</h2>
<h3>India</h3>
</body>
</html>
```

This will produce the following result:

**Around the World**

**Asian Countries**

**India**

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <h1> to <h6> tag also supports the following additional attributes:

Attribute	Value	Description
align	left right center justify	<i>Deprecated</i> - Specifies the alignment of the content enclosed.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <head> Tag

---

### Description

The HTML <head> tag is used for indicating the head section of the HTML document. Tags included inside head tags are not displayed on browser window.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML head Tag</title>
</head>
<body>
actual content goes here
</body>
</html>
```

This will produce the following result:

actual content goes here

### Specific Attributes

The HTML <head> tag also supports the following additional attributes:

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Attribute	Value	Description
profile	URL	Specifies the URI/URL of one or more meta data profiles. <i>It is not supported in HTML5.</i>

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Header Tag

---

### Description

The HTML <header> tag specifies a header for a document or section.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Header Tag</title>
</head>
<body>
<header>
<h1>Simply Easy Learning</h1>
<p>You're visiting tutorialspoint.com - tutorial hub for simply easy learning.</p>
</header>
</body>
</html>
```

This will produce the following result:

### Simply Easy Learning

You're visiting tutorialspoint.com - tutorial hub for simply easy learning.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <hr> Tag

---

### Description

The HTML <hr> tag is used for creating a horizontal line. This is also called Horizontal Rule in HTML.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML hr Tag</title>
</head>
<body>
<p>This text will be followed by a horizontal line <hr /></p>
</body>
</html>
```

This will produce the following result:

This text will be followed by a horizontal line

---

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <hr> tag also supports the following additional attributes:

Attribute	Value	Description
align	left right center	<i>Deprecated-Specifies the alignment of the horizontal rule.</i>
noshade	noshade	<i>Deprecated-Removes the usual shading effect that most browsers display.</i>
size	pixels or %	<i>Deprecated-Specifies the height of the horizontal rule.</i>
width	pixels or %	<i>Deprecated-Specifies the width of the horizontal rule.</i>

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <html> Tag

---

### Description

The HTML <html> tag is the container that contains all other HTML elements except for the !doctype tag which is located before the opening <html> tag. All other HTML elements are nested between the <html> and </html> tags.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML html Tag</title>
</head>
<body>
<p>Actual content goes here... </p>
```

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

This will produce the following result:

```
Actual content goes here...
```

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <> tag also supports the following additional attributes:

Attribute	Value	Description
manifest 	URL	It is for offline browsing i.e. the address of the document's cache manifest.
xmlns	http://www.w3.org/1999/xhtml	<i>Deprecated-Specifies</i> the XML namespace attribute.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <i> Tag

---

### Description

The HTML <i> tag is used to display the content in italic.

### Example

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

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```
<title>HTML i Tag</title>
</head>
<body>
<p>We liked the movie <i>3 Idiots</i></p>
</body>
</html>
```

This will produce the following result:

We liked the movie *3 Idiots*

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <iframe> Tag

---

### Description

The HTML <iframe> tag is used to create an inline frame.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML iframe Tag</title>
</head>
<body>
<iframe src ="http://www.tutorialspoint.com/index.htm" width="100%"></iframe>
</body>
</html>
```

This will produce the following result:

This word is shifted down, while this one is shifted over. With a negative value, words can be moved up and to the left.

The result will only work on Netscape 4.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <iframe> tag also supports the following additional attributes:

Attribute	Value	Description
align	left right top middle bottom	Specifies how to align the iframe according to the surrounding text
frameborder	1 0	Specifies whether or not to display border around the frame.
height	pixels	Specifies the height of the inline frame.
longdesc	URL	A URL to a long description of the frame contents.
marginheight	pixels	Allows you to specify the width of the space between the left and right of the frame's borders and the frame's content. The value is given in pixels. For example marginwidth="10".
marginwidth	pixels	Specifies the margin, in pixels, between the frame's contents and its left and right margins.
name	text	Name of the frame
sandbox 	"" allow-forms allow-same-origin	Enables a set of extra restrictions for the content in the iframe.

	allow-scripts allow-top-navigation	
scrolling	yes no auto	Determines scrollbar action
seamless <small>5</small>	seamless	Specifies that the iframe should look like it is a part of the containing document
src	URL	Location of the frame contents file
srcdoc <small>5</small>	HTML_code	Specifies the HTML content of the page to show in the iframe
width	pixels	Specifies the width of the inline frame.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <ilayer> Tag

---

### Description

The HTML <ilayer> tag is used to create a layer that occupies space in the containing text flow. Subsequent content is placed after the space occupied by the <ilayer>.

This is in contrast to the <layer> tag, which creates a layer above the containing text flow, allowing subsequent content to be placed under the layer just created.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML ilayer Tag</title>
```

```

</head>
<body>
This <ilayer top="4">word</ilayer> is shifted down, while
this <ilayer left="10">one</ilayer> is shifted over. With a negative
value, words can be moved <ilayer top="-4">up</ilayer> and to
the <ilayer left="-10">left</ilayer>.
</body>
</html>

```

This will produce the following result:

This word is shifted down, while this one is shifted over. With a negative value, words can be moved up and to the left.

The result will only work on Netscape 4.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <ilayer> tag also supports the following additional attributes:

Attribute	Value	Description
above	layer name	The name of the inline layer that will be positioned directly above the current layer in the z-order.
background	URL	A filename or URL for an image upon which the inline layer's text and images will appear.
below	layer name	The name of the inline layer that will be positioned directly below the current layer in the z-order.
bgcolor	rgb(x,x,x) #xxxxxx colorname	The color to use for the inline layer background.
clip	number	The coordinates of the inline layer's viewable area.
height	pixels	The inline layer's height, in pixels.
left	number	The position of the left side of the inline layer. If the current inline layer is part of another layer.called the

		parent layer--then the position is relative to the parent layer.
name	layer name	The name of the inline layer.
pagex	number	The position of the left side of the inline layer relative to the browser window.
pagey	number	The position of the top of the inline layer relative to the browser window.
src	URL	The URL of a page that will appear inside the inline layer.
top	number	The position of the top of the inline layer. If the current inline layer is part of another layer--called the parent layer--then the position is relative to the parent layer.
visibility	show hide inherit	Determines whether the inline layer is visible.
width	pixels	The inline layer's width, in pixels.
z-index	number	The inline layer's position within the z-order. Inline layers with higher Z-INDEX values are positioned above inline layers with lower Z-INDEX values.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
No	No	No	No	No	No

## HTML <img> Tag

---

### Description

The HTML <img> tag is used to put an image in an HTML document.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Tag</title>
</head>
<body>

</body>
</html>
```

This will produce the following result:



### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <img> tag also supports the following additional attributes:

Attribute	Value	Description
align	top bottom middle left right	<i>Deprecated</i> -Specifies the alignment for the image.

alt	text	Specifies alternate text
border	pixels	<i>Deprecated</i> - Specifies the width of the image border.
crossorigin 	anonymous use-credentials	It allows images from third-party sites that allow cross-origin access to be reused with canvas.
height	pixels or %	Specifies the height of the image.
hspace	pixels	<i>Deprecated</i> - Amount of white space to be inserted to the left and right of the object.
ismap	URL	Defines the image as a server-side image map.
longdesc	text	<i>Deprecated</i> -Specifies a URI/URL of a long description - this can elaborate on a shorter description specified with the alt attribute.
src	URL	the url of an image
usemap	#mapname	Defines the image as a client-side image map and used alongwith <map> and <area> tags.
vspace	pixels	<i>Deprecated</i> - Amount of white space to be inserted to the top and bottom of the object.
width	pixels or %	Sets the width of an image in pixels or in %.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <input> Tag

---

### Description

The HTML <input> tag is used within a form to declare an input element - a control that allows the user to input data.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML input Tag</title>
</head>
<body>
<form action="/cgi-bin/hello_get.cgi" method="get">
First name:
<input type="text" name="first_name" value="" maxlength="100" />
<br />
Last name:
<input type="text" name="last_name" value="" maxlength="100" />
<input type="submit" value="Submit" />
</form>
</body>
</html>
```

This will produce the following result:

First	name: <input style="width: 100px;" type="text"/>
Last name:	<input style="width: 100px;" type="text"/> <input style="width: 100px;" type="button" value="Submit"/>

---

## Bottom of Form

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <input> tag also supports the following additional attributes:

Attribute	Value	Description
accept	content types	Specifies a comma-separated list of content types that the server accepts.
align	left right top middle bottom	<i>Deprecated</i> -Defines the alignment of content
alt	text	This specifies text to be used in case the browser/user agent can't render the input control.
autocomplete 	on off	Specifies for enabling or disabling of autocomplete in <input> element
autofocus 	autofocus	Specifies that <input> element should automatically get focus when the page loads
checked	checked	If type="radio" or type="checkbox" it will already be selected when the page loads.
disabled	disabled	Disables the input control. The button won't accept changes from the user. It also cannot receive focus

		and will be skipped when tabbing.
form 	form_id	Specifies one or more forms
formaction 	URL	Specifies the URL of the file that will process the input control when the form is submitted
formenctype 	application/x-www-form-urlencoded multipart/form-data text/plain	Specifies how the form-data should be encoded when submitting it to the server
formmethod 	post get	Defines the HTTP method for sending data to the action URL
formnovalidate 	formnovalidate	Defines that form elements should not be validated when submitted
formtarget 	_blank _self _parent _top	Specifies the target where the response will be displayed that is received after submitting the form
height 	pixels	Specifies the height
list 	datalist_id	Specifies the <datalist> element that contains pre-defined options for an <input> element
max 	autofocus	Specifies the maximum value.
maxlength	number	Defines the maximum number of characters allowed in a text field
min 	number	Specifies the minimum value.

multiple 	multiple	Specifies that a user can enter multiple values
name	text	Assigns a name to the input control.
pattern 	regexp	Specifies a regular expression that an <input> element's value is checked against
placeholder 	text	Specifies a short hint that describes the expected value.
readonly	readonly	Sets the input control to read-only. It won't allow the user to change the value. The control however, can receive focus and are included when tabbing through the form controls.
required 	required	Specifies that an input field must be filled out before submitting the form
size	number	Specifies the width of the control. If type="text" or type="password" this refers to the width in characters. Otherwise it's in pixels.
src	URL	Defines the URL of the image to display. Used only for type="image".
step 	number	Specifies the legal number intervals for an input field
type	button checkboxcolor date datetime datetime-local email	Specifies the type of control.

	file hidden image month number password radio range reset search submit tel text time url week	
value	text	Specifies the initial value for the control. If type="checkbox" or type="radio" this attribute is required.
width 	pixels	Specifies the width

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <ins> Tag

### Description

The HTML <ins> tag is used to indicate newly inserted text.

### Example

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

```

<head>
<title>HTML ins Tag</title>
</head>
<body>
<p>Following text is inserted newly <ins>HTML ins tag</ins>
</body>
</html>

```

This will produce the following result:

Following text is inserted newly HTML ins tag

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML `<ins>` tag also supports the following additional attributes:

Attribute	Value	Description
<code>cite</code>	URL	Defines a URL to another document which explains why the text was deleted.
<code>datetime</code>	YYYYMMDD HH:MM:SS	Defines the date and time the text was deleted.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <isindex> tag

---

### Description

The HTML <isindex> tag is used for querying a document through a text field. The tag can be used anywhere but head tag is preferable. It is a deprecated tag and should not be used.

```
<!Doctype html>
<html>
<head>
<title>HTML isindex Tag</title>
<isindex prompt = "Search" />
</head>
</html>
```

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <isindex> tag also supports the following additional attributes:

Attribute	Value	Description
prompt	string	Label for the text field
action	URL	used when a query needs to be sent to a different URL

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

### Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes (partial)	No				

## HTML <kbd> Tag

---

### Description

The HTML <kbd> tag defines keyboard input. It is a phrase tag.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML kbd Tag</title>
</head>
<body>
<p>Open previously closed tab using
<kbd>Ctrl</kbd>+<kbd>Shift</kbd>+<kbd>T</kbd>
</body>
</html>
```

This will produce the following result:

Open previously closed tab using Ctrl+Shift+T

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

### Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML keygen Tag

---

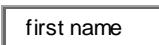
### Description

The HTML <keygen> tag is used to process Web forms with certificate management systems. The element generates a secure key and submits the public key.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML keygen Tag</title>
</head>
<body>
<form>
<keygen name="random_key" challenge="0987654321">
<input name="firstname" value="first name">
</form>
</body>
</html>
```

This will produce the following result:



## Bottom of Form

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <keygen> tag also supports the following additional attributes:

Attribute	Value	Description
autofocus 	autofocus	Specifies that when the page loads the <keygen> element automatically gets focus.
challenge 	challenge	Specifies the challenge string to be packaged with the public key in the PublicKeyAndChallenge for use in verification of the form submission. If no challenge string is provided, then it is encoded as an IA5STRING of length zero./td>
disabled 	disabled	Specifies that <keygen> element should be disabled.

form 	form_id	Specifies one or more forms.
keytype 	rsa dsa ec	Specifies the secret algorithm which is for the key.
name 	autofocus	Specifies a name.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	No	Yes	Yes	Yes

## HTML <label> Tag

---

### Description

The HTML <label> tag is used to add a label to a form control like text, textarea etc.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML label Tag</title>
</head>
<body>
<label for="email">EMAIL-ID:<br /> <input type="email" value="" name="emailid" size="30" placeholder="Enter a valid email address"><br /><br />
<label for="phone">PHONE NO:<br /> <input type="text" value="" name="phno" size="30" maxlength="10" placeholder="Enter a valid phone number" pattern="[0-9]{10}"><br /><br />
</body>
</html>
```

This will produce the following result:

EMAIL-ID:

PHONE

NO:

Bottom of Form

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <label> tag also supports the following additional attributes:

Attribute	Value	Description
form 	form_id	It specifies one or more forms the label belongs to
for	control id	Specifies the input control that this label is for. This value must be the same as the value in the input control's "id" attribute.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <layer> Tag

---

### Description

The HTML <layer> tag is used to position and animate (through scripting) elements in a page. A layer can be thought of as a separate document that resides on top of the main one, all existing within one window.

This tag has support in Netscape 4 and higher versions of it.

## Example

This example creates three overlapping layers. The back one is red, the middle one is blue, and the front one is green.

```
<!DOCTYPE html>
<html>
<head>
<title>HTML layer Tag</title>
</head>
<body>
<layer id="layer1" top="250" left="50" width="200"
       height="200" bgcolor="red">
    <p>layer 1</p>
</layer>
<layer id="layer2" top="350" left="150" width="200"
       height="200" bgcolor="blue">
    <p>layer 2</p>
</layer>
<layer id="layer3" top="450" left="250" width="200"
       height="200" bgcolor="green">
    <p>layer 3</p>
</layer>
</body>
</html>
```

This will produce the following result, it will work in Netscape 4 and higher versions.

layer 1

layer 2

layer 3

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <layer> tag also supports the following additional attributes:

Attribute	Value	Description

above	layer name	The name of the inline layer that will be positioned directly above the current layer in the z-order.
background	URL	A filename or URL for an image upon which the inline layer's text and images will appear.
below	layer name	The name of the inline layer that will be positioned directly below the current layer in the z-order.
bgcolor	rgb(x,x,x) #xxxxxx colorname	The color to use for the inline layer background.
clip	number	The coordinates of the inline layer's viewable area.
height	pixels	The inline layer's height, in pixels.
left	number	The position of the left side of the inline layer. If the current inline layer is part of another layer--called the parent layer--then the position is relative to the parent layer.
name	layer name	The name of the inline layer.
pagex	number	The position of the left side of the inline layer relative to the browser window.
pagey	number	The position of the top of the inline layer relative to the browser window.
src	URL	The URL of a page that will appear inside the inline layer.
top	number	The position of the top of the inline layer. If the current inline layer is part of another layer--called the parent layer--then the position is relative to the parent layer.
visibility	show hide inherit	Determines whether the inline layer is visible.
width	pixels	The inline layer's width, in pixels.

z-index	number	The inline layer's position within the z-order. Inline layers with higher Z-INDEX values are positioned above inline layers with lower Z-INDEX values.
---------	--------	--

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
No	No	No	No	No	No

## HTML <legend> Tag

---

### Description

The HTML <legend> tag is used to define a caption for <fieldset> tag.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML legend Tag</title>
</head>
<body>
<form>
<fieldset>
<legend>Details</legend>
Student Name: <input type="text"><br />
MCA Subjects:<input type="text"><br />
Course Link:<input type="url" name="websitelink">
</fieldset>
</form>
</body>
</html>
```

This will produce the following result:

DetailsStudent

Name:

MCA

Subjects:

Course Link:

Bottom of Form

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <legend> tag also supports the following additional attributes:

Attribute	Value	Description
align	top bottom left right	<i>Deprecated-</i> Specifies the content alignment.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <li> Tag

---

### Description

The HTML <li> tag is used for specifying a list item in ordered, unordered, directory, and menu lists.

### Example

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

```

<head>
<title>HTML li Tag</title>
</head>
<body>
<ul>
<li>ol - ordered list</li>
<li>ul - unordered list</li>
<li>dir - directory list</li>
<li>menu - menu list</li>
</ul>
</body>
</html>

```

This will produce the following result:

- ol - ordered list
- ul - unordered list
- dir - directory list
- menu - menu list

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <li> tag also supports the following additional attributes:

Attribute	Value	Description
type	A a I i 1 disc square circle	<i>Deprecated</i> - Specifies the type of the list.
value	number	Specifies the value of a list item.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <link> Tag

---

### Description

The HTML <link> tag is used for defining a link to an external document. It is placed in the <head> section of the document.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML link Tag</title>
<link rel="stylesheet" href="stylenew.css">
</head>
<body>
<div id="contentinfo">
<p>Welcome to our website. We provide tutorials on various subjects.</p>
</div>
</body>
</html>
```

Here is the css file *stylenew.css*

```
#contentinfo p {
    line-height: 20px;
    margin: 30px;
    padding-bottom: 20px;
    text-align: justify;
    width: 140px;
    color: red;
}
```

This will produce the following result:

Welcome to our website. We provide tutorials on various subjects.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <link> tag also supports the following additional attributes:

Attribute	Value	Description
charset	charset	Defines the character encoding of the linked document.
href	URL	Specifies the URL of the resource document.
hreflang	language	Language code of the destination URL
media	screen tty tv projection handheld print braille aural all	Specifies the device the document will be displayed on
rel	alternate appendix bookmark chapter contents copyright glossary help home	Describes the relationship between the current document and the destination URL.

	index next prev section start stylesheet subsection	
rev	alternate appendix bookmark chapter contents copyright glossary help home index next prev section start stylesheet subsection	Describes a reverse between the destination URI and the current document.
sizes 	HeightxWidth	Specifies the size of the linked resource.
target	blank _self _top _parent	Specifies the target frame to load the page into.
type	mimetype	The MIMEtype of content at the link destination

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Main Tag

---

### Description

The HTML `<main>` tag specifies main or important content in the document. It can be used only once per page and can't be used as a descendent of `<article>`, `<aside>`, `<footer>`, `<header>`, `<nav>` element.

### Example

```
<!DOCTYPE html>
<html>
<body>
<main>
<h1>Learning</h1>
<p>Learn to gain experience and try to share your knowledge with others.</p>
<article>
<h3>Web Development Tutorials</h3>
<p>Consist of CSS, HTML, and PHP tutorials for 2nd Semester exams.</p>
</article>
<article>
<h3>Academic Tutorials</h3>
<p>Consist of Computer Fundamental, Computer Network tutorials for 1st Semester exams.</p>
</article>
</main>
</body>
</html>
```

This will produce the following result:

## Learning

Learn to gain experience and try to share your knowledge with others.

### Web Development Tutorials

Consist of CSS, HTML, and PHP tutorials for 2nd Semester exams.

### Academic Tutorials

Consist of Computer Fundamental, Computer Network tutorials for 1st Semester exams.

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	No	Yes	Yes	No

## HTML <map> Tag

---

### Description

The HTML <map> tag is used for defining an image map along with <img> tag.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML map Tag</title>
</head>
<body>


<!-- Create Mappings -->
<map name="html">
  <area shape="circle"
        coords="154,150,59" href="about/about_team.htm" alt="Team"
        target="_self" />
</map>
</body>
</html>
```

This will produce the following result, find the image map on bottom right:



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <map> tag also supports the following additional attributes:

Attribute	Value	Description
name	unique_name	Defines a unique name for the map tag.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Mark Tag

---

### Description

The HTML <mark> tag specifies a text highlighted for reference purposes, that is for its relevance in another context.

### Example

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

```

<head>
<title>HTML Mark Tag</title>
</head>
<body>
<h2>Cricketers in India</h2>
<p>Sachin Tendulkar is <mark>god</mark> of cricket.</p>
</body>
</html>

```

This will produce the following result:

Cricketers in India  
Sachin Tendulkar is god of cricket.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <marquee> Tag

---

### Description

The HTML <marquee> tag is used for scrolling piece of text or image displayed either horizontally across or vertically down your web site page depending on the settings.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>HTML marquee Tag</title>
</head>
<body>

```

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```
<marquee>This is basic example of marquee</marquee>
<marquee direction="up">The direction of text will be from bottom to
top.</marquee>
</body>
</html>
```

This will produce the following result:

This is basic example of marquee  
The direction of text will be from bottom to top.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <marquee> tag also supports the following additional attributes:

Attribute	Value	Description
behavior	scroll slide alternate	Defines the type of scrolling.
bgcolor	rgb(x,x,x) #xxxxxx colorname	<i>Deprecated</i> -Defines the direction of scrolling the content.
direction	up down left right	Defines the direction of scrolling the content.
height	pixels or %	Defines the height of marquee.
hspace	pixels	Specifies horizontal space around the marquee.
loop	number	Specifies how many times to loop. The default value is INFINITE, which means that the marquee loops endlessly.
scrolldelay	seconds	Defines how long to delay between each jump.

scrollamount	number	Defines how far to jump.
width	pixels or %	Defines the width of marquee.
vspace	pixels	Specifies vertical space around the marquee.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	?

## HTML <menu> Tag

---

### Description

The HTML <menu> tag is used for creating a menu list. This tag has been deprecated in HTML and redefined in HTML5.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML menu Tag</title>
</head>
<body>
<menu>
<li>ol - ordered list</li>
<li>ul - unordered list</li>
<li>dir - directory list</li>
<li>menu - menu list</li>
</menu>
</body>
</html>
```

This will produce the following result:

- ol - ordered list
- ul - unordered list
- dir - directory list
- menu - menu list

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <menu> tag also supports the following additional attributes:

Attribute	Value	Description
label <span style="color:red">S</span>	text	Specifies a visible label.
type <span style="color:red">S</span>	popup toolbar context	Specifies the type of menu to be displayed.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
No	Yes	No	No	No	No

## HTML <menuitem> tag

---

### Description

The HTML <menuitem> tag is used for defining a menu item for a menu.

```
<!Doctype html>
<html>
<head>
<title>HTML menuitem Tag</title>
</head>
<body>
```

```
<div style="border:1px solid #000;padding:20px;" contextmenu="clickmenu">
<p>Right click inside here....</p>

<menu type="context" id="clickmenu">
<menuitem label="Tutorialspoint" onclick="">
</menuitem>
</menu>
</div>

</body>
</html>
```

This will produce the following result in Firefox browser only:

Right-click inside here....

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <menuitem> tag also supports the following additional attributes:

Attribute	Value	Description
checked 	checked	defines that a menuitem should be checked
command 		
default 	default	a menuitem is marked as a default command
disabled 	disabled	disables a menuitem and cannot be clicked
icon 	url	defines an icon for a menuitem
label 	text	defines a name for a menuitem which is displayed to the user
radiogroup 	groupname	defiens a group of commands out of which only one can be selected

type 	checkbox command radio	defines type of command for a menuitem default is command
--	------------------------------	---

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
No	Yes	No	No	No	No

## HTML <meta> tag

---

### Function

The HTML <meta> tag is used for declaring metadata for the HTML document.

### Difference between HTML and XHTML

In HTML the <meta> tag has no end tag.

In XHTML the <meta> tag must be properly closed.

### Example

```
<html>
<head>
<title>HTML meta tag</title>
<meta name="keywords" content="HTML, meta tag, metadata" />
<meta name="description" content="Brief description of the document" />
<meta http-equiv="refresh" content="10" />
</head>
<body style="background-color:orange">
Document content goes here
</body>
</html>
```

For more detail on Meta Tag please go through [Meta Tag](#)

## Attributes

Attribute	Value	Description
Name	author description keywords generator revised others	Name for the property.
content	text	Defines meta information to be associated with http-equiv or name.
http-equiv	content-type expires refresh set-cookie	Connects the content attribute to an HTTP header.
scheme	text	Defines a format to be used to interpret the value of the content attribute.

## Standard Attributes

Attribute	Description
dir	Specifies the direction of the text
lang	Sets the language code.
xml:lang	Sets the language code.

## HTML <meter> Tag

---

### Description

The HTML <meter> tag specifies a scalar measurement within a known range (a gauge).

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML meter Tag</title>
</head>
```

```
<body>
<meter value="7" min="0" max="10">2 out of 10</meter><br />
<p>gauge value can be seen here</p>
</body>
</html>
```

This will produce the following result:

gauge value can be seen here

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <meter> tag also supports the following additional attributes:

Attribute	Value	Description
form <small>5</small>	form_id	Specifies one or more forms.
high <small>5</small>	number	Specifies high value range.
low <small>5</small>	number	Specifies low value range.
max <small>5</small>	number	Specifies the maximum value of the range
min <small>5</small>	number	Specifies the minimum value of the range
optimum <small>5</small>	number	Specifies the optimal value.
value <small>5</small>	number	Specifies current value of the gauge - <i>Required</i> .

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	No	Yes	Yes	No

## HTML <multicol> tag

---

### Function

The HTML <multicol> tag is used to create multiple columns of text and lets you control the size and number of the columns.

The <multicol> tag can contain any other HTML content, much like the <div> tag. All of the content within the <multicol> tag is displayed just like conventional content, except that Netscape 4 places the contents into multiple columns instead of just one.

This tag is supported by Netscape 3 and higher versions only.

### Difference between HTML and XHTML

NONE

### Example

Following example will create a three columns layout in Netscape 4.

```
<h1>Breaking News</h1>
<multicol cols=3>
<p>State media said more than 2,000 soldiers, police and miners closed the
breach in the dike in Shandong province early Sunday and installed pipes and
five high-speed pumps, but gave no indication if there were any signs of
life.<p>
<p>The Huayuan Mining Co. mine flooded on Friday afternoon when the Wen river
burst a dike, sending water pouring into a shaft and trapping 172 miners,
Xinhua and state television said.<p>
</multicol>
```

### Attributes

Attribute	Value	Description
cols	number	specifies the number of text columns for the text display. The browser attempts to flow elements evenly across the columns to make each column be about the same height. Unless the WIDTH attribute is present, column width is adjusted to fill the available width.

gutter	number	specifies the distance between each column in pixels.
width	number	specifies the width of each column in pixels. All columns are the same width. If this attribute is not present, its value is calculated from the gutter width and the number of columns.

## Standard Attributes

Attribute	Description
class	Document wide identifier
dir	Specifies the direction of the text
id	Document wide identifier
style	Helps to include inline cascading style sheet.
lang	Sets the language code.
xml:lang	Sets the language code.

## HTML <nav> Tag

---

### Description

The HTML <nav> tag specifies a section that contains only navigation links.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Nav Tag</title>
</head>
<body>
<p>Database Tutorials:</p>
<nav>
<a href="dbms/index.htm">DBMS</a> |
<a href="mongodb/index.htm">MongoDB</a> |
<a href="mysql/index.htm">MySQL</a> |
<a href="plsql/index.htm">PL/SQL</a> |
```

```
<a href="sql/index.htm">SQL</a>
</nav>
</body>
</html>
```

This will produce the following result:

Database Tutorials:

[DBMS](#) | [MongoDB](#) | [MySQL](#) | [PL/SQL](#) | [SQL](#)

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <nobr> Tag

### Description

The HTML <nobr> tag is used to instruct the browser not to break the specified text (such as the usual line wrap that occurs at the right edge of the browser window).

This is used with the <wbr> tag, <wbr> advises the extended browser when it may insert a line break in an otherwise nonbreakable sequence of text. Unlike the <br> tag, which always causes a line break, even within a <nobr>- tagged segment, the <wbr> tag works only when placed inside a <nobr>- tagged content segment and causes a line break only if the current line has already extended beyond the browser's display window margins.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML nobr Tag</title>
</head>
```

```

<body>
<nobr>

This is a very long sequence of text that is
forced to be on a single line, even if doing so causes
<wbr />
the browser to extend the document window beyond the
size of the viewing pane and the poor user must scroll right
<wbr />
to read the entire line.

</nobr>
</body>
</html>

```

This is a very long sequence of text that is forced to be on a single line, even if doing so causes the browser to extend the document window beyond the size of the viewing pane and the poor user must scroll right to read the entire line.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Browser Support

This tag is available in Netscape 4 and higher version only.

Chrome	Firefox	IE	Opera	Safari	Android
No	No	No	No	No	No

## HTML <noembed> Tag

---

### Description

The HTML <noembed> tag is used to handle browsers which do not support the <embed> tag. The <noembed> tag makes it easy to supply alternative content that tells users what they are missing.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>HTML noembed Tag</title>

```

```
</head>
<body>
<embed src="/html/yourfile.swf" width="200" height="200" >
<noembed></noembed>
</embed>
</body>
</html>
```

The message inside `<noembed>` tag will appear only when your browser does not support `<embed>` tag. So based on your browser it will display following result:

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML `<noframes>` Tag

---

### Description

The HTML `<noframes>` tag is used to handle the browsers which do not support `<frame>` tag. This tag is used to display alternate text message.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML noframes Tag</title>
</head>
<body>
<frameset cols="200, *">
    <frame src="/html/menu.htm" name="menu_page" />
    <frame src="/html/main.htm" name="main_page" />
    <noframes>
        Your browser does not support frames.
    </noframes>
</frameset>
</body>
```

```
</html>
```

This will produce the following result, refer the image given below. The left frame is menu.htm and the right one is main.htm. If the browser doesn't support frames, it will display the message "Your browser does not support frames."

<a href="#">Google</a> <a href="#">Microsoft</a> <a href="#">BBC News</a>	<p><b>This is main page and content from any link will be displayed here.</b></p> <p>So now click any link and see the result.</p>
---	--

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <noscript> Tag

### Description

The HTML <noscript> tag is used to handle the browsers which do recognize <script> tag but do not support scripting. This tag is used to display alternate text message.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML noscript Tag</title>
</head>
<body>
<script type="text/JavaScript">
```

```

<!--
  document.write("Hello JavaScript!")

-->
</script>
<noscript>
  Your browser does not support JavaScript!
</noscript>
</body>
</html>

```

This will produce the following result, browser that doesn't support will show the text under <noscript> tag as output ie. "Your browser does not support JavaScript!".

Hello JavaScript!

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <object> Tag

### Description

The HTML <object> tag is used to embed multimedia in an HTML document. The <param> tag is also used along with this tag to define various parameters.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>HTML object Tag</title>
</head>
<body>

```

```
<object data="data/test.htm" type="text/html" width="300" height="200">
  alt : <a href="data/test.htm">test.htm</a>
</object>
</body>
</html>
```

This will produce the following result:

alt : [test.htm](#)

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <object> tag also supports the following additional attributes:

Attribute	Value	Description
align	left right top bottom	Defines visual alignment of the object
archive	URL	A space separated list of URL's to archives.
border	pixels	Specifies border width around the object
classid	Class ID	Defines a class ID value as set in the Windows Registry or a URL.
codebase	URL	Specifies the path where object code is located.
codetype	mime type	The internet media type of the code referred to by the classid attribute.
data	URL	Specifies the URL for Object data.
declare	declare	Defines that the object should only be declared, not created or instantiated until needed.
height	pixels	Specifies the height of the object.

hspace	pixels	Specifies the horizontal space around the object.
name	object name	Specifies a unique name for the object
standby	text	Defines a text to display while the object is loading.
type	mime type	Defines the MIME type of data specified in the data attribute.
usemap	URL	Specifies a URL of a client-side image map to be used with the object
vspace	pixels	Specifies the vertical space around the object.
width	pixels	Specifies the width of the object.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <ol> Tag

---

### Description

The HTML <ol> tag is used for creating an ordered list.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML ol Tag</title>
</head>
```

```
<body>
<ol>
<li>ol - ordered list</li>
<li>ul - unordered list</li>
<li>dir - directory list</li>
<li>menu - menu list</li>
</ol>
</body>
</html>
```

This will produce the following result:

- ol - ordered list
- ul - unordered list
- dir - directory list
- menu - menu list

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <ol> tag also supports the following additional attributes:

Attribute	Value	Description
compact	autofocus	Defines if compact rendering is required.
reversed <span style="color: red;">5</span>	reversed	Specifies the order of the list (descending).
start <span style="color: red;">5</span>	number	Specifies the initial number to start the list.
type	A a I i 1	Specifies the style of the list.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <optgroup> Tag

---

### Description

The HTML <optgroup> tag is used for grouping related options within your select list. This makes it easier for users to comprehend their choices when looking at a large list.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML optgroup Tag</title>
</head>
<body>
<select>
<optgroup label="India">
    <option value ="mumbai">Mumbai</option>
    <option value ="delhi">Delhi</option>
</optgroup>
<optgroup label="USA">
    <option value ="florida">Florida</option>
    <option value ="newyork">New York</option>
</optgroup>
</select>
</body>
</html>
```

This will produce the following result:



### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <optgroup> tag also supports the following additional attributes:

Attribute	Value	Description
disabled	disabled	Disables the input control. The button won't accept changes from the user. It also cannot receive focus and will be skipped when tabbing.
label	text	Defines a label to use when using <optgroup>.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <option> Tag

---

### Description

The HTML <option> tag is used within a form for defining options in the drop-down list.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML option Tag</title>
</head>
<body>
<form action="/cgi-bin/dropdown.cgi" method="post">
<select name="dropdown">
<option value="Java" selected>Maths</option>
<option value="Ruby">Physics</option>
</select>
<input type="submit" value="Submit" />

```

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

This will produce the following result:

 Java  

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <option> tag also supports the following additional attributes:

Attribute	Value	Description
disabled	disabled	Disables the input control. The button won't accept changes from the user. It also cannot receive focus and will be skipped when tabbing.
label	text	Defines a label to use when using <optgroup>.
selected	selected	Defines the default option to be selected when page loads.
value	text	Specifies the value of the option to be sent to the server.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <output> Tag

---

### Description

The HTML <output> tag specifies the result of a calculation.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Output Tag</title>
</head>
<body>
<form
oninput="sumresult.value=parseInt(z1.value)+parseInt(z2.value)+parseInt(z3.value)">
<input type="range" name="z1" value="0" /> +
<input type="number" name="z2" value="20" /> +
<input type="number" name="z3" value="40" /><br />
The output is: <output name="sumresult"></output>
</body>
</html>
```

This will produce the following result:

The output is:  
60

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <output> tag also supports the following additional attributes:

Attribute	Value	Description

for 	for	List of IDs of other elements, i.e it indicates the elements who have contributed input value to the calculation.
form 	form	Enables to place output elements anywhere within a document.
name 	name	It is the name of the element.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	No	Yes	Yes	No

## HTML <p> Tag

---

### Description

The HTML <p> tag defines a paragraph of text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML p Tag</title>
</head>
<body>
<p>This paragraph is defined using the HTML p tag</p>
</body>
</html>
```

This will produce the following result:

This paragraph is defined using the HTML p tag

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <p> tag also supports the following additional attributes:

Attribute	Value	Description
align	left right center justify	Specifies text alignment within a paragraph.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <param> Tag

---

### Description

The HTML <param> tag is used for passing parameters to an embedded object using <object> tag.

### Example

You can specify some parameters related to the document with the tag. Here is an example to embed a wav file:

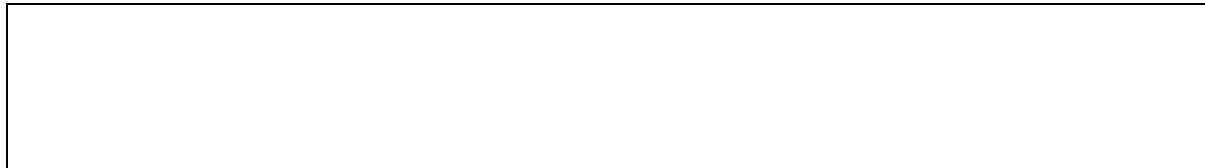
```
<!DOCTYPE html>
<html>
<head>
<title>HTML param Tag</title>
</head>
<body>
<object title="Test Object." classid="java.class">
<param name="audio" value="music.wav" />
<param name="width" value="600" />
```

```

<param name="height" value="400" />
</object>
</body>
</html>

```

This will produce the following result:



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <param> tag also supports the following additional attributes:

Attribute	Value	Description
name	parameter type	Defines a unique name for the parameter.
type	MIME type	Specifies the internet media type for the parameter.
value	value	Specifies the value of the parameter.
valuetype	data ref object	Specifies the MIME type of the value.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android

Yes	Yes	Yes	Yes	Yes	Yes
-----	-----	-----	-----	-----	-----

## HTML <plaintext> Tag

---

### Description

The HTML <plaintext> tag is used to render all text in the document exactly as it was typed in, including all tags and even the document tags.

This tag ignores all formatting for the rest of the document, displaying all text exactly as is. It cannot be stopped, it cannot be turned off. It is *deprecated* because it messes up the balance of the document tags.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML plaintext Tag</title>
</head>
<body>

</body>
</html>
```

### Browser Support

This tag is available in Netscape 4 and higher version only.

Chrome	Firefox	IE	Opera	Safari	Android
No	No	No	No	No	No

## HTML <pre> Tag

---

### Description

The HTML <pre> tag is used for indicating preformatted text. The code tag surrounds the code being marked up.

Browsers normally render pre text in a fixed-pitched font, with whitespace intact, and without word wrap.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>HTML pre Tag</title>
</head>
<body>
<pre>
    This text is
    in a fixed-pitch
        font, and it preserves
    both    spaces and line breaks
</pre>
</body>
</html>

```

This will produce the following result:

```

This text is
in a fixed-pitch
    font, and it preserves
both    spaces and line breaks

```

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <pre> tag also supports the following additional attributes:

Attribute	Value	Description
width	number	<i>Deprecated:</i> It specifies the desired width of the pre-formatted text.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Progress Tag

---

### Description

The HTML <progress> tag specifies a completion progress of a task. It is displayed as a progress bar. The value of progressbar can be manipulated by JavaScript.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Progress Tag</title>
</head>
<body>
<h1>Student's Intelligence level</h1>
<progress value="20" max="100"/>
</body>
</html>
```

This will produce the following result:

## Student's Intelligence Level

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <progress> tag also supports the following additional attributes:

Attribute	Value	Description
max 	max	It should have a value greater than zero and a valid floating point number.
value 	value	Specifies how much of the task that has been completed. It should be a floating point number between 0 and max or 0 and 1 if max is omitted.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <q> Tag

---

### Description

The HTML <q> tag is used for indicating short quotations (i.e. quotations that span multiple lines).

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML q Tag</title>
</head>
<body>

Here comes a short quotation: <q> here is a short quotation </q>

</body>
</html>
```

This will produce the following result:

```
Here comes a short quotation: here is a short quotation
```

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <q> tag also supports the following additional attributes:

Attribute	Value	Description
cite	URL	URL of the quote, if it is taken from the web.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Rp Tag

---

### Description

The HTML <rp> tag specifies to show browsers that do not support the ruby annotations. Ruby Annotations are used in East Asian typography.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Rp Tag</title>
</head>
<body>
<ruby>
  漢 <rp>(</rp><rt>Kan</rt><rp>)</rp>
  字 <rp>(</rp><rt>ji</rt><rp>)</rp>
</ruby>

```

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

This will produce the following result:

Kanji  
漢字

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Not Supported	Yes	Not Supported	Yes	Yes

## HTML Rt Tag

---

### Description

The HTML `<rt>` tag is used for pronunciation of character in ruby annotations. These are for showing pronunciation of East Asian characters.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Rt Tag</title>
</head>
<body>
<ruby>
    漢 <rp>(</rp><rt>Kan</rt><rp>)</rp>
    字 <rp>(</rp><rt>ji</rt><rp>)</rp>
</ruby>
</body>
```

```
</html>
```

This will produce the following result:

Kanji  
漢字

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Not Supported	Yes	Not Supported	Yes	Yes

## HTML Ruby Tag

---

### Description

The HTML <ruby> tag specifies ruby annotations which are for East Asian characters' pronunciation.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Ruby Tag</title>
</head>
<body>
<ruby>
    &#20013; <rp>(</rp><rt>This is it</rt></rp>)</rp>
</ruby>
</body>
</html>
```

This will produce the following result:

This is it  
æ~Žæ-¥

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Not Supported	Yes	Not Supported	Yes	Yes

## HTML <strike> Tag

### Description

The HTML <strike> tag specifies strikethrough text. This tag is deprecated now, <del> should be used instead.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML strike Tag</title>
</head>
<body>
The HTML strike tag renders a <strike>strike</strike> through the middle of the
text .
</body>
</html>
```

This will produce the following result:

The HTML strike tag renders a ~~strike~~ through the middle of the text.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## HTML Phrase Elements

---

### Function

Phrase elements add structural information to text fragments. The usual meanings of phrase elements are following:

<b>&lt;abbr&gt;</b>	Indicates an abbreviated form like pvt. inc. etc.
<b>&lt;acronym&gt;</b>	Indicates an acronym (e.g., WAC, radar, etc.).
<b>&lt;em&gt;</b>	Indicates emphasis.
<b>&lt;strong&gt;</b>	Indicates stronger emphasis.
<b>&lt;cite&gt;</b>	Contains a citation or a reference to other sources.
<b>&lt;dfn&gt;</b>	Indicates that this is the defining instance of the enclosed term.
<b>&lt;code&gt;</b>	Designates a fragment of computer code.
<b>&lt;samp&gt;</b>	Designates sample output from programs, scripts, etc.
<b>&lt;kbd&gt;</b>	Indicates text to be entered by the user.
<b>&lt;var&gt;</b>	Indicates an instance of a variable or program argument.

## Difference between HTML and XHTML

NONE

### Example

```
<abbr>pvt. or inc.</abbr><br />
<acronym>HTML</acronym><br />
<cite>Citation</cite><br />
<em>Emphasized text</em><br />
<strong>Strong text</strong><br />
<dfn>Definition term</dfn><br />
```

```
<code>Computer code text</code><br />
<samp>Sample computer code text</samp><br />
<kbd>Keyboard text</kbd><br />
<var>Variable</var><br />
```

This will produce following result:

pvt.		or	inc.
HTML			
<i>Citation</i>			
<i>Emphasized</i>			
<b>Strong</b>			
<i>Definition</i>			
Computer	code		
Sample	computer	code	
Keyboard			
<i>Variable</i>			

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## Standard Attributes

Attribute	Description
class	Document wide identifier
dir	Specifies the direction of the text
id	Document wide identifier
title	Specifies a title to associate with the element.
style	Helps to include inline cascading style sheet.
lang	Sets the language code.

## Event Attributes

Attribute	Description

onclick	Script runs when a mouse click
ondblclick	Script runs when a mouse double-click
onmousedown	Script runs when mouse button is pressed
onmouseup	Script runs when mouse button is released
onmouseover	Script runs when mouse pointer moves over an element
onmousemove	Script runs when mouse pointer moves
onmouseout	Script runs when mouse pointer moves out of an element
onkeypress	Script runs when key is pressed and released
onkeydown	Script runs when key is pressed
onkeyup	Script runs when key is released

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <script> Tag

---

### Description

The HTML <script> tag is used for declaring a script (such as JavaScript) within your HTML document.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML script Tag</title>
</head>
```

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```

<body>
<script type="text/JavaScript">

    document.write("You're visiting tutorialspoint!")

</script>

</body>
</html>

```

This will produce the following result:

You're visiting tutorialspoint!

For more detail on <script> tag please check [HTML Scripts](#) chapter.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <script> tag also supports the following additional attributes:

Attribute	Value	Description
async 	sync	Specifies that the script is executed asynchronously.
charset	charset	Defines the character encoding that the script uses.
defer	defer	Declares that the script will not generate any content. Therefore, the browser/user agent can continue parsing and rendering the rest of the page.
src	URL	Specifies a URI/URL of an external script.
type	text/JavaScript application/ecmascript	Specifies the scripting language as a content-type (MIME type).

	application/JavaScript text/vbscript	
xml:space	preserve	<i>Deprecated-</i> Whether the whitespace in code should be preserved

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Section Tag

---

### Description

The HTML <section> tag specifies a section in a document.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Section Tag</title>
</head>
<body>
<section>
<h1>Java</h1>
<h3>Inheritance</h3>
<p>Inheritance defines the relationship between superclass and subclass.</p>
</section>
</body>
</html>
```

This will produce the following result:

## Java

### Inheritance

Inheritance defines the relationship between superclass and subclass.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <select> Tag

---

### Description

The HTML <select> tag is used within a form for defining a select list.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML select Tag</title>
</head>
<body>
<form action="/cgi-bin/dropdown.cgi" method="post">
<select name="dropdown">
<option value="Data Structures" selected>Data Structures</option>
<option value="Data Mining">Data Mining</option>
</select>
<input type="submit" value="Submit" />
```

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

This will produce the following result:

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <select> tag also supports the following additional attributes:

Attribute	Value	Description
autofocus 	autofocus	Specifies that on page load the drop-down list should automatically get focus.
disabled	disabled	Disables the input control. The button won't accept changes from the user. It also cannot receive focus and will be skipped when tabbing.
form 	form_id	Specifies one or more forms.
multiple	multiple	When set, it specifies that multiple items can be selected at a time
name	name	Assigns a name to the input control.
required 	required	Before submitting the form the user is required to select a value, else it won't proceed ahead.
size	number	Defines the number of visible items in the drop-down list

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <spacer> Tag

---

### Description

The HTML <spacer> tag specifies a whitespace.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML spacer Tag</title>
</head>
<body>
Create some space <spacer type="block" width="50" /> here.
</body>
</html>
```

<spacer> tag is available in Netscape 4 and higher version only. This will produce the following result:

Create some space here.

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <object> tag also supports the following additional attributes:

Attribute	Value	Description
type	vertical horizontal block	The type attribute is used to specify whether the spacer will be horizontal, vertical, or block.

size	number	Specifies the number of pixels tall or wide the spacer will be. This attribute is only used if the spacer type is "horizontal" or "vertical." If the spacer type is "block," then the width attribute is used.
width	number	The width attribute is used when the spacer type="block". Between the quotes specify a pixel value for the width of the block.
height	number	The height attribute is used when the spacer type="block". Between the quotes specify a pixel value for the height of the block.
align	left right center	The align tag is used to specify the alignment of the block of white space. Valid alignments are left, right, and center.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

This tag is available in Netscape 4 and higher version only.

Chrome	Firefox	IE	Opera	Safari	Android
No	No	No	No	No	No

## HTML <small> Tag

---

### Description

The HTML <small> tag makes the font size one size smaller.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML small Tag</title>
</head>
```

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```
<body>
<h2>www.tutorialspoint.com</h2>
<p><small> Simply Easy Learning</small></p>
</body>
</html>
```

This will produce the following result:

**www.tutorialspoint.com**

Simply Easy Learning

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <source> tag

---

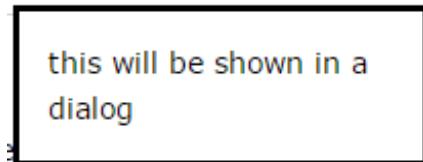
### Description

The HTML <source> tag is used for defining multimedia resources for <audio> and <video> elements. The browser can make a choice from the source based on media type and codec support.

```
<!Doctype html>
<html>
<head>
<title>HTML source Tag</title>
</head>
<body>
<audio controls>
<source src = "yourfile.mp3">
```

```
<p>The browser doesnot support the file</p>
</audio>
</body>
</html>
```

This will produce the following result:



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <source> tag also supports the following additional attributes:

Attribute	Value	Description
media 	media_query	defines the type of media resource
src 	URL	URL of the media file
type 	media_type	media type of media resource

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes (4.0)	Yes (3.5)	Yes (9)	Yes (10.5)	Yes (4.0)	No

## HTML <span> Tag

---

### Description

The HTML <span> tag is used for grouping and applying styles to inline elements.

There is a difference between the span tag and the div tag. The span tag is used with inline elements whilst the div tag is used with block-level content.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML span Tag</title>
</head>
<body>
<p>This is a paragraph <span style="color:#FF0000;">
This is a paragraph</span>
This is a paragraph</p>
<p><span style="color:#8866ff;">
This is another paragraph</span></p>
</body>
</html>
```

This will produce the following result:

This is a paragraph **This is a paragraph** This is a paragraph

This is another paragraph

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <strike> Tag

### Description

The HTML `<strike>` tag specifies strikethrough text. This tag is deprecated now, `<del>` should be used instead.

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML strike Tag</title>
</head>
<body>
The HTML strike tag renders a <strike>strike</strike> through the middle of the
text .
</body>
</html>
```

This will produce the following result:

The HTML strike tag renders a strike through the middle of the text.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML `<strong>` tag

---

### Description

The HTML `<strong>` tag is used for emphasizing an important text.

```
<!Doctype html>
<html>
<head>
```

```
<title>HTML strong Tag</title>
</head>
<body>
<p>This is a <strong>strong</strong> text</p>
</body>
</html>
```

This will produce the following result:

This is a **strong** text

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <style> tag

---

### Function

The HTML <style> tag is used for declaring style sheets within the head of your HTML document.

### Difference between HTML and XHTML:

NONE

### Example

```
<head>
<style type="text/css">
  h1 { color:#F1F1F1 }
</style>
</head>
```

For more detail on <style> tag please check [HTML Styles](#) chapter.

## Online Practice

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## Attributes

Attribute	Value	Description
type	text/css	Specifies the style sheet language as a content-type (MIME type).
media	screen tty tv projection handheld print braille aural all	Specifies the device the document will be displayed on.

## Standard Attributes

Attribute	Description
dir	Specifies the direction of the text
id	Document wide identifier
lang	Sets the language code.
xml:space	Sets the language code.

## HTML <sub> Tag

---

### Description

The HTML <sub> tag is used for defining subscript text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML sub Tag</title>
</head>
```

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```
<body>
Value of y<sub>1</sub> - y<sub>3</sub> = 17
</body>
</html>
```

This will produce the following result:

```
Value of y1 - y3 = 17
```

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML Summary Tag

---

### Description

The HTML <summary> tag specifies a summary, caption or legend for a given details.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Summary Tag</title>
</head>
<body>
<details>
    <summary>Some details</summary>
    <p>Provide more info about the details here.</p>
</details>
</section>
```

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

This will produce the following result:

Some details

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Not Supported	Not Supported	Not Supported	Not Supported	Yes

## HTML <sup> Tag

---

### Description

The HTML <sup> tag is used for defining superscript text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML sup Tag</title>
</head>
<body>
Value of 5<sup>2</sup> + 3<sup>3</sup> = 52
</body>
</html>
```

This will produce the following result:

Value of $5^2 + 3^3 = 52$
---------------------------

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <table> Tag

---

### Description

The HTML <table> tag is used for defining a table. The table tag contains other tags that define the structure of the table.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML table Tag</title>
</head>
<body>
<table border="1">
  <tr>
    <th>Team</th>
    <th>Ranking</th>
  </tr>
  <tr>
    <td>India</td>
    <td>1</td>
  </tr>
  <tr>
```

```

<td>South Africa</td>
<td>2</td>
</tr>
<tr>
<td>Australia</td>
<td>3</td>
</tr>
</table>
</body>
</html>

```

This will produce the following result:

Team	Ranking
India	1
South Africa	2
Australia	3

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <table> tag also supports the following additional attributes:

Attribute	Value	Description
abbr	abbreviated_text	<i>Deprecated</i> -Specifies an abbreviated version of the content in a cell.
align	right left center justify char	<i>Deprecated</i> -Visual alignment.
bgcolor	rgb(x,x,x) #hexcode colorname	<i>Deprecated</i> -Specifies the background color of the table.

border	pixels	<i>Deprecated</i> -Specifies the border width. A value of "0" means no border.
cellpadding	pixels or %	<i>Deprecated</i> -Specifies the space between the cell borders and their contents.
cellspacing	pixels or %	<i>Deprecated</i> -Specifies the space between cells.
frame	void above below hsides lhs rhs vsides box border	<i>Deprecated</i> -Used in conjunction with the border attribute, specifies which side of the frame that makes up the border surrounding the table is displayed.
rules	none groups rows cols all	<i>Deprecated</i> -Used in conjunction with the border attribute, specifies which rules appear between the cells of the table.
summary	text	<i>Deprecated</i> -Specifies the summary of the content.
width	pixels or %	<i>Deprecated</i> -Specifies the width of the table.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <tbody> Tag

---

### Description

The HTML <tbody> tag is used in adding a body to a table. The tbody tag is used in conjunction with the thead tag and the tfoot tag in determining each part of the table (header, footer, body).

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML tbody Tag</title>
</head>
<body>
<table style="width:100%" border="1">
<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>
<tr>
...more rows here containing four cells...
</tr>
</tbody>
<tbody>
<tr>
<td>Cell 1</td>
<td>Cell 2</td>
<td>Cell 3</td>
```

```

<td>Cell 4</td>
</tr>
<tr>
...more rows here containing four cells...
</tr>
</tbody>
</table>
</body>
</html>

```

This will produce the following result:

...more rows here containing four cells.... ...more rows here containing four cells...

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

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <tbody> tag also supports the following additional attributes:

Attribute	Value	Description
align	right left center justify char	<i>Deprecated</i> -Visual alignment.

char	character	<i>Deprecated-Specifies which character to align text on. Used when align="char"</i>
charoff	pixels or %	<i>Deprecated-Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align="char"</i>
valign	top middle bottom baseline	<i>Deprecated-Vertical alignment.</i>

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <td> Tag

---

### Description

The HTML <td> tag is used for specifying a cell or table data within a table.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML td Tag</title>
</head>
<body>
<table border="1">
  <tr>
    <th>Subject</th>
    <th>Topic</th>
```

```

</tr>
<tr>
  <td>Java</td>
  <td>Threading</td>
</tr>
<tr>
  <td>C++</td>
  <td>Virtual Functions</td>
</tr>
<tr>
  <td>Linux</td>
  <td>File Systems</td>
</tr>
</table>
</body>
</html>

```

This will produce the following result:

<b>Subject</b>	<b>Topic</b>
Java	Threading
C++	Virtual Functions
Linux	File Systems

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <td> tag also supports the following additional attributes:

<b>Attribute</b>	<b>Value</b>	<b>Description</b>
abbr	abbreviated_text	<i>Deprecated</i> -Specifies an abbreviated version of the content in a cell.
align	right left center	<i>Deprecated</i> -Visual alignment.

	justify char	
axis	name	<i>Deprecated</i> -Specifies a category for this td. This can potentially be used to perform queries against the table data and can be beneficial in the context of a speech browser.
bgcolor	rgb(x,x,x) #hexcode colorname	<i>Deprecated</i> -Specifies the background color of the table cell.
char	character	<i>Deprecated</i> -Specifies which character to align text on. Used when align="char"
charoff	pixels or %	<i>Deprecated</i> -Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align="char"
colspan	number	Specifies the number of columns the current cell spans across.
header	id	Specifies a space-separated list of header cells that contain information about this cell. The value needs to correspond with the id of the header cell (which is set using the id attribute). This attribute is useful for non-visual browsers.
height	pixels	<i>Deprecated</i> -Specifies the height of the table cell.
nowrap	nowrap	<i>Deprecated</i> -Prevents text from automatically wrapping.
rowspan	numbers	Specifies the number of rows the current cell spans across.
scope	col colgroup row rowgroup	<i>Deprecated</i> -This attribute is used on header cells and specifies the cells that will use this header's information.

valign	top middle bottom baseline	<i>Deprecated</i> -Vertical alignment.
width	pixels or %	<i>Deprecated</i> -Specifies the width of the table cell

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML textarea Tag

---

### Description

The HTML <textarea> tag is used within a form to declare a textarea element - a control that allows the user to input text over multiple rows.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML textarea Tag</title>
</head>
<body>
<form action="/cgi-bin/hello_get.cgi" method="get">
Fill the Detail: <br />
<textarea rows="5" cols="50" name="description">
Enter your name
</textarea>
<input type="submit" value="submit" />
</form>
</body>
```

```
</html>
```

This will produce the following result:

Fill the Detail:



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <textarea> tag also supports the following additional attributes:

Attribute	Value	Description
autofocus <small>5</small>	autofocus	Specifies that on page load the text area should automatically get focus.
cols	number	Specifies the width of the textarea based on the number of visible character widths.
disabled	disabled	Specifies the width of the textarea based on the number of visible character widths.
form <small>5</small>	form_id	Specifies one or more forms.
maxlength <small>5</small>	number	Specifies the maximum number of characters in textarea.
name	text	Assigns a name to the input control.
placeholder <small>5</small>	text	Specifies a short hint of the value in textarea.
readonly	readonly	Sets the input control to read-only. It won't allow the user to change the value. The control however, can receive focus and are included when tabbing through the form controls.

required <small>5</small>	required	Specifies that a textarea is required
rows	number	Specifies the height of the textarea based on the number of visible lines of text. If there's more text than this allows, users can scroll using the textarea's scrollbars.
wrap <small>5</small>	hard soft	Specifies the text to be wrapped in textarea.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <tfoot> Tag

---

### Description

The HTML <tfoot> tag is used in adding a footer to a table. The tfoot tag is used in conjunction with the tbody tag and the thead tag in determining each part of the table (header, footer, body).

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML tfoot Tag</title>
</head>
<body>
<table style="width:100%" border="1">
<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>
<tr>
...more rows here containing four cells...
</tr>
</tbody>
<tbody>
<tr>
<td>Cell 1</td>
<td>Cell 2</td>
<td>Cell 3</td>
<td>Cell 4</td>
</tr>
<tr>
...more rows here containing four cells...
</tr>
</tbody>
</table>
</body>
</html>

```

This will produce the following result:

...more rows here containing four cells... ...more rows here containing four cells...

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

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

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <tfoot> tag also supports the following additional attributes:

Attribute	Value	Description
align	right left center justify char	<i>Deprecated</i> -Visual alignment.
char	character	<i>Deprecated</i> -Specifies which character to align text on. Used when align="char"
charoff	pixels or %	<i>Deprecated</i> -Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align="char"
valign	top middle bottom baseline	<i>Deprecated</i> -Vertical alignment.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <th> Tag

---

### Description

The HTML <th> tag is used for specifying a header cell or table header within a table.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML th Tag</title>
</head>
<body>
<table border="1">
  <tr>
    <th>ID</th>
    <th>Product Details</th>
  </tr>
  <tr>
    <td>00L1</td>
    <td>i3, 500gb laptop</td>
  </tr>
</table>
</body>
</html>
```

This will produce the following result:

ID	Product Details
00L1	i3, 500gb laptop

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <th> tag also supports the following additional attributes:

<b>Attribute</b>	<b>Value</b>	<b>Description</b>
abbr	abbreviated_text	<i>Deprecated-Specifies an abbreviated version of the content in a header cell.</i>
align	right left center justify char	<i>Deprecated-Content alignment in header cell.</i>
axis	name	<i>Deprecated-Specifies a category for this th.</i>
bgcolor	rgb(x,x,x) #hexcode colorname	<i>Deprecated-Specifies the background color of the header cell.</i>
char	character	<i>Deprecated-Specifies which character to align text on. Used when align="char"</i>
charoff	pixels or %	<i>Deprecated-Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align="char"</i>
colspan	number	Specifies the number of columns the header cell spans across.
headers	id	Specifies one or more header cells a cell is related to.
height	pixels	<i>Deprecated-Specifies the height of the header cell.</i>
nowrap	nowrap	<i>Deprecated-Prevents text from automatically wrapping.</i>
rowspan	numbers	Specifies the number of rows the header cell spans across.
scope	col colgroup row rowgroup	This attribute is used on header cells and specifies the cells that will use this header's information.

valign	top middle bottom baseline	<i>Deprecated</i> -Vertical alignment.
width	pixels or %	<i>Deprecated</i> -Specifies the width of the header cell

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <thead> Tag

---

### Description

The HTML <thead> tag is used in adding a header to a table. The thead tag is used in conjunction with the tbody tag and the tfoot tag in determining each part of the table (header, footer, body).

### Example

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

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```

<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>
<tr>
...more rows here containing four cells...
</tr>
</tbody>
<tbody>
<tr>
<td>Cell 1</td>
<td>Cell 2</td>
<td>Cell 3</td>
<td>Cell 4</td>
</tr>
<tr>
...more rows here containing four cells...
</tr>
</tbody>
</table>
</body>
</html>

```

This will produce the following result:

...more rows here containing four cells... ...more rows here containing four cells...

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

This is the head of the table
This is the foot of the table

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <thead> tag also supports the following additional attributes:

Attribute	Value	Description
align	right left center justify char	<i>Deprecated</i> -Visual alignment.
char	character	<i>Deprecated</i> -Specifies which character to align text on. Used when align="char"
charoff	pixels or %	<i>Deprecated</i> -Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align="char"
valign	top middle bottom baseline	<i>Deprecated</i> -Vertical alignment.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <time> tag

---

### Description

The HTML <time> tag is used for displaying the human readable date and time.

```
<!Doctype html>
<html>
<head>
<title>HTML time Tag</title>
</head>
<body>
<p>The time is <time>12:51 pm</time></p>
</body>
</html>
```

This will produce the following result:

The time is 12:51 pm

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Specific Attributes

The HTML <time> tag also supports the following additional attributes:

Attribute	Value	Description
datetime 	datetime	it is machine readable date time

### Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

### Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes (6.0)	Yes (4.0)	Yes (9.0)	Yes (11.1)	Yes (5.0)	No

## HTML <title> Tag

### Description

The HTML <title> tag is used for indicating the title of the HTML document. The body title is placed between the **<title>** and **</title>** tags.

HTML document title is visible via browser's title bar.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>Title comes here</title>
</head>
<body>
<p>title tag is used for indicating the title of the HTML document. HTML document title is visible via browser's title bar.</p>
</body>
</html>
```

This will produce the following result:

title tag is used for indicating the title of the HTML document. HTML document title is visible via browser's title bar.

### Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

### Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <tr> Tag

### Description

The HTML <tr> tag is used for specifying a table row within a table.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>HTML tr Tag</title>
</head>
<body>
<table border="1">
<tr>
<th>Cricketers</th>
<th>Ranking</th>
</tr>
<tr>
<td>M.S Dhoni</td>
<td>1</td>
</tr>
<tr>
<td>Yuvraj Singh</td>
<td>2</td>
</tr>
<tr>
<td>Virat Kohli</td>
<td>3</td>
</tr>
</table>
</body>
</html>

```

This will produce the following result:

Cricketers	Ranking
M.S Dhoni	1
Yuvraj Singh	2
Virat Kohli	3

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <tr> tag also supports the following additional attributes:

Attribute	Value	Description
align	right left center justify char	<i>Deprecated</i> -Visual alignment.
bgcolor	rgb(x,x,x) #hexcode colorname	<i>Deprecated</i> -Specifies the background color of the table cell.
char	character	<i>Deprecated</i> -Specifies which character to align text on. Used when align="char".
charoff	pixels or %	<i>Deprecated</i> -Specifies an alignment offset (either in pixels or percentage value) against the first character as specified with the char attribute. Used when align="char".
valign	top middle bottom baseline	<i>Deprecated</i> -Vertical alignment.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <track> tag

---

### Description

The HTML <track> tag is used for defining captions, subtitles, and other content for <audio> and <video> tags

```
<!Doctype html>
<html>
<head>
<title>HTML source Tag</title>
</head>
<body>
<audio controls>
<source src = "yourfile.mp3">
<track src = "subtitles.vtt" kind="subtitles" srclang="en" label="English">
<p>The browser doesnot support the file</p>
</audio>
</body>
</html>
```

This will produce the following result:

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <track> tag also supports the following additional attributes:

Attribute	Value	Description
default 	default	uses the default track
kind 	captions chapters descriptions metadata subtitles	kind of track to be used
label 	text	displays title of text track
src 	URL	URL of track file

srclang class="inline"> 	language_code	specifies language of the text
---	---------------	--------------------------------

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <tt> Tag

---

### Description

The HTML <tt> tag specifies teletype text. *This is not supported in HTML5.*

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML tt Tag</title>
</head>
<body>
<p>tutorialspoint</p>
<tt>learning website</tt>
</body>
</html>
```

This will produce the following result:

```
tutorialspoint
learning website
```

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <u> Tag

---

### Description

The HTML <u> tag is used to underline a text. This tag is deprecated now and should not be used.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML u Tag</title>
</head>
<body>
<u>tutorialspoint.com</u> was started by <b>Mr. Mohammad Mohtashim,</b> in the
year 2006.
</body>
</html>
```

This will produce the following result:

tutorialspoint.com was started by **Mr. Mohammad Mohtashim**, in the year 2006.

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <ul> Tag

---

### Description

The HTML <ul> tag is used for creating an unordered list.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML ul Tag</title>
</head>
<body>
<p>Sports Club Games</p>
<ul>
<li>Cricket</li>
<li>Football</li>
<li>Hockey</li>
<li>Badminton</li>
<li>Squash</li>
</ul>
</body>
</html>
```

This will produce the following result:

Sports Club Games

- Cricket
- Football

- Hockey
- Badminton
- Squash

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <ul> tag also supports the following additional attributes:

Attribute	Value	Description
type	disc circle square	<i>Deprecated</i> -Specifies the style of the bullet.
compact	compact	<i>Deprecated</i> -Defines if compact rendering is required.

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <var> Tag

---

### Description

The HTML <var> tag is used to format text in a document. It can include a variable in a mathematical expression.

### Example

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

```

<head>
<title>HTML var Tag</title>
</head>
<body>
<p> The equations: <var>3x</var> - <var>7z</var> = <var>8y</var> + 2 and
<var>x</var> + <var>3z</var> = <var>4y</var> + 9 </p>
</body>
</html>

```

This will produce the following result:

The equations:  $3x - 7z = 8y + 2$  and  $x + 3z = 4y + 9$

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <video> Tag

---

### Description

The HTML <video> tag is used to embed video into your web page, it has several video sources.

### Example

```

<!DOCTYPE html>
<html>
<head>
<title>HTML video Tag</title>
</head>
<body>
<p>Run your first program using an Online Compiler (compileonline.com)</p><br>
/>

```

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```
<video width="500" height="300" controls>
  <source src="/html/compileonline.mp4" type="video/mp4">
  This browser doesn't support video tag.
</video>
</body>
</html>
```

This will produce the following result:

Run your first program using an Online Compiler ([compileonline.com](http://compileonline.com))



## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Specific Attributes

The HTML <video> tag also supports the following additional attributes:

Attribute	Value	Description
autoplay <small>5</small>	autoplay	Specifies that the video will play automatically.
controls <small>5</small>	controls	Specifies that the video controls gets displayed.
height <small>5</small>	pixels	Specifies the height

loop 	loop	Specifies that the video will start again every time after finish
muted 	muted	Specifies that the audio should be muted
poster 	URL	Specifies the image to be shown while the video is downloading.
preload 	auto metadata none	Specifies what author thinks will lead to user experience at its best.
src 	URL	Specifies the URL
width 	pixels	Specifies the width

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Mobile
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <wbr> Tag

---

### Description

The HTML <wbr> tag defines a potential line break point if needed. This stands for Word Break Opportunity.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML wbr Tag</title>
</head>
<body>
```

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```
<wbr />
the browser to extend the document window beyond the size of the viewing pane
and the poor user must scroll right
<wbr />
</body>
</html>
```

This will produce the following result:

The browser to extend the document window beyond the size of the viewing pane and the poor user must scroll right

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Event Attributes

This tag supports all the event attributes described in - [HTML Events Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

## HTML <xmp> Tag

---

### Description

The HTML <xmp> tag specifies preformatted text.

### Example

```
<!DOCTYPE html>
<html>
<head>
<title>HTML xmp Tag</title>
</head>
<body>
<xmp>HTML tags include <b> for bold text, <i> for italic text.</xmp>
</body>
</html>
```

This will produce the following result:

HTML tags include

<b> for bold text</b>, <i> for italic text.</i>

## Global Attributes

This tag supports all the global attributes described in - [HTML Attribute Reference](#)

## Browser Support

Chrome	Firefox	IE	Opera	Safari	Android
Yes	Yes	Yes	Yes	Yes	Yes

# 29. HTML – ATTRIBUTE REFERENCE

There are few HTML attributes which are standard and associated to all the HTML tags. These attributes are listed here with a brief description.

## Global Attributes

Not valid in base, head, html, meta, param, script, style, and title elements.

Attribute	HTML-5	Description
accesskey		Specifies a shortcut key for an element to be used in place of keyboard.
class		The class of the element
contenteditable	Yes	Boolean attribute to specify whether the element is editable or not.
contextmenu	Yes	Specifies a context menu for an element.
data-*	Yes	Used to store custom data associated with the element.
draggable	Yes	Boolean attribute to specify whether the element can be dragged or not.
dropzone	Yes	Specifies whether the dragged data is copied, moved, or linked, when dropped.
hidden	Yes	Specifies whether element should be visible or not.
id		A unique id for the element
spellcheck	Yes	Specifies if the element must have it's spelling or grammar checked.
style		An inline style definition
tabindex		Specifies the tab order of an element.

title		A text to display in a tool tip
translate	Yes	Boolean attribute specifies whether the content of an element should be translated or not

## Language Attributes

---

The **lang** attribute indicates the language being used for the enclosed content. The language is identified using the ISO standard language abbreviations, such as **fr** for **French**, **en** for **English**, and so on.

RFC 1766 (<http://www.ietf.org/rfc/rfc1766.txt>) describes these codes and their formats.

Not valid in base, br, frame, frameset, hr, iframe, param, and script elements.

Attribute	Value	Description
dir	ltr   rtl	Sets the text direction
lang	language_code	Sets the language code

# 30. HTML EVENTS REFERENCE

When users visit your website, they do things like click various links, bring mouse over text and images etc. These are examples of what we call events in JavaScript and VBScript terminologies.

We can write our event handlers using JavaScript or VBScript and can specify some actions to be taken against these events. Though these are the events but they will be specified as attributes for the HTML tags.

The HTML 4.01 specification had defined 19 events but later HTML-5 has added many other events which we have listed down here:

## Window Events Attributes

Following events have been introduced in older versions of HTML but all the tags marked with  are part of HTML-5.

Events	HTML-5	Description
onafterprint		Triggers after a document is printed
onbeforeprint		Triggers before a document is printed
onbeforeonload		Triggers before a document loads
onerror		Triggers when an error occurs
onhaschange		Triggers when a document has changed
onload		Triggers when a document loads
onmessage		Triggers when a message is triggered
onoffline		Triggers when a document goes offline
ononline		Triggers when a document comes online
onpagehide		Triggers when a window is hidden

onpageshow		Triggers when a window becomes visible
onpopstate		Triggers when a window's history changes
onredo		Triggers when a document performs a redo
onresize		Triggers when a window is resized
onstorage		Triggers when a document loads
onundo		Triggers when a document performs an undo
onunload		Triggers when a user leaves the document

## Form Events

Following tags have been introduced in older versions of HTML but all the tags marked with  are part of HTML-5.

Events	HTML-5	Description
onblur		Triggers when a window loses focus
onchange		Triggers when an element changes
oncontextmenu		Triggers when a context menu is triggered
onfocus		Triggers when a window gets focus
onformchange		Triggers when a form changes
onforminput		Triggers when a form gets user input
oninput		Triggers when an element gets user input
oninvalid		Triggers when an element is invalid
onreset		Triggers when a form is reset

onselect		Triggers when an element is selected
onsubmit		Triggers when a form is submitted

## Keyboard Events

Events	HTML-5	Description
onkeydown		Triggers when a key is pressed
onkeypress		Triggers when a key is pressed and released
onkeyup		Triggers when a key is released

## Mouse Events

Following tags have been introduced in older versions of HTML but all the tags marked with  are part of HTML-5.

Events	HTML-5	Description
onclick		Triggers on a mouse click
ondblclick		Triggers on a mouse double-click
ondrag		Triggers when an element is dragged
ondragend		Triggers at the end of a drag operation
ondragenter		Triggers when an element has been dragged to a valid drop target
ondragleave		Triggers when an element leaves a valid drop target
ondragover		Triggers when an element is being dragged over a valid drop target

ondragstart		Triggers at the start of a drag operation
ondrop		Triggers when a dragged element is being dropped
onmousedown		Triggers when a mouse button is pressed
onmousemove		Triggers when the mouse pointer moves
onmouseout		Triggers when the mouse pointer moves out of an element
onmouseover		Triggers when the mouse pointer moves over an element
onmouseup		Triggers when a mouse button is released
onmousewheel		Triggers when the mouse wheel is being rotated
onscroll		Triggers when an element's scrollbar is being scrolled

## Media Events

Following tags have been introduced in older versions of HTML but all the tags marked with  are part of HTML-5.

Events	HTML-5	Description
onabort		Triggers on an abort event
oncanplay		Triggers when a media can start play, but might has to stop for buffering
oncanplaythrough		Triggers when a media can be played to the end, without stopping for buffering
ondurationchange		Triggers when the length of a media is changed
onemptied		Triggers when a media resource element suddenly becomes empty.
onended		Triggers when a media has reached the end

onerror	<span style="color: orange;">5</span>	Triggers when an error occurs
onloadeddata	<span style="color: orange;">5</span>	Triggers when media data is loaded
onloadedmetadata	<span style="color: orange;">5</span>	Triggers when the duration and other media data of a media element is loaded
onloadstart	<span style="color: orange;">5</span>	Triggers when the browser starts loading the media data
onpause	<span style="color: orange;">5</span>	Triggers when media data is paused
onplay	<span style="color: orange;">5</span>	Triggers when media data is going to start playing
onplaying	<span style="color: orange;">5</span>	Triggers when media data has started playing
onprogress	<span style="color: orange;">5</span>	Triggers when the browser is fetching the media data
onratechange	<span style="color: orange;">5</span>	Triggers when the playing rate of media data has changed
onreadystatechange	<span style="color: orange;">5</span>	Triggers when the ready-state changes
onseeked	<span style="color: orange;">5</span>	Triggers when the seeking attribute of a media element is no longer true, and the seeking has ended
onseeking	<span style="color: orange;">5</span>	Triggers when the seeking attribute of a media element is true, and the seeking has begun
onstalled	<span style="color: orange;">5</span>	Triggers when there is an error in fetching media data
onsuspend	<span style="color: orange;">5</span>	Triggers when the browser has been fetching media data, but stopped before the entire media file was fetched
ontimeupdate	<span style="color: orange;">5</span>	Triggers when media changes its playing position
onvolumechange	<span style="color: orange;">5</span>	Triggers when a media changes the volume, also when volume is set to "mute"

onwaiting		Triggers when media has stopped playing, but is expected to resume
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# 31. HTML – FONTS REFERENCE

Fonts are specific to platform. You will have different look and feel of a web page on different machines running different operating systems like Windows, Linux or Mac iOS. Here we are giving a list of fonts which are available in various operating systems.

HTML `<font>` tag is deprecated in version 4.0 onwards and now all fonts are set by using CSS. Here is the simple syntax of setting font of a body of web page.

```
body { font-family: "new century schoolbook"; }
```

or

```
<body style="font-family:new century schoolbook;">
```

## Example

```
<!DOCTYPE html>
<html>
<head>
<title>Font Setting Using CSS</title>
</head>
<body>

<p>Change any of the style and try it.</p>
<div style="font-family:verdana;">This is demo for font family</div>
<br />
<div style="font-size:120%;">This is demo for font size</div>
<br />
<div style="font-size:14pt;">This is demo for font size</div>

</body>
</html>
```

This will produce the following result:

Change any of the style and try it.

This is demo for font family

This is demo for font size

This is demo for font size

## **Fonts for Microsoft Systems**

<b>Font</b>	<b>Font</b>	<b>Font</b>
Andale Mono	Arial	Arial Bold
Arial Italic	Arial Bold Italic	Arial Black
Comic Sans MS	Comic Sans MS Bold	Courier New
Courier New Bold	Courier New Italic	Courier New Bold Italic
Georgia	Georgia Bold	Georgia Italic
Georgia Bold Italic	Impact	Lucida Console
Lucida Sans Unicode	Marlett	Minion Web
Symbol	Times New Roman	Times New Roman Bold
Times New Roman Italic	Times New Roman Bold Italic	Tahoma
Trebuchet MS	Trebuchet MS Bold	Trebuchet MS Italic
Trebuchet MS Bold Italic	Verdana	Verdana Bold
Verdana Italic	Verdana Bold Italic	Webdings

You can check example fonts here: [Microsoft Fonts Examples](#). You can also have more information on Microsoft Fonts at <http://www.microsoft.com/typography/fonts>.

## Fonts for Macintosh Systems

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Following is the list of fonts supported by Macintosh System 7 and higher versions

Font	Font	Font
American Typewriter	Andale Mono	Apple Chancery
Arial	Arial Black	Brush Script
Baskerville	Big Caslon	Comic Sans MS
Copperplate	Courier New	Gill Sans
Futura	Herculanum	Impact
Lucida Grande	Marker Felt	Optima
Trebuchet MS	Verdana	Webdings
Palatino	Symbol	Times
Osaka	Papyrus	Times New Roman
Textile	Zapf Dingbats	Zapfino
Techno	Hoefer Text	Skia
Hoefer Text Ornaments	Capitals	Charcoal
Gadget	Sand	

You can check example fonts here: [Mac Fonts Examples](#)

## Fonts for Unix Systems

---

Following is the list of fonts supported by most Unix System variants

Font	Font	Font
Charter	Clean	Courier
Fixed	Helvetica	Lucida
Lucida bright	Lucida Typewriter	New Century Schoolbook
Symbol	Terminal	Times
Utopia		

You can check example fonts here: [Unix Fonts Examples](#)

## HTML ASCII Codes

---

There are  $2^7 = 128$  printable characters which can be represented by different 7-BIT ASCII codes. Another set of characters are not for HTML representation but they are devised to control hardware.

Following tables list down all the 7-BIT ASCII codes and their equivalent HTML Entity Codes.

If you want to see equivalent HEX, OCT and extended set of ASCII codes then check next chapter.

## 7-BIT Printable ASCII Characters

---

ASCII Characters	Description	HTML Entity Codes
	space	&#32;
!	exclamation mark	&#33;
"	quotation mark	&#34;
#	number sign	&#35;
\$	dollar sign	&#36;
%	percent sign	&#37;
&	ampersand	&#38;

'	apostrophe	&#39;
(	left parenthesis	&#40;
)	right parenthesis	&#41;
*	asterisk	&#42;
+	plus sign	&#43;
,	comma	&#44;
-	hyphen	&#45;
.	period	&#46;
/	slash	&#47;
0	digit 0	&#48;
1	digit 1	&#49;
2	digit 2	&#50;
3	digit 3	&#51;
4	digit 4	&#52;
5	digit 5	&#53;
6	digit 6	&#54;
7	digit 7	&#55;
8	digit 8	&#56;
9	digit 9	&#57;
:	colon	&#58;
;	semicolon	&#59;
<	less-than	&#60;
=	equals-to	&#61;

>	greater-than	&#62;
?	question mark	&#63;
@	at sign	&#64;
A	uppercase A	&#65;
B	uppercase B	&#66;
C	uppercase C	&#67;
D	uppercase D	&#68;
E	uppercase E	&#69;
F	uppercase F	&#70;
G	uppercase G	&#71;
H	uppercase H	&#72;
I	uppercase I	&#73;
J	uppercase J	&#74;
K	uppercase K	&#75;
L	uppercase L	&#76;
M	uppercase M	&#77;
N	uppercase N	&#78;
O	uppercase O	&#79;
P	uppercase P	&#80;
Q	uppercase Q	&#81;
R	uppercase R	&#82;
S	uppercase S	&#83;
T	uppercase T	&#84;

U	uppercase U	&#85;
V	uppercase V	&#86;
W	uppercase W	&#87;
X	uppercase X	&#88;
Y	uppercase Y	&#89;
Z	uppercase Z	&#90;
[	left square bracket	&#91;
\	backslash	&#92;
]	right square bracket	&#93;
^	caret	&#94;
_	underscore	&#95;
`	grave accent	&#96;
a	lowercase a	&#97;
b	lowercase b	&#98;
c	lowercase c	&#99;
d	lowercase d	&#100;
e	lowercase e	&#101;
f	lowercase f	&#102;
g	lowercase g	&#103;
h	lowercase h	&#104;
i	lowercase i	&#105;
j	lowercase j	&#106;
k	lowercase k	&#107;

I	lowercase I	&#108;
m	lowercase m	&#109;
n	lowercase n	&#110;
o	lowercase o	&#111;
p	lowercase p	&#112;
q	lowercase q	&#113;
r	lowercase r	&#114;
s	lowercase s	&#115;
t	lowercase t	&#116;
u	lowercase u	&#117;
v	lowercase v	&#118;
w	lowercase w	&#119;
x	lowercase x	&#120;
y	lowercase y	&#121;
z	lowercase z	&#122;
{	left curly brace	&#123;
	vertical bar	&#124;
}	right curly brace	&#125;
~	tilde	&#126;

## 7-BIT ASCII Device Control Characters

ASCII Characters	Description	HTML Entity Codes
NUL	null character	&#00;

SOH	start of header	&#01;
STX	start of text	&#02;
ETX	end of text	&#03;
EOT	end of transmission	&#04;
ENQ	enquiry	&#05;
ACK	acknowledge	&#06;
BEL	bell (ring)	&#07;
BS	backspace	&#08;
HT	horizontal tab	&#09;
LF	line feed	&#10;
VT	vertical tab	&#11;
FF	form feed	&#12;
CR	carriage return	&#13;
SO	shift out	&#14;
SI	shift in	&#15;
DLE	data link escape	&#16;
DC1	device control 1	&#17;
DC2	device control 2	&#18;

DC3	device control 3	&#19;
DC4	device control 4	&#20;
NAK	negative acknowledge	&#21;
SYN	synchronize	&#22;
ETB	end transmission block	&#23;
CAN	cancel	&#24;
EM	end of medium	&#25;
SUB	substitute	&#26;
ESC	escape	&#27;
FS	file separator	&#28;
GS	group separator	&#29;
RS	record separator	&#30;
US	unit separator	&#31;
DEL	delete (rubout)	&#127;

## 32. ASCII TABLE LOOKUP

ASCII stands for American Standard Code for Information Interchange. There are 128 standard ASCII codes, each of which can be represented by a 7-digit binary number: 0000000 through 1111111.

Extended ASCII adds an additional 128 characters that vary between computers, programs and fonts.

### 7 Bit ASCII Codes

DEC	OCT	HEX	BIN	Symbol	HTML Code	Description
0	000	00	00000000	NUL	&#000;	Null char
1	001	01	00000001	SOH	&#001;	Start of Heading
2	002	02	00000010	STX	&#002;	Start of Text
3	003	03	00000011	ETX	&#003;	End of Text
4	004	04	00000100	EOT	&#004;	End of Transmission
5	005	05	00000101	ENQ	&#005;	Enquiry
6	006	06	00000110	ACK	&#006;	Acknowledgment
7	007	07	00000111	BEL	&#007;	Bell
8	010	08	00001000	BS	&#008;	Back Space
9	011	09	00001001	HT	&#009;	Horizontal Tab
10	012	0A	00001010	LF	&#010;	Line Feed
11	013	0B	00001011	VT	&#011;	Vertical Tab
12	014	0C	00001100	FF	&#012;	Form Feed
13	015	0D	00001101	CR	&#013;	Carriage Return
14	016	0E	00001110	SO	&#014;	Shift Out / X-On
15	017	0F	00001111	SI	&#015;	Shift In / X-Off

16	020	10	00010000	DLE	&#016;	Data Line Escape
17	021	11	00010001	DC1	&#017;	Device Control 1 (oft. XON)
18	022	12	00010010	DC2	&#018;	Device Control 2
19	023	13	00010011	DC3	&#019;	Device Control 3 (oft. XOFF)
20	024	14	00010100	DC4	&#020;	Device Control 4
21	025	15	00010101	NAK	&#021;	Negative Acknowledgement
22	026	16	00010110	SYN	&#022;	Synchronous Idle
23	027	17	00010111	ETB	&#023;	End of Transmit Block
24	030	18	00011000	CAN	&#024;	Cancel
25	031	19	00011001	EM	&#025;	End of Medium
26	032	1A	00011010	SUB	&#026;	Substitute
27	033	1B	00011011	ESC	&#027;	Escape
28	034	1C	00011100	FS	&#028;	File Separator
29	035	1D	00011101	GS	&#029;	Group Separator
30	036	1E	00011110	RS	&#030;	Record Separator
31	037	1F	00011111	US	&#031;	Unit Separator
32	040	20	00100000		&#32;	Space
33	041	21	00100001	!	&#33;	Exclamation mark
34	042	22	00100010	"	&#34;	Double quotes
35	043	23	00100011	#	&#35;	Number
36	044	24	00100100	\$	&#36;	Dollar
37	045	25	00100101	%	&#37;	Procentzeichen
38	046	26	00100110	&	&#38;	Ampersand

39	047	27	00100111	'	&#39;	Single quote
40	050	28	00101000	(	&#40;	Open parenthesis
41	051	29	00101001	)	&#41;	Close parenthesis
42	052	2A	00101010	*	&#42;	Asterisk
43	053	2B	00101011	+	&#43;	Plus
44	054	2C	00101100	,	&#44;	Comma
45	055	2D	00101101	-	&#45;	Hyphen
46	056	2E	00101110	.	&#46;	Period, dot or full stop
47	057	2F	00101111	/	&#47;	Slash or divide
48	060	30	00110000	0	&#48;	Zero
49	061	31	00110001	1	&#49;	One
50	062	32	00110010	2	&#50;	Two
51	063	33	00110011	3	&#51;	Three
52	064	34	00110100	4	&#52;	Four
53	065	35	00110101	5	&#53;	Five
54	066	36	00110110	6	&#54;	Six
55	067	37	00110111	7	&#55;	Seven
56	070	38	00111000	8	&#56;	Eight
57	071	39	00111001	9	&#57;	Nine
58	072	3A	00111010	:	&#58;	Colon
59	073	3B	00111011	;	&#59;	Semicolon
60	074	3C	00111100	<	&#60;	Less than
61	075	3D	00111101	=	&#61;	Equals

62	076	3E	00111110	>	&#62;	Greater than
63	077	3F	00111111	?	&#63;	Question mark
64	100	40	01000000	@	&#64;	At symbol
65	101	41	01000001	A	&#65;	Uppercase A
66	102	42	01000010	B	&#66;	Uppercase B
67	103	43	01000011	C	&#67;	Uppercase C
68	104	44	01000100	D	&#68;	Uppercase D
69	105	45	01000101	E	&#69;	Uppercase E
70	106	46	01000110	F	&#70;	Uppercase F
71	107	47	01000111	G	&#71;	Uppercase G
72	110	48	01001000	H	&#72;	Uppercase H
73	111	49	01001001	I	&#73;	Uppercase I
74	112	4A	01001010	J	&#74;	Uppercase J
75	113	4B	01001011	K	&#75;	Uppercase K
76	114	4C	01001100	L	&#76;	Uppercase L
77	115	4D	01001101	M	&#77;	Uppercase M
78	116	4E	01001110	N	&#78;	Uppercase N
79	117	4F	01001111	O	&#79;	Uppercase O
80	120	50	01010000	P	&#80;	Uppercase P
81	121	51	01010001	Q	&#81;	Uppercase Q
82	122	52	01010010	R	&#82;	Uppercase R
83	123	53	01010011	S	&#83;	Uppercase S
84	124	54	01010100	T	&#84;	Uppercase T

85	125	55	01010101	U	&#85;	Uppercase U
86	126	56	01010110	V	&#86;	Uppercase V
87	127	57	01010111	W	&#87;	Uppercase W
88	130	58	01011000	X	&#88;	Uppercase X
89	131	59	01011001	Y	&#89;	Uppercase Y
90	132	5A	01011010	Z	&#90;	Uppercase Z
91	133	5B	01011011	[	&#91;	Opening bracket
92	134	5C	01011100	\	&#92;	Backslash
93	135	5D	01011101	]	&#93;	Closing bracket
94	136	5E	01011110	^	&#94;	Caret - circumflex
95	137	5F	01011111	_	&#95;	Underscore
96	140	60	01100000	`	&#96;	Grave accent
97	141	61	01100001	a	&#97;	Lowercase a
98	142	62	01100010	b	&#98;	Lowercase b
99	143	63	01100011	c	&#99;	Lowercase c
100	144	64	01100100	d	&#100;	Lowercase d
101	145	65	01100101	e	&#101;	Lowercase e
102	146	66	01100110	f	&#102;	Lowercase f
103	147	67	01100111	g	&#103;	Lowercase g
104	150	68	01101000	h	&#104;	Lowercase h
105	151	69	01101001	i	&#105;	Lowercase i
106	152	6A	01101010	j	&#106;	Lowercase j
107	153	6B	01101011	k	&#107;	Lowercase k

108	154	6C	01101100	I	&#108;	Lowercase I
109	155	6D	01101101	m	&#109;	Lowercase m
110	156	6E	01101110	n	&#110;	Lowercase n
111	157	6F	01101111	o	&#111;	Lowercase o
112	160	70	01110000	p	&#112;	Lowercase p
113	161	71	01110001	q	&#113;	Lowercase q
114	162	72	01110010	r	&#114;	Lowercase r
115	163	73	01110011	s	&#115;	Lowercase s
116	164	74	01110100	t	&#116;	Lowercase t
117	165	75	01110101	u	&#117;	Lowercase u
118	166	76	01110110	v	&#118;	Lowercase v
119	167	77	01110111	w	&#119;	Lowercase w
120	170	78	01111000	x	&#120;	Lowercase x
121	171	79	01111001	y	&#121;	Lowercase y
122	172	7A	01111010	z	&#122;	Lowercase z
123	173	7B	01111011	{	&#123;	Opening brace
124	174	7C	01111100		&#124;	Vertical bar
125	175	7D	01111101	}	&#125;	Closing brace
126	176	7E	01111110	~	&#126;	Equivalency sign (tilde)
127	177	7F	01111111		&#127;	Delete

## Extended ASCII Codes

Below is set of additional 128 Extended ASCII Codes according to ISO 8859-1, also called ISO Latin-1.

<b>DEC</b>	<b>OCT</b>	<b>HEX</b>	<b>BIN</b>	<b>Symbol</b>	<b>HTMLCode</b>	<b>Description</b>
128	200	80	10000000	€	&#128;	Euro sign
129	201	81	10000001			
130	202	82	10000010	,	&#130;	Single low-9 quotation mark
131	203	83	10000011	f	&#131;	Latin small letter f with hook
132	204	84	10000100	"	&#132;	Double low-9 quotation mark
133	205	85	10000101	...	&#133;	Horizontal ellipsis
134	206	86	10000110	†	&#134;	Dagger
135	207	87	10000111	‡	&#135;	Double dagger
136	210	88	10001000	^	&#136;	Modifier letter circumflex accent
137	211	89	10001001	%o	&#137;	Per mille sign
138	212	8A	10001010	Ś	&#138;	Latin capital letter S with caron
139	213	8B	10001011	<	&#139;	Single left-pointing angle quotation
140	214	8C	10001100	Œ	&#140;	Latin capital ligature OE
141	215	8D	10001101			
142	216	8E	10001110	Ž	&#142;	Latin capital letter Z with caron
143	217	8F	10001111			
144	220	90	10010000			
145	221	91	10010001	'	&#145;	Left single quotation mark
146	222	92	10010010	'	&#146;	Right single quotation mark
147	223	93	10010011	"	&#147;	Left double quotation mark
148	224	94	10010100	"	&#148;	Right double quotation mark
149	225	95	10010101	•	&#149;	Bullet

150	226	96	10010110	-	&#150;	En dash
151	227	97	10010111	—	&#151;	Em dash
152	230	98	10011000	~	&#152;	Small tilde
153	231	99	10011001	™	&#153;	Trade mark sign
154	232	9A	10011010	š	&#154;	Latin small letter S with caron
155	233	9B	10011011	>	&#155;	Single right-pointing angle quotation mark
156	234	9C	10011100	œ	&#156;	Latin small ligature oe
157	235	9D	10011101			
158	236	9E	10011110	ž	&#158;	Latin small letter z with caron
159	237	9F	10011111	Ŷ	&#159;	Latin capital letter Y with diaeresis
160	240	A0	10100000		&#160;	Non-breaking space
161	241	A1	10100001	i	&#161;	Inverted exclamation mark
162	242	A2	10100010	¢	&#162;	Cent sign
163	243	A3	10100011	£	&#163;	Pound sign
164	244	A4	10100100	¤	&#164;	Currency sign
165	245	A5	10100101	¥	&#165;	Yen sign
166	246	A6	10100110		&#166;	Pipe, Broken vertical bar
167	247	A7	10100111	§	&#167;	Section sign
168	250	A8	10101000	“	&#168;	Spacing diaeresis - umlaut
169	251	A9	10101001	©	&#169;	Copyright sign
170	252	AA	10101010	ª	&#170;	Feminine ordinal indicator
171	253	AB	10101011	«	&#171;	Left double angle quotes
172	254	AC	10101100	¬	&#172;	Not sign

173	255	AD	10101101		&#173;	Soft hyphen
174	256	AE	10101110	®	&#174;	Registered trade mark sign
175	257	AF	10101111	—	&#175;	Spacing macron - overline
176	260	B0	10110000	°	&#176;	Degree sign
177	261	B1	10110001	±	&#177;	Plus-or-minus sign
178	262	B2	10110010	²	&#178;	Superscript two - squared
179	263	B3	10110011	³	&#179;	Superscript three - cubed
180	264	B4	10110100	'	&#180;	Acute accent - spacing acute
181	265	B5	10110101	μ	&#181;	Micro sign
182	266	B6	10110110	¶	&#182;	Pilcrow sign - paragraph sign
183	267	B7	10110111	·	&#183;	Middle dot - Georgian comma
184	270	B8	10111000	,	&#184;	Spacing cedilla
185	271	B9	10111001	¹	&#185;	Superscript one
186	272	BA	10111010	º	&#186;	Masculine ordinal indicator
187	273	BB	10111011	»	&#187;	Right double angle quotes
188	274	BC	10111100	¼	&#188;	Fraction one quarter
189	275	BD	10111101	½	&#189;	Fraction one half
190	276	BE	10111110	¾	&#190;	Fraction three quarters
191	277	BF	10111111	¿	&#191;	Inverted question mark
192	300	C0	11000000	À	&#192;	Latin capital letter A with grave
193	301	C1	11000001	Á	&#193;	Latin capital letter A with acute
194	302	C2	11000010	Â	&#194;	Latin capital letter A with circumflex
195	303	C3	11000011	Ã	&#195;	Latin capital letter A with tilde

196	304	C4	11000100	Ä	&#196;	Latin capital letter A with diaeresis
197	305	C5	11000101	Å	&#197;	Latin capital letter A with ring above
198	306	C6	11000110	Æ	&#198;	Latin capital letter AE
199	307	C7	11000111	Ç	&#199;	Latin capital letter C with cedilla
200	310	C8	11001000	È	&#200;	Latin capital letter E with grave
201	311	C9	11001001	É	&#201;	Latin capital letter E with acute
202	312	CA	11001010	Ê	&#202;	Latin capital letter E with circumflex
203	313	CB	11001011	Ë	&#203;	Latin capital letter E with diaeresis
204	314	CC	11001100	Ì	&#204;	Latin capital letter I with grave
205	315	CD	11001101	Í	&#205;	Latin capital letter I with acute
206	316	CE	11001110	Î	&#206;	Latin capital letter I with circumflex
207	317	CF	11001111	Ï	&#207;	Latin capital letter I with diaeresis
208	320	D0	11010000	Ð	&#208;	Latin capital letter ETH
209	321	D1	11010001	Ñ	&#209;	Latin capital letter N with tilde
210	322	D2	11010010	Ò	&#210;	Latin capital letter O with grave
211	323	D3	11010011	Ó	&#211;	Latin capital letter O with acute
212	324	D4	11010100	Ô	&#212;	Latin capital letter O with circumflex
213	325	D5	11010101	Õ	&#213;	Latin capital letter O with tilde
214	326	D6	11010110	Ö	&#214;	Latin capital letter O with diaeresis
215	327	D7	11010111	×	&#215;	Multiplication sign
216	330	D8	11011000	Ø	&#216;	Latin capital letter O with slash
217	331	D9	11011001	Ù	&#217;	Latin capital letter U with grave
218	332	DA	11011010	Ú	&#218;	Latin capital letter U with acute

219	333	DB	11011011	Ü	&#219;	Latin capital letter U with circumflex
220	334	DC	11011100	Ü	&#220;	Latin capital letter U with diaeresis
221	335	DD	11011101	Ý	&#221;	Latin capital letter Y with acute
222	336	DE	11011110	þ	&#222;	Latin capital letter THORN
223	337	DF	11011111	ß	&#223;	Latin small letter sharp s - ess-zed
224	340	E0	11100000	à	&#224;	Latin small letter a with grave
225	341	E1	11100001	á	&#225;	Latin small letter a with acute
226	342	E2	11100010	â	&#226;	Latin small letter a with circumflex
227	343	E3	11100011	ã	&#227;	Latin small letter a with tilde
228	344	E4	11100100	ä	&#228;	Latin small letter a with diaeresis
229	345	E5	11100101	å	&#229;	Latin small letter a with ring above
230	346	E6	11100110	æ	&#230;	Latin small letter ae
231	347	E7	11100111	ç	&#231;	Latin small letter c with cedilla
232	350	E8	11101000	è	&#232;	Latin small letter e with grave
233	351	E9	11101001	é	&#233;	Latin small letter e with acute
234	352	EA	11101010	ê	&#234;	Latin small letter e with circumflex
235	353	EB	11101011	ë	&#235;	Latin small letter e with diaeresis
236	354	EC	11101100	ì	&#236;	Latin small letter i with grave
237	355	ED	11101101	í	&#237;	Latin small letter i with acute
238	356	EE	11101110	î	&#238;	Latin small letter i with circumflex
239	357	EF	11101111	ï	&#239;	Latin small letter i with diaeresis
240	360	F0	11110000	ð	&#240;	Latin small letter eth
241	361	F1	11110001	ñ	&#241;	Latin small letter n with tilde

242	362	F2	11110010	ò	&#242;	Latin small letter o with grave
243	363	F3	11110011	ó	&#243;	Latin small letter o with acute
244	364	F4	11110100	ô	&#244;	Latin small letter o with circumflex
245	365	F5	11110101	õ	&#245;	Latin small letter o with tilde
246	366	F6	11110110	ö	&#246;	Latin small letter o with diaeresis
247	367	F7	11110111	÷	&#247;	Division sign
248	370	F8	11111000	ø	&#248;	Latin small letter o with slash
249	371	F9	11111001	ù	&#249;	Latin small letter u with grave
250	372	FA	11111010	ú	&#250;	Latin small letter u with acute
251	373	FB	11111011	û	&#251;	Latin small letter u with circumflex
252	374	FC	11111100	ü	&#252;	Latin small letter u with diaeresis
253	375	FD	11111101	ý	&#253;	Latin small letter y with acute
254	376	FE	11111110	þ	&#254;	Latin small letter thorn
255	377	FF	11111111	ÿ	&#255;	Latin small letter y with diaeresis

### 33. HTML – COLOR NAMES

The following table shows the 16 color names that were introduced in HTML 3.2:

Color Name	Hex Value	Color	Show
aqua	#00ffff		Demo
black	#000000		Demo
blue	#0000ff		Demo
fuchsia	#ff00ff		Demo
green	#008000		Demo
gray	#808080		Demo
lime	#00ff00		Demo
maroon	#800000		Demo
navy	#000080		Demo
olive	#808000		Demo
purple	#800080		Demo
red	#ff0000		Demo
silver	#c0c0c0		Demo
teal	#008080		Demo
white	#ffffff		Demo
yellow	#ffff00		Demo

There are other colors which are not part of HTML or XHTML but they are supported by most of the versions of major browsers.

Color Name	Hex Value	Color	Show
aliceblue	#f0f8ff		Demo
antiquewhite	#faebd7		Demo
aquamarine	#7ffffd4		Demo
azure	#f0ffff		Demo
beige	#f5f5dc		Demo
bisque	#ffe4c4		Demo
blanchedalmond	#ffebcd		Demo
blueviolet	#8a2be2		Demo
brown	#a52a2a		Demo
burlywood	#deb887		Demo
cadetblue	#5f9ea0		Demo
chartreuse	#7fff00		Demo
chocolate	#d2691e		Demo
coral	#ff7f50		Demo
cornflowerblue	#6495ed		Demo
cornsilk	#fff8dc		Demo
crimson	#dc143c		Demo
cyan	#00ffff		Demo
darkblue	#00008b		Demo

darkcyan	#008b8b		Demo
darkgoldenrod	#b8860b		Demo
darkgray	#a9a9a9		Demo
darkgreen	#006400		Demo
darkkhaki	#bdb76b		Demo
darkmagenta	#8b008b		Demo
darkolivegreen	#556b2f		Demo
darkorange	#ff8c00		Demo
darkorchid	#9932cc		Demo
darkred	#8b0000		Demo
darksalmon	#e9967a		Demo
darkseagreen	#8fbcb8		Demo
darkslateblue	#483d8b		Demo
darkslategray	#2f4f4f		Demo
darkturquoise	#00ced1		Demo
darkviolet	#9400d3		Demo
deeppink	#ff1493		Demo
deepskyblue	#00bfff		Demo
dimgray	#696969		Demo
dodgerblue	#1e90ff		Demo

firebrick	#b22222		Demo
floralwhite	#ffffaf0		Demo
forestgreen	#228b22		Demo
gainsboro	#dcdcdc		Demo
ghostwhite	#f8f8ff		Demo
gold	#ffd700		Demo
goldenrod	#daa520		Demo
gray	#808080		Demo
greenyellow	#adff2f		Demo
honeydew	#f0ffff0		Demo
hotpink	#ff69b4		Demo
indianred	#cd5c5c		Demo
indigo	#4b0082		Demo
ivory	#ffffff0		Demo
khaki	#f0e68c		Demo
lavender	#e6e6fa		Demo
lavenderblush	#fff0f5		Demo
lawngreen	#7fcfc00		Demo
lemonchiffon	#ffffacd		Demo
lightblue	#add8e6		Demo

lightcoral	#f08080		Demo
lightcyan	#e0ffff		Demo
lightgoldenrodyellow	#fafad2		Demo
lightgreen	#90ee90		Demo
lightgrey	#d3d3d3		Demo
lightpink	#ffb6c1		Demo
lightsalmon	#ffa07a		Demo
lightseagreen	#20b2aa		Demo
lightskyblue	#87cefa		Demo
lightslategray	#778899		Demo
lightsteelblue	#b0c4de		Demo
lightyellow	#ffffe0		Demo
limegreen	#32cd32		Demo
linen	#faf0e6		Demo
magenta	#ff00ff		Demo
mediumblue	#0000cd		Demo
mediumorchid	#ba55d3		Demo
mediumpurple	#9370db		Demo
midnightblue	#191970		Demo
mistyrose	#ffe4e1		Demo

moccasin	#ffe4b5		Demo
oldlace	#fdf5e6		Demo
orange	#ffa500		Demo
orchid	#da70d6		Demo
peachpuff	#ffdab9		Demo
peru	#cd853f		Demo
pink	#ffc0cb		Demo
plum	#dda0dd		Demo
purple	#800080		Demo
rosybrown	#bc8f8f		Demo
royalblue	#4169e1		Demo
salmon	#fa8072		Demo
sandybrown	#f4a460		Demo
seagreen	#2e8b57		Demo
sienna	#a0522d		Demo
skyblue	#87ceeb		Demo
slateblue	#6a5acd		Demo
steelblue	#4682b4		Demo
tan	#d2b48c		Demo
thistle	#d8bfd8		Demo

tomato	#ff6347		Demo
violet	#ee82ee		Demo
wheat	#f5deb3		Demo
whitesmoke	#f5f5f5		Demo
yellow	#ffff00		Demo
yellowgreen	#9acd32		Demo

## 34. HTML – ENTITIES

Some characters are reserved in HTML and they have special meaning when used in HTML document. For example, you cannot use the greater than and less than signs or angle brackets within your HTML text because the browser will treat them differently and will try to draw a meaning related to HTML tag.

HTML processors must support following five special characters listed in the table that follows.

Symbol	Description	Entity Name	Number Code
"	quotation mark	&quot;	&#34;
'	apostrophe	&apos;	&#39;
&	ampersand	&amp;	&#38;
<	less-than	&lt;	&#60;
>	greater-than	&gt;	&#62;

### Example

If you want to write `<div id="character">` as a code, then you will have to write as follows:

```
<!DOCTYPE html>
<html>
<head>
<title>HTML Entities</title>
</head>
<body>
&lt;div id=&quot;character&quot;&gt;
</body>
</html>
```

This will produce the following result:

```
<div id="character">
```

There is also a long list of special characters in HTML 4.0. In order for these to appear in your document, you can use either the numerical codes or the entity names. For example, to insert a copyright symbol you can use either of the following:

&copy; 2007  
or  
&#169; 2007

## ISO 8859-1 Symbol Entities

<b>Result</b>	<b>Description</b>	<b>Entity Name</b>	<b>Number Code</b>
	non-breaking space	&nbsp;	&#160;
i	inverted exclamation mark	&iexcl;	&#161;
¤	currency	&curren;	&#164;
¢	cent	&cent;	&#162;
£	pound	&pound;	&#163;
¥	yen	&yen;	&#165;
¦	broken vertical bar	&brvbar;	&#166;
§	section	&sect;	&#167;
..	spacing diaeresis	&uml;	&#168;
©	copyright	&copy;	&#169;
ª	feminine ordinal indicator	&ordf;	&#170;
«	angle quotation mark (left)	&laquo;	&#171;
¬	negation	&not;	&#172;
	soft hyphen	&shy;	&#173;
®	registered trademark	&reg;	&#174;
™	trademark	&trade;	&#8482;
—	spacing macron	&macr;	&#175;
°	degree	&deg;	&#176;

±	plus-or-minus	&plusmn;	&#177;
²	superscript 2	&sup2;	&#178;
³	superscript 3	&sup3;	&#179;
'	spacing acute	&acute;	&#180;
µ	micro	&micro;	&#181;
¶	paragraph	&para;	&#182;
·	middle dot	&middot;	&#183;
,	spacing cedilla	&cedil;	&#184;
¹	superscript 1	&sup1;	&#185;
º	masculine ordinal indicator	&ordm;	&#186;
»	angle quotation mark (right)	&raquo;	&#187;
¼	fraction 1/4	&frac14;	&#188;
½	fraction 1/2	&frac12;	&#189;
¾	fraction 3/4	&frac34;	&#190;
¿	inverted question mark	&iquest;	&#191;
×	multiplication	&times;	&#215;
÷	division	&divide;	&#247;

## ISO 8859-1 Character Entities

Result	Description	Entity Name	Number Code
À	capital a, grave accent	&Agrave;	&#192;
Á	capital a, acute accent	&Aacute;	&#193;
Â	capital a, circumflex accent	&Acirc;	&#194;
Ã	capital a, tilde	&Atilde;	&#195;

Ä	capital a, umlaut mark	&Auml;	&#196;
Å	capital a, ring	&Aring;	&#197;
Æ	capital ae	&AElig;	&#198;
Ç	capital c, cedilla	&Ccedil;	&#199;
È	capital e, grave accent	&Egrave;	&#200;
É	capital e, acute accent	&Eacute;	&#201;
Ê	capital e, circumflex accent	&Ecirc;	&#202;
Ë	capital e, umlaut mark	&Euml;	&#203;
Ì	capital i, grave accent	&Igrave;	&#204;
Í	capital i, acute accent	&Iacute;	&#205;
Î	capital i, circumflex accent	&Icirc;	&#206;
Ï	capital i, umlaut mark	&Iuml;	&#207;
Ð	capital eth, Icelandic	&ETH;	&#208;
Ñ	capital n, tilde	&Ntilde;	&#209;
Ò	capital o, grave accent	&Ograve;	&#210;
Ó	capital o, acute accent	&Oacute;	&#211;
Ô	capital o, circumflex accent	&Ocirc;	&#212;
Õ	capital o, tilde	&Otilde;	&#213;
Ö	capital o, umlaut mark	&Ouml;	&#214;
Ø	capital o, slash	&Oslash;	&#216;
Ù	capital u, grave accent	&Ugrave;	&#217;
Ú	capital u, acute accent	&Uacute;	&#218;
Û	capital u, circumflex accent	&Ucirc;	&#219;

Ü	capital u, umlaut mark	&Uuml;	&#220;
Ý	capital y, acute accent	&Yacute;	&#221;
þ	capital THORN, Icelandic	&THORN;	&#222;
ß	small sharp s, German	&szlig;	&#223;
à	small a, grave accent	&agrave;	&#224;
á	small a, acute accent	&aacute;	&#225;
â	small a, circumflex accent	&acirc;	&#226;
ã	small a, tilde	&atilde;	&#227;
ä	small a, umlaut mark	&auml;	&#228;
å	small a, ring	&aring;	&#229;
æ	small ae	&aelig;	&#230;
ç	small c, cedilla	&ccedil;	&#231;
è	small e, grave accent	&egrave;	&#232;
é	small e, acute accent	&eacute;	&#233;
ê	small e, circumflex accent	&ecirc;	&#234;
ë	small e, umlaut mark	&euml;	&#235;
ì	small i, grave accent	&igrave;	&#236;
í	small i, acute accent	&iacute;	&#237;
î	small i, circumflex accent	&icirc;	&#238;
ï	small i, umlaut mark	&iuml;	&#239;
ð	small eth, Icelandic	&eth;	&#240;
ñ	small n, tilde	&ntilde;	&#241;
ò	small o, grave accent	&ograve;	&#242;

ó	small o, acute accent	&oacute;	&#243;
ô	small o, circumflex accent	&ocirc;	&#244;
õ	small o, tilde	&otilde;	&#245;
ö	small o, umlaut mark	&ouml;	&#246;
ø	small o, slash	&oslash;	&#248;
ù	small u, grave accent	&ugrave;	&#249;
ú	small u, acute accent	&uacute;	&#250;
û	small u, circumflex accent	&ucirc;	&#251;
ü	small u, umlaut mark	&uuml;	&#252;
ý	small y, acute accent	&yacute;	&#253;
þ	small thorn, Icelandic	&thorn;	&#254;
ÿ	small y, umlaut mark	&yuml;	&#255;

## Other Entities Supported by HTML Browsers

Result	Description	Entity Name	Number Code
Œ	capital ligature OE	&OElig;	&#338;
œ	small ligature oe	&oelig;	&#339;
Š	capital S with caron	&Scaron;	&#352;
š	small S with caron	&scaron;	&#353;
Ÿ	capital Y with diaeres	&Yuml;	&#376;
^	modifier letter circumflex accent	&circ;	&#710;
~	small tilde	&tilde;	&#732;
	en space	&ensp;	&#8194;
	em space	&emsp;	&#8195;

	thin space	&thinsp;	&#8201;
	zero width non-joiner	&zwnj;	&#8204;
	zero width joiner	&zwj;	&#8205;
	left-to-right mark	&lrm;	&#8206;
	right-to-left mark	&rmlm;	&#8207;
-	en dash	&ndash;	&#8211;
—	em dash	&mdash;	&#8212;
‘	left single quotation mark	&lsquo;	&#8216;
’	right single quotation mark	&rsquo;	&#8217;
,	single low-9 quotation mark	&sbquo;	&#8218;
“	left double quotation mark	&ldquo;	&#8220;
”	right double quotation mark	&rdquo;	&#8221;
„	double low-9 quotation mark	&bdquo;	&#8222;
†	dagger	&dagger;	&#8224;
‡	double dagger	&Dagger;	&#8225;
...	horizontal ellipsis	&hellip;	&#8230;
%o	per mille	&permil;	&#8240;
<	single left-pointing angle quotation	&lsquo;	&#8249;
>	single right-pointing angle quotation	&rsquo;	&#8250;
€	euro	&euro;	&#8364;

## 35. MIME MEDIA TYPES

MIME (Multipurpose Internet Mail Extension) media types were originally devised so that e-mails could include information other than plain text. MIME media types indicate the following things:

- How different parts of a message, such as text and attachments, are combined into the message.
- The way in which each part of the message is specified.
- The way different items are encoded for transmission so that even software that was designed to work only with ASCII text can process the message.

Now MIME types are not just for use with e-mail; they have been adopted by Web servers as a way to tell Web browsers what type of material was being sent to them so that they can cope with that kind of messages correctly.

MIME content types consist of two parts:

- A main type
- A sub-type

The main type is separated from the subtype by a forward slash character. For example, text/html for HTML.

This chapter is organized for the main types:

- text
- image
- multipart
- audio
- video
- message
- model
- application

Following are subtypes for **text**:

calendar	css	directory
enriched	html	parityfec
plain	vnd.curl	prs.lines.tag
rfc822-headers	richtext	rtf
sgml	t140	tab-separated-values
uri-list	vnd.abc	prs.fallenstein.rst

vnd.DMClientScript	vnd.fly	vnd.fmi.flexstor
vnd.in3d.3dml	vnd.in3d.spot	vnd.IPTC.NewsML
vnd.IPTC.NITF	vnd.latex-z	vnd.motorola.reflex
vnd.ms-mediapackage	vnd.wap.wml	vnd.sun.j2me.app-descriptor
vnd.wap.si	vnd.wap.sl	vnd.net2phone.commcenter.command
vnd.wap.wmlscript	xml	xml-external-parsed-entityvnd.wap.wml

Following are subtypes for **image**:

bmp	cgm	g3fax
gif	ief	jpeg
naplps	png	prs.btif
prs.pti	t38	vnd.fujixerox.edmics-rlc
tiff-fx	vnd.cns.inf2	vnd.djvu
vnd.dwg	vnd.dxf	vnd.fastbidsheet
vnd.fpx	vnd.fst	vnd.fujixerox.edmics-mmr
vnd.xiff	tiff	vnd.microsoft.icon
vnd.mix	vnd.ms-modi	vndsealedmedia.softseal.gif
vnd.net-fpx	vndsealed.png	vndsealedmedia.softseal.jpg
vnd.svf	vnd.wap.wbmp	vnd.globalgraphics.pgb
x-portable-pixmap	x-xbitmap	

Following are subtypes for **multipart**:

alternative	appledouble	byteranges
digest	encrypted	form-data

header-set	mixed	parallel
related	report	signed
voice-messagerelated	&nbsp;	&nbsp;

Following are subtypes for **audio**:

32kadpcm	GSM-EFR	vnd.3gpp.iufp
AMR	L8	vnd.cisco.nse
AMR-WB	L16	vnd.cns.anp1
basic	L20	vnd.cns.inf1
CN	L24	vnd.digital-winds
DAT12	LPC	vnd.everad.plj
dsr-es201108	MPA	vnd.lucent.voice
DVI4	MP4A-LATM	vnd.nokia.mobile-xmf
EVRC	mpa-robust	vnd.nortel.vbk
EVRC0	mpeg	vnd.nuera.ecelp4800
EVRC-QCP	mpeg4-generic	vnd.nuera.ecelp7470
G722	parityfec	vnd.nuera.ecelp9600
G.722.1	PCMA	vnd.octel.sbc
G723	PCMU	vnd.qcelp.deprecated,use audio/qcelp
G726-16	prs.sid	vnd.rhetorex.32kadpcm

G726-24	QCELP	vnd.sealedmedia.softseal.mpeg
G726-32	RED	vnd.vmx.cvsd
G726-40	SMV	x-aiff
G728	SMV0	x-midi
G729	SMV-QCP	x-mod
G729D	telephone-event	x-mp3
G729E	tone	x-wav
GSM	VDVI	

Following are subtypes for **video**:

BMPEG	MP4V-ES	vnd.mpegurl
BT656	MPV	vnd.nokia.interleaved-multimedia
CelB	mpeg	vnd.objectvideo
DV	mpeg4-generic	vndsealed.mpeg1
H261	nv	vndsealed.mpeg4
H263	parityfec	vndsealed.swf
H263-1998	pointer	vndsealedmedia.softseal.mov
H263-2000	quicktime	vnd.vivo
JPEG	SMPTE292M	x-sgi-movie

MP1S	vnd.fvt	x-msvideo
MP2P	vnd.motorola.video	
MP2T	vnd.motorola.videop	

Following are subtypes for **message**:

CPIM	http	s-http
delivery-status	news	sip
disposition-notification	partial	sipfrag
external-body	rfc822	

Following are subtypes for **model**:

iges	vnd.gdl	vnd.parasolid.transmit.binary
mesh	vnd.gs-gdl	vnd.parasolid.transmit.text
vnd.dwf	vnd.gtw	vnd.vtu
vnd.flatland.3dml	vnd.mts	vrml

Following are subtypes for **application**:

activemessage	andrew-inset
applefile	atomicmail
batch-SMTP	beep+xml
cals-1840	cnrp+xml

commonground	cpl+xml
cybercash	dca-rft
dec-dx	dicom
dvcs	EDI-Consent
EDIFACT	eshop
font-tdpfr	http
hyperstudio	iges
index	index.cmd
index.obj	index.response
index.vnd	iotp
ipp	isup
mac-binhex40	macwriteii
marc	mathematica
mpeg4-generic	msword
news-message-id	news-transmission
ocsp-request	ocsp-response
octet-stream	oda
ogg	parityfec

pdf	pgp-encrypted
pgp-keys	pgp-signature
pidf+xml	pkcs10
pkcs7-mime	pkcs7-signature
pkix-cert	pkixcmp
pkix-crl	pkix-pkipath
postscript	prs.alvestrand.titrax-sheet
prs.cww	prs.nprend
prs.plucker	qsig
reginfo+xml	remote-printing
riscos	rtf
sdp	set-payment
set-payment-initiation	set-registration
set-registration-initiation	sgml
sgml-open-catalog	sieve
slate	timestamp-query
timestamp-reply	tve-trigger
vemmi	vnd.3gpp.pic-bw-large

vnd.3gpp.pic-bw-small	vnd.3gpp.pic-bw-var
vnd.3gpp.sms	vnd.3M.Post-it-Notes
vnd.accpac.simply.aso	vnd.accpac.simply.imp
vnd.acucobol	vnd.acucorp
vnd.adobe.xfdf	vnd.aether.imp
vnd.amiga.ami	vnd.anser-web-certificate-issue-initiation
vnd.audiograph	vnd.anser-web-funds-transfer-initiation
vnd.blueice.multipass	vnd.bmi
vnd.businessobjects	vnd.canon-cpdl
vnd.canon-lips	vnd.cinderella
vnd.claymore	vnd.commerce-battelle
vnd.commonspace	vnd.cosmocaller
vnd.contact.cmsg	vnd.criticaltools.wbs+xml
vnd.ctc-posml	vnd.cups-postscript
vnd.cups-raster	vnd.cups-raw
vnd.curl	vnd.cybank
vnd.data-vision.rdz	vnd.dna
vnd.dpgraph	vnd.dreamfactory

vnd.dxr	vnd.ecdis-update
vnd.ecowin.chart	vnd.ecowin.filerequest
vnd.ecowin.fileupdate	vnd.ecowin.series
vnd.ecowin.seriesrequest	vnd.ecowin.seriesupdate
vnd.enliven	vnd.epson.esf
vnd.epson.msf	vnd.epson.quickanime
vnd.epson.salt	vnd.epson.ssf
vnd.ericsson.quickcall	vnd.eudora.data
vnd.fdf	vnd.ffsns
vnd.fints	vnd.FloGraphIt
vnd.framemaker	vnd.fsc.weblaunch
vnd.fujitsu.oasys	vnd.fujitsu.oasys2
vnd.fujitsu.oasys3	vnd.fujitsu.oasysgp
vnd.fujitsu.oasysprs	vnd.fujixerox.ddd
vnd.fujixerox.docuworks	vnd.fujixerox.docuworks.binder
vnd.fut-misnet	vnd.genomatix.tuxedo
vnd.grafeq	vnd.groove-account
vnd.groove-help	vnd.groove-identity-message

vnd.groove-injector	vnd.groove-tool-message
vnd.groove-tool-template	vnd.groove-vcard
vnd.hbci	vnd.hhe.lesson-player
vnd.hp-HPGL	vnd.hp-hpid
vnd.hp-hps	vnd.hp-PCL
vnd.hp-PCLXL	vnd.httpphone
vnd.hzn-3d-crossword	vnd.ibm.afplinedata
vnd.ibm.electronic-media	vnd.ibm.MiniPay
vnd.ibm.modcap	vnd.ibm.rights-management
vnd.ibm.secure-container	vnd.informix-visionary
vnd.intercon.formnet	vnd.intertrust.digibox
vnd.intertrust.nncp	vnd.japannet-registration-wakeup
vnd.intu.qfx	vnd.ipunplugged.rcprofile
vnd.irepository.package+xml	vnd.is-xpr
vnd.japannet-directory-service	vnd.japannet-jpnstore-wakeup
vnd.japannet-payment-wakeup	vnd.japannet-registration
vnd.intu.qbo	vnd.japannet-setstore-wakeup
vnd.japannet-verification	vnd.japannet-verification-wakeup

vnd.jisp	vnd.kde.karbon
vnd.kde.kchart	vnd.kde.kformula
vnd.kde.kivio	vnd.kde.kontour
vnd.kde.kpresenter	vnd.kde.kspread
vnd.kde.kword	vnd.kenameaapp
vnd.kidspiration	vnd.koan
vnd.liberty-request+xml	vnd.llamagraphics.life-balance.desktop
vnd.lotus-1-2-3	vnd.llamagraphics.life-balance.exchange+xml
vnd.lotus-approach	vnd.lotus-freelance
vnd.lotus-notes	vnd.lotus-organizer
vnd.lotus-screencam	vnd.lotus-wordpro
vnd.mcd	vnd.mediastation.cdkey
vnd.meridian-slingshot	vnd.micrografx.flo
vnd.micrografx.igx	vnd.mif
vnd.minisoft-hp3000-save	vnd.mitsubishi.misty-guard.trustweb
vnd.Mobius.DAF	vnd.Mobius.DIS
vnd.Mobius.MBK	vnd.Mobius.MQY
vnd.Mobius.MSL	vnd.Mobius.PLC

vnd.Mobius.TXF	vnd.mophun.application
vnd.mophun.certificate	vnd.motorola.flexsuite
vnd.motorola.flexsuite.adsi	vnd.motorola.flexsuite.fis
vnd.motorola.flexsuite.gotap	vnd.motorola.flexsuite.kmr
vnd.motorola.flexsuite.ttc	vnd.motorola.flexsuite.wem
vnd.mozilla.xul+xml	vnd.ms-artgalry
vnd.ms-asf	vnd.mseq
vnd.ms-excel	vnd.msign
vnd.ms-lrm	vnd.ms-powerpoint
vnd.ms-project	vnd.ms-tnef
vnd.ms-works	vnd.ms-wpl
vnd.musician	vnd.music-niff
vnd.nervana	vnd.netfp
vnd.noblenet-directory	vnd.noblenet-sealer
vnd.noblenet-web	vnd.novadigm.EDM
vnd.novadigm.EDX	vnd.novadigm.EXT
vnd.obn	vnd.osa.netdeploy
vnd.palm	vnd.paos.xml

vnd.pg.format	vnd.picsel
vnd.pg.osasli	vnd.powerbuilder6
vnd.powerbuilder6-s	vnd.powerbuilder7
vnd.powerbuilder75	vnd.powerbuilder75-s
vnd.powerbuilder7-s	vnd.previewsystems.box
vnd.publishare-delta-tree	vnd.pvi.ptid1
vnd.pwg-multiplexed [RFC3391]	vnd.pwg-xhtml-print+xml
vnd.Quark.QuarkXPress	vnd.rapid
vnd.s3sms	vndsealed.doc
vndsealed.eml	vndsealed.mht
vndsealed.net	vndsealed.ppt
vndsealed.xls	vndsealedmedia.softseal.html
vndsealedmedia.softseal.pdf	vndshana.informed.interchange
vndshana.informed.formdata	vndshana.informed.formtemplate
vndseemail	vndshana.informed.package
vndsmaf	vndsss-cod
vndsss-dtf	vndsss-ntf
vndstreet-stream	vndsvd

vnd.swiftview-ics	vnd.triscape.mxs
vnd.trueapp	vnd.truedoc
vnd.ufdl	vnd.uiq.theme
vnd.uplanet.alert	vnd.uplanet.alert-wbxml
vnd.uplanet.bearer-choice	vnd.uplanet.bearer-choice-wbxml
vnd.uplanet.cacheop	vnd.uplanet.cacheop-wbxml
vnd.uplanet.channel	vnd.uplanet.channel-wbxml
vnd.uplanet.list	vnd.uplanet.listcmd
vnd.uplanet.listcmd-wbxml	vnd.uplanet.list-wbxml
vnd.uplanet.signal	vnd.vcx
vnd.vectorworks	vnd.vidsoft.vidconference
vnd.visio	vnd.visionary
vnd.vividence.scriptfile	vnd.vsf
vnd.wap.sic	vnd.wap.slc
vnd.wap.wbxml	vnd.wap.wmlc
vnd.wap.wmlscriptc	vnd.webturbo
vnd.wqd	vnd.wrq-hp3000-labelled
vnd.wt.stf	vnd.wv.csp+xml

vnd.wv.csp+wbxml	vnd.wv.ssp+xml
vnd.xara	vnd.xfdl
vnd.yamaha.hv-dic	vnd.yamaha.hv-script
vnd.yamaha.hv-voice	vnd.yamaha.smaf-audio
vnd.yamaha.smaf-phrase	vnd.yellowriver-custom-menu
watcherinfo+xml	whoispp-query
whoispp-response	wita
wordperfect5.1	x400-bp
x-debian-package	x-java
x-javascript	x-gzip
x-msaccess	x-msexcel
x-mspowerpoint	x-rpm
x-zip	xhtml+xml
xml	xml-dtd
xml-external-parsed-entity	zip

For example, the text main type contains types of plain text files, such as:

- text/plain for plain text files
- text/html for HTML files
- text/rtf for text files using rich text formatting

MIME types are officially supposed to be assigned and listed by the Internet Assigned Numbers Authority (IANA).

Many of the popular MIME types in this list (all those begin with "x-") are not assigned by the IANA and do not have official status. You can see the list of official MIME types at <http://www.iana.org/assignments/media-types/>. Those preceded with **.vnd** are vendor-specific.

When specifying the MIME type of a content-type field you can also indicate the character set for the text being used. If you do not specify a character set, the default is US-ASCII. For example:

```
content-type:text/plain; charset=iso-8859-1
```

# 36. HTML – URL ENCODING

URL encoding is the practice of translating unprintable characters or characters with special meaning within URLs to a representation that is unambiguous and universally accepted by web browsers and servers. These characters include:

- **ASCII control characters:** Unprintable characters typically used for output control. Character ranges 00-1F hex (0-31 decimal) and 7F (127 decimal). A complete encoding table is given below.
- **Non-ASCII control characters:** These are characters beyond the ASCII character set of 128 characters. This range is part of the ISO-Latin character set and includes the entire "top half" of the ISO-Latin set 80-FF hex (128-255 decimal). A complete encoding table is given below.
- **Reserved characters:** These are special characters such as the dollar sign, ampersand, plus, common, forward slash, colon, semi-colon, equals sign, question mark, and "at" symbol. All of these can have different meanings inside a URL so need to be encoded. A complete encoding table is given below.
- **Unsafe characters:** These are space, quotation marks, less than symbol, greater than symbol, pound character, percent character, Left Curly Brace, Right Curly Brace, Pipe, Backslash, Caret, Tilde, Left Square Bracket, Right Square Bracket, Grave Accent. These character present the possibility of being misunderstood within URLs for various reasons. These characters should also always be encoded. A complete encoding table is given below.

The encoding notation replaces the desired character with three characters: a percent sign and two hexadecimal digits that correspond to the position of the character in the ASCII character set.

## Example

One of the most common special characters is a white space. You can't type a space in a URL directly. A space position in the character set is 20 hexadecimals. So you can use %20 in place of a space when passing your request to the server.

```
http://www.example.com/new%20pricing.htm
```

This URL actually retrieves a document named "new pricing.htm" from the [www.example.com](http://www.example.com)

## ASCII Control Characters Encoding

---

This includes the encoding for character ranges 00-1F hex (0-31 decimal) and 7F (127 decimal)

<b>Decimal</b>	<b>Hex Value</b>	<b>Character</b>	<b>URL Encode</b>
0	00		%00
1	01		%01
2	02		%02
3	03		%03
4	04		%04
5	05		%05
6	06		%06
7	07		%07
8	08	backspace	%08
9	09	tab	%09
10	0a	linefeed	%0a
11	0b		%0b
12	0c		%0c
13	0d	carriage return	%0d
14	0e		%0e
15	0f		%0f
16	10		%10
17	11		%11
18	12		%12
19	13		%13

20	14		%14
21	15		%15
22	16		%16
23	17		%17
24	18		%18
25	19		%19
26	1a		%1a
27	1b		%1b
28	1c		%1c
29	1d		%1d
30	1e		%1e
31	1f		%1f
127	7f		%7f

## Non-ASCII control characters encoding

---

This includes the encoding for the entire "top half" of the ISO-Latin set 80-FF hex (128-255 decimal.)

Decimal	Hex Value	Character	URL Encode
128	80	€	%80
129	81	•	%81
130	82	,	%82
131	83	f	%83
132	84	"	%84

133	85	...	%85
134	86	†	%86
135	87	‡	%87
136	88	^	%88
137	89	%o	%89
138	8a	Š	%8a
139	8b	€	%8b
140	8c	Œ	%8c
141	8d	•	%8d
142	8e	Ž	%8e
143	8f	•	%8f
144	90	•	%90
145	91	‘	%91
146	92	,	%92
147	93	“	%93
148	94	”	%94
149	95	•	%95
150	96	—	%96

151	97	—	%97
152	98	~	%98
153	99	™	%99
154	9a	š	%9a
155	9b	›	%9b
156	9c	œ	%9c
157	9d	•	%9d
158	9e	ž	%9e
159	9f	Ÿ	%9f
160	a0		%a0
161	a1	í	%a1
162	a2	¢	%a2
163	a3	£	%a3
164	a4	¤	%a4
165	a5	¥	%a5
166	a6	፣	%a6
167	a7	§	%a7
168	a8	„	%a8

169	a9	©	%a9
170	aa	ª	%aa
171	ab	«	%ab
172	ac	¬	%ac
173	ad		%ad
174	ae	®	%ae
175	af	-	%af
176	b0	º	%b0
177	b1	±	%b1
178	b2	²	%b2
179	b3	³	%b3
180	b4	‘	%b4
181	b5	µ	%b5
182	b6	¶	%b6
183	b7	·	%b7
184	b8	,	%b8
185	b9	¹	%b9
186	ba	º	%ba

187	bb	»	%bb
188	bc	¼	%bc
189	bd	½	%bd
190	be	¾	%be
191	bf	¿	%bf
192	c0	À	%c0
193	c1	Á	%c1
194	c2	Â	%c2
195	c3	Ã	%c3
196	c4	Ä	%c4
197	c5	Å	%c5
198	c6	Æ	%v6
199	c7	Ҫ	%c7
200	c8	Ѐ	%c8
201	c9	Ӯ	%c9
202	ca	Ӯ	%ca
203	cb	Ӯ	%cb
204	cc	Ӯ	%cc

205	cd	í	%cd
206	ce	î	%ce
207	cf	ї	%cf
208	d0	đ	%d0
209	d1	ñ	%d1
210	d2	ò	%d2
211	d3	ó	%d3
212	d4	ô	%d4
213	d5	õ	%d5
214	d6	ö	%d6
215	d7	×	%d7
216	d8	∅	%d8
217	d9	ù	%d9
218	da	ú	%da
219	db	û	%db
220	dc	ü	%dc
221	dd	ÿ	%dd
222	de	þ	%de

223	df	ß	%df
224	e0	à	%e0
225	e1	á	%e1
226	e2	â	%e2
227	e3	ã	%e3
228	e4	ä	%e4
229	e5	å	%e5
230	e6	æ	%e6
231	e7	ç	%e7
232	e8	è	%e8
233	e9	é	%e9
234	ea	ê	%ea
235	eb	ë	%eb
236	ec	ì	%ec
237	ed	í	%ed
238	ee	î	%ee
239	ef	ï	%ef
240	f0	ð	%f0

241	f1	ñ	%f1
242	f2	ò	%f2
243	f3	ó	%f3
244	f4	ô	%f4
245	f5	õ	%f5
246	f6	ö	%f6
247	f7	÷	%f7
248	f8	ø	%f8
249	f9	ù	%f9
250	fa	ú	%fa
251	fb	û	%fb
252	fc	ü	%fc
253	fd	ý	%fd
254	fe	þ	%fe
255	ff	ÿ	%ff

## Reserved Characters Encoding

---

Following is the table to be used to encode reserved characters.

Decimal	Hex Value	Char	URL Encode
36	24	\$	%24

38	26	&	%26
43	2b	+	%2b
44	2c	,	%2c
47	2f	/	%2f
58	3a	:	%3a
59	3b	;	%3b
61	3d	=	%3d
63	3f	?	%3f
64	40	@	%40

## Unsafe Characters Encoding

---

Following is the table to be used to encode unsafe characters.

Decimal	Hex Value	Char	URL Encode
32	20	space	%20
34	22	"	%22
60	3c	<	%3c
62	3e	>	%3e
35	23	#	%23
37	25	%	%25
123	7b	{	%7b
125	7d	}	%7d
124	7c		%7c
92	5c	\	%5c
94	5e	^	%5e

126	7e	~	%7e
91	5b	[	%5b
93	5d	]	%5d
96	60	`	%60

# 37. LANGUAGE ISO CODES

The following is a draft list of language code correspondences between ISO codes, Microsoft codes, and Macintosh codes. Source of this information is [Unicode Consortium](#).

## Language Codes: ISO 639, Microsoft

Language	ISO Code	Windows Name	Win Code
Abkhazian	ab		
Afar	aa		
Afrikaans	af	LANG_AFRIKAANS	0x36
Albanian	sq	LANG_ALBANIAN	0x1c
Amharic	am	(no constant defined)	0x5e
Arabic	ar	LANG_ARABIC	0x01
Armenian	hy	LANG_ARMENIAN	0x2b
Assamese	as	LANG_ASSAMESE	0x4d
Aymara	ay		
Azerbaijani	az	LANG_AZERI	0x2c
Bashkir	ba		
Basque	eu	LANG_BASQUE	0x2d
Bengali (Bangla)	bn	LANG_BENGALI	0x45
Bhutani	dz		
Bihari	bh		
Bislama	bi		

Breton	br		
Bulgarian	bg	LANG_BULGARIAN	0x02
Burmese	my	(no constant defined)	0x55
Byelorussian (Belarusian)	be	LANG_BELARUSIAN	0x23
Cambodian	km	(no constant defined)	0x53
Catalan	ca	LANG_CATALAN	0x03
Cherokee		(no constant defined)	0x5c
Chewa			
Chinese (Simplified)	zh	LANG_CHINESE (SUBLANG_CHINESE_SIMPLIFIED)	0x04 (0x0804)
Chinese (Traditional)	zh	LANG_CHINESE (SUBLANG_CHINESE_TRADITIONAL)	0x04 (0x0404)
Corsican	co		
Croatian	hr	LANG_CROATIAN	0x1a
Czech	cs	LANG_CZECH	0x05
Danish	da	LANG_DANISH	0x06
Divehi		LANG_DIVEHI	0x65
Dutch	nl	LANG_DUTCH	0x13
Edo		(no constant defined)	0x66
English	en	LANG_ENGLISH	0x09
Esperanto	eo		
Estonian	et	LANG_ESTONIAN	0x25
Faeroese	fo	LANG_FAEROESE	0x38
Farsi	fa	LANG_FARSI	0x29

Fiji	fj		
Finnish	fi	LANG_FINNISH	0x0b
Flemish		LANG_DUTCH (SUBLANG_DUTCH_BELGIAN)	0x13 (0x0813)
French	fr	LANG_FRENCH	0x0c
Frisian	(no constant defined)	0x62	
Fulfulde		(no constant defined)	0x67
Galician	gl	LANG_GALICIAN	0x56
Gaelic (Scottish)	gd	(no constant defined)	0x3c (0x043c)
Gaelic (Manx)	gv		
Georgian	ka	LANG_GEORGIAN	0x37
German	de	LANG_GERMAN	0x07
Greek	el	LANG_GREEK	0x08
Greenlandic	kl		
Guarani	gn	(no constant defined)	0x74
Gujarati	gu	LANG_GUJARATI	0x47
Hausa	ha	(no constant defined)	0x68
Hawaiian		(no constant defined)	0x75
Hebrew	he, iw*	LANG_HEBREW	0x0d
Hindi	hi	LANG_HINDI	0x39
Hungarian	hu	LANG_HUNGARIAN	0x0e
Ibibio		(no constant defined)	0x69
Icelandic	is	LANG_ICELANDIC	0x0f

Igbo		(no constant defined)	0x70
Indonesian	id, in*	LANG_INDONESIAN	0x21
Interlingua	ia		
Interlingue	ie		
Inuktitut	iu	(no constant defined)	0x5d
Inupiak	ik		
Irish	ga	(no constant defined)	0x3c (0x083c)
Italian	it	LANG_ITALIAN	0x10
Japanese	ja	LANG_JAPANESE	0x11
Javanese	jv		
Kannada	kn	LANG_KANNADA	0x4b
Kanuri		(no constant defined)	0x71
Kashmiri	ks	LANG_KASHMIRI	0x60
Kazakh	kk	LANG_KAZAK	0x3f
Kinyarwanda (Ruanda)	rw		
Kirghiz	ky	LANG_KYRGYZ	0x40
Kirundi (Rundi)	rn		
Konkani		LANG_KONKANI	0x57
Korean	ko	LANG_KOREAN	0x12
Kurdish	ku		
Laothian	lo	(no constant defined)	0x54
Latin	la	(no constant defined)	0x76

Latvian (Lettish)	lv	LANG_LATVIAN	0x26
Limburgish (Limburger)	li		
Lingala	ln		
Lithuanian	lt	LANG_LITHUANIAN	0x27
Macedonian	mk	LANG_MACEDONIAN	0x2f
Malagasy	mg		
Malay	ms	LANG_MALAY	0x3e
Malayalam	ml	LANG_MALAYALAM	0x4c
		LANG_MANIPURI	0x58
Maltese	mt	(no constant defined)	0x3a
Maori	mi		
Marathi	mr	LANG_MARATHI	0x4e
Moldavian	mo		
Mongolian	mn	LANG_MONGOLIAN	0x50
Nauru	na		
Nepali	ne	LANG_NEPALI	0x61
Norwegian	no	LANG_NORWEGIAN	0x14
Occitan	oc		
Oriya	or	LANG_ORIYA	0x48
Oromo (Afan, Galla)	om	(no constant defined)	0x72
Papiamentu		(no constant defined)	0x79
Pashto (Pushto)	ps	(no constant defined)	0x63

Polish	pl	LANG_POLISH	0x15
Portuguese	pt	LANG_PORTUGUESE	0x16
Punjabi	pa	LANG_PUNJABI	0x46
Quechua	qu		
Rhaeto-Romance	rm	(no constant defined)	0x17
Romanian	ro	LANG_ROMANIAN	0x18
Russian	ru	LANG_RUSSIAN	0x19
Sami (Lappish)		(no constant defined)	0x3b
Samoan	sm		
Sangro	sg		
Sanskrit	sa	LANG_SANSKRIT	0x4f
Serbian	sr	LANG_SERBIAN (SUBLANG_SERBIAN_LATIN or SUBLANG_SERBIAN_CYRILLIC)	0x1a (0x081a or 0x0c1a)
Serbo-Croatian	sh		
Sesotho	st		
Setswana	tn		
Shona	sn		
Sindhi	sd	LANG_SINDHI	0x59
Sinhalese	si	(no constant defined)	0x5b
Siswati	ss		
Slovak	sk	LANG_SLOVAK	0x1b
Slovenian	sl	LANG_SLOVENIAN	0x24
Somali	so	(no constant defined)	0x77

Spanish	es	LANG_SPANISH	0x0a
Sundanese	su		
Swahili (Kiswahili)	sw	LANG_SWAHILI	0x41
Swedish	sv	LANG_SWEDISH	0x1d
Syriac		LANG_SYRIAC	0x5a
Tagalog	tl	(no constant defined)	0x64
Tajik	tg	(no constant defined)	0x28
Tamazight		(no constant defined)	0x5f
Tamil	ta	LANG_TAMIL	0x49
Tatar	tt	LANG_TATAR	0x44
Telugu	te	LANG_TELUGU	0x4a
Thai	th	LANG_THAI	0x1e
Tibetan	bo	(no constant defined)	0x51
Tigrinya	ti	(no constant defined)	0x73
Tonga	to		
Tsonga	ts	(no constant defined)	0x31
Turkish	tr	LANG_TURKISH	0x1f
Turkmen	tk	(no constant defined)	0x42
Twi	tw		
Uighur	ug		
Ukrainian	uk	LANG_UKRAINIAN	0x22
Urdu	ur	LANG_URDU	0x20
Uzbek	uz	LANG_UZBEK	0x43

Venda		(no constant defined)	0x33
Vietnamese	vi	LANG_VIETNAMESE	0x2a
Volap?k	vo		
Welsh	cy	(no constant defined)	0x52
Wolof	wo		
Xhosa	xh	(no constant defined)	0x34
Yi		(no constant defined)	0x78
Yiddish	yi, ji*	(no constant defined)	0x3d
Yoruba	yo	(no constant defined)	0x6a
Zulu	zu	(no constant defined)	0x35

## Language Codes: ISO 639, Macintosh

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Language	ISO Code	Mac Name	Mac Code
Abkhazian	ab		
Afar	aa		
Afrikaans	af	langAfricaans	141
Albanian	sq	langAlbanian	36
Amharic	am	langAmharic	85
Arabic	ar	langArabic	12
Armenian	hy	langArmenian	51
Assamese	as	langAssamese	68
Aymara	ay	langAymara	134
Azerbaijani	az	langAzerbaijani(Cyrillic), langAzerbaijanAr(Arabic)	49(C), 50(A)

Bashkir	ba		
Basque	eu	langBasque	129
Bengali (Bangla)	bn	langBengali	67
Bhutani	dz	langDzongkha	137
Bihari	bh		
Bislama	bi		
Breton	br	langBreton	142
Bulgarian	bg	langBulgarian	44
Burmese	my	langBurmese	77
Byelorussian (Belarusian)	be	langByelorussian	46
Cambodian	km	langKhmer	78
Catalan	ca	langCatalan	130
Cherokee			
Chewa		langChewa	92
Chinese (Simplified)	zh	langSimpChinese	33
Chinese (Traditional)	zh	langTradChinese	19
Corsican	co		
Croatian	hr	langCroatian	18
Czech	cs	langCzech	38
Danish	da	langDanish	7
Divehi			
Dutch	nl	langDutch	4

Edo			
English	en	langEnglish	0
Esperanto	eo	langEsperanto	94
Estonian	et	langEstonian	27
Faeroese	fo	langFaeroese	30
Farsi	fa	langFarsi, langPersian	31
Fiji	fj		
Finnish	fi	langFinnish	13
Flemish		langFlemish	34
French	fr	langFrench	1
Frisian			
Fulfulde			
Galician	gl	langGalician	140
Gaelic (Scottish)	gd	langScottishGaelic	144
Gaelic (Manx)	gv	langManxGaelic	145
Georgian	ka	langGeorgian	52
German	de	langGerman	2
Greek	el	langGreek (monotonic), langGreekPoly (polytonic)	14(m), 148(p)
Greenlandic	kl		
Guarani	gn	langGuarani	133
Gujarati	gu	langGujarati	69
Hausa	ha		
Hawaiian			

Hebrew	he, iw*	langHebrew	10
Hindi	hi	langHindi	21
Hungarian	hu	langHungarian	26
Ibibio			
Icelandic	is	langIcelandic	15
Igbo			
Indonesian	id, in*	langIndonesian	81
Interlingua	ia		
Interlingue	ie		
Inuktitut	iu	langInuktitut	143
Inupiak	ik		
Irish	ga	langIrishGaelic (normal), langIrishGaelicScr (dots above)	35, 146
Italian	it	langItalian	3
Japanese	ja	langJapanese	11
Javanese	jv	langJavaneseRom	138
Kannada	kn	langKannada	73
Kanuri			
Kashmiri	ks	langKashmiri	61
Kazakh	kk	langKazakh	48
Kinyarwanda (Ruanda)	rw	langKiryarwanda (langRuanda)	90
Kirghiz	ky	langKirghiz	54
Kirundi (Rundi)	rn	langRundi	91

Konkani			
Korean	ko	langKorean	23
Kurdish	ku	langKurdish	60
Laothian	lo	langLao	79
Latin	la	langLatin	131
Latvian (Lettish)	lv	langLatvian	28
Limburgish ( Limburger)	li		
Lingala	ln		
Lithuanian	lt	langLithuanian	24
Macedonian	mk	langMacedonian	43
Malagasy	mg	langMalagasy	93
Malay	ms	langMalayRoman(Latin), langMalayArabic(Arabic)	83(L), 84(A)
Malayalam	ml	langMalayalam	72
Maltese	mt	langMaltese	16
Maori	mi		
Marathi	mr	langMarathi	66
Moldavian	mo	langMoldavian	53
Mongolian	mn	langMongolian(Mongolian), langMongolianCyr(Cyrillic)	57(M), 58(C)
Nauru	na		
Nepali	ne	langNepali	64
Norwegian	no	langNorwegian	9

Occitan	oc		
Oriya	or	langOriya	71
Oromo (Afan, Galla)	om	langOromo (langGalla)	87
Papiamentu			
Pashto (Pushto)	ps	langPashto	59
Polish	pl	langPolish	25
Portuguese	pt	langPortuguese	8
Punjabi	pa	langPunjabi	70
Quechua	qu	langQuechua	132
Rhaeto-Romance	rm		
Romanian	ro	langRomanian	37
Russian	ru	langRussian	32
Sami (Lappish)		langSami (langLappish)	29
Samoan	sm		
Sangro	sg		
Sanskrit	sa	langSanskrit	65
Serbian	sr	langSerbian	42
Serbo-Croatian	sh		
Sesotho	st		
Setswana	tn		
Shona	sn		
Sindhi	sd	langSindhi	62
Sinhalese	si	langSinhalese	76

Siswati	ss		
Slovak	sk	langSlovak	39
Slovenian	sl	langSlovenian	40
Somali	so	langSomali	88
Spanish	es	langSpanish	6
Sundanese	su	langSundaneseRom	139
Swahili (Kiswahili)	sw	langSwahili	89
Swedish	sv	langSwedish	5
Syriac			
Tagalog	tl	langTagalog	82
Tajik	tg	langTajiki	55
Tamazight			
Tamil	ta	langTamil	74
Tatar	tt	langTatar	135
Telugu	te	langTelugu	75
Thai	th	langThai	22
Tibetan	bo	langTibetan	63
Tigrinya	ti	langTigrinya	86
Tonga	to	langTongan	147
Tsonga	ts		
Turkish	tr	langTurkish	17
Turkmen	tk	langTurkmen	56
Twi	tw		

Uighur	ug	langUighur	136
Ukrainian	uk	langUkrainian	45
Urdu	ur	langUrdu	20
Uzbek	uz	langUzbek	47
Venda			
Vietnamese	vi	langVietnamese	80
Volap?k	vo		
Welsh	cy	langWelsh	128
Wolof	wo		
Xhosa	xh		
Yi			
Yiddish	yi, ji*	langYiddish	41
Yoruba	yo		
Zulu	zu		

# 38. HTML – CHARACTER ENCODINGS

Character encoding is a method of converting bytes into characters. To validate or display an HTML document properly, a program must choose a proper character encoding.

The most common character set or character encoding in use on computers is ASCII - **The American Standard Code for Information Interchange**, and this is probably the most widely used character set for encoding text electronically.

ASCII encoding supports only the upper- and lowercase Latin alphabet, the numbers 0-9, and some extra characters which make a total of 128 characters in all. You can have a look at complete set of [Printable ASCII Characters](#)

However, many languages use either accented Latin characters or completely different alphabets. ASCII does not address these characters; therefore, you need to learn about character encodings if you want to use any non-ASCII characters.

The International Standards Organization created a range of character sets to deal with different national characters. For the documents in English and most other Western European languages, the widely supported encoding ISO-8859-1 is used.

Here is the list of Character Set being used around the world along with their description.

Character Set	Description
ISO-8859-1	Latin alphabet part 1 Covering North America, Western Europe, Latin America, the Caribbean, Canada, Africa
ISO-8859-2	Latin alphabet part 2 Covering Eastern Europe
ISO-8859-3	Latin alphabet part 3 Covering SE Europe, Esperanto, miscellaneous others
ISO-8859-4	Latin alphabet part 4 Covering Scandinavia/Baltics (and others not in ISO-8859-1)
ISO-8859-5	Latin/Cyrillic alphabet part 5
ISO-8859-6	Latin/Arabic alphabet part 6
ISO-8859-7	Latin/Greek alphabet part 7
ISO-8859-8	Latin/Hebrew alphabet part 8

ISO-8859-9	Latin 5 alphabet part 9 Same as ISO-8859-1 except Turkish characters replace Icelandic ones
ISO-8859-10	Latin 6 Latin 6 Lappish, Nordic, and Eskimo
ISO-8859-15	The same as ISO-8859-1 but with more characters added
ISO-2022-JP	Latin/Japanese alphabet part 1
ISO-2022-JP-2	Latin/Japanese alphabet part 2
ISO-2022-KR	Latin/Korean alphabet part 1

The Unicode Consortium was then set up to devise a way to show all characters of different languages, rather than have these different incompatible character codes for different languages.

Therefore, if you want to create documents that use characters from multiple character sets, you will be able to do so using the single Unicode character encodings.

Unicode therefore specifies encodings that can deal with a string in special ways so as to make enough space for the huge character set it encompasses. These are known as UTF-8, UTF-16, and UTF-32.

Character Set	Description
UTF-8	A Unicode Translation Format that comes in 8-bit units that is, it comes in bytes. A character in UTF8 can be from 1 to 4 bytes long, making UTF8 variable width.
UTF-16	A Unicode Translation Format that comes in 16-bit units that is, it comes in shorts. It can be 1 or 2 shorts long, making UTF16 variable width.
UTF-32	A Unicode Translation Format that comes in 32-bit units that is, it comes in longs. It is a fixed-width format and is always 1 "long" in length.

The first 256 characters of Unicode character sets correspond to the 256 characters of ISO-8859-1.

By default, HTML 4 processors should support UTF-8, and XML processors are supposed to support UTF-8 and UTF-16; therefore all XHTML-compliant processors should also support UTF-16.

# 39. HTML – DEPRECATED TAGS

A complete list of deprecated HTML tags and attributes are given here. All the tags have been ordered alphabetically along with their equivalent tag or alternate CSS option.

Tag	Description	Alternate
<u>&lt;applet&gt;</u>	Deprecated. Specifies an applet	<object>
<u>&lt;basefont&gt;</u>	Deprecated. Specifies a base font	
<u>&lt;center&gt;</u>	Deprecated. Specifies centered text	text-align
<u>&lt;dir&gt;</u>	Deprecated. Specifies a directory list	
<u>&lt;embed&gt;</u>	Deprecated. Embeds an application in a document	<object>
<u>&lt;font&gt;</u>	Deprecated. Specifies text font, size, and color	font-family, font-size
<u>&lt;isindex&gt;</u>	Deprecated. Specifies a single-line input field	
<u>&lt;listing&gt;</u>	Deprecated. Specifies listing of items	<pre>
<u>&lt;menu&gt;</u>	Deprecated. Specifies a menu list	
<u>&lt;plaintext&gt;</u>	Deprecated. Specifies plaintext	<pre>
<u>&lt;s&gt;</u>	Deprecated. Specifies strikethrough text	text-decoration
<u>&lt;strike&gt;</u>	Deprecated. Specifies strikethrough text	text-decoration
<u>&lt;u&gt;</u>	Deprecated. Specifies underlined text	text-decoration
<u>&lt;xmp&gt;</u>	Deprecated. Specifies preformatted text	<pre>

## HTML Deprecated Attributes

Following is the list of deprecated HTML attributes and alternative CSS options available.

Attribute	Description	Alternate
align	Specifies positioning of an element	text-align, float & vertical-align

alink	Specifies the color of an active link or selected link	active
background	Specifies background image	background-image
bgcolor	Specifies background color	background-color
border	Specifies a border width of any element	border-width
clear	Indicates how the browser should display the line after the   element	clear
height	Specifies height of body and other elements	height
hspace	Specifies the amount of whitespace or padding that should appear left or right an element	padding
language	Specifies scripting language being used	type
link	Specifies the default color of all links in the document	link
nowrap	Prevents the text from wrapping within that table cell	white-space
start	Indicates the number at which a browser should start numbering a list	counter-reset
text	Specifies color of body text	color
type	Specifies the type of list in <li> tag	list-style-type
vlink	Specifies the color of visited links	visited
vspace	Specifies the amount of whitespace or padding that should appear above or below an element	padding
width	Specifies width of body and other elements	width