



FOR GOD AND COUNTRY

# ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution



## STUDY MATERIAL - 9

Subject: COMPUTER SCIENCE

Class - 12

Chapter: Hypertext Markup Language

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## HTML anchor element

- The **HTML anchor tag** defines a *hyperlink that links one page to another page*.
- It can create hyperlink to other web page as well as files, location, or any URL.
- The "**href**" attribute is the most important attribute of the HTML a tag and which links to destination page or URL.
- The **target** attribute can only use with **href** attribute in anchor tag.
- If we will not use target attribute then link will open in same page.
- By default, links will appear as follows in all browsers:
  - An unvisited link is underlined and blue
  - A visited link is underlined and purple
  - An active link is underlined and red

### href attribute of HTML anchor tag

- The href attribute is used to define the address of the file to be linked. In other words, it points out the destination page.
- The syntax of HTML anchor tag is given below:
  - `<a href = "link"> Link Name </a>`
- Example:

```
<html>
  <head>
    <title>anchor tag</title>
  </head>

  <body>
    <p>Welcome to
      <a href = "https://stlawrencehighschool.edu.in/">
        ST.LAWRENCE HIGH SCHOOL
      </a>
    </p>
  </body>
</html>
```

OUTPUT: Welcome to ST.LAWRENCE HIGH SCHOOL

# HTML Tables

- HTML tables allow web authors to arrange data into rows and columns.
- An HTML table is defined with the <table> tag.
- Each table row is defined with the <tr> tag. A table header is defined with the <th> tag. By default, table headings are bold and centered. A table data/cell is defined with the <td> tag.
- We will use the colspan attribute to make a cell span many columns.
- We will use the rowspan attribute to make a cell span many rows.
- We will use the id attribute to uniquely define one table.
- We will use border attribute to set a visible border width for a table.
- Example:

```
<table border="1">  
  <tr><th>Year<th>Month<th>Day  
  <tr><td>1972<td>June<td>23rd  
  <tr><td>1982<td>October<td>7th  
</table>
```

Year	Month	Day
1972	June	23rd
1982	October	7th

# HTML Forms

- An **HTML form** is a section of a document which contains controls such as text fields, password fields, checkboxes, radio buttons, submit button, menus etc.
- An HTML form facilitates the user to enter data that is to be sent to the server for processing such as name, email address, password, phone number, etc. .
- HTML forms are required if you want to collect some data from of the site visitor.
- For example: If a user want to purchase some items on internet, he/she must fill the form such as shipping address and credit/debit card details so that item can be sent to the given address.

## HTML Form Tags

Tag	Description
<form>	It defines an HTML form to enter inputs by the used side.
<input>	It defines an input control.
<textarea>	It defines a multi-line input control.
<label>	It defines a label for an input element.
<fieldset>	It groups the related element in a form.
<legend>	It defines a caption for a <fieldset> element.
<select>	It defines a drop-down list.
<option>	It defines an option in a drop-down list.
<button>	It defines a clickable button.

## HTML Form Example

```
<html>
<head>
  <title>Form in HTML</title>
</head>
<body>
  <h2>Registration form</h2>
  <form>
    <fieldset>
      <legend>User personal information</legend>
      <label>Enter your full name</label><br>
      <input type="text" name="name"><br>
      <label>Enter your email</label><br>
      <input type="email" name="email"><br>
      <label>Enter your password</label><br>
      <input type="password" name="pass"><br>
      <label>confirm your password</label><br>
      <input type="password" name="pass"><br>
      <br><label>Enter your gender</label><br>
      <input type="radio" id="gender" name="gender" value="male"/>Male <br>
      <input type="radio" id="gender" name="gender" value="female"/>Female <br/>
      <input type="radio" id="gender" name="gender" value="others"/>others <br/>
      <br>Enter your Address:<br>
      <textarea></textarea><br>
      <input type="submit" value="sign-up">
    </fieldset>
  </form>
</body>
</html>
```

OUTPUT:

### Registration form

User personal information

Enter your full name

Enter your email

Enter your password

confirm your password

Enter your gender

☐ Male

☐ Female

☐ others

Enter your Address:

sign-up

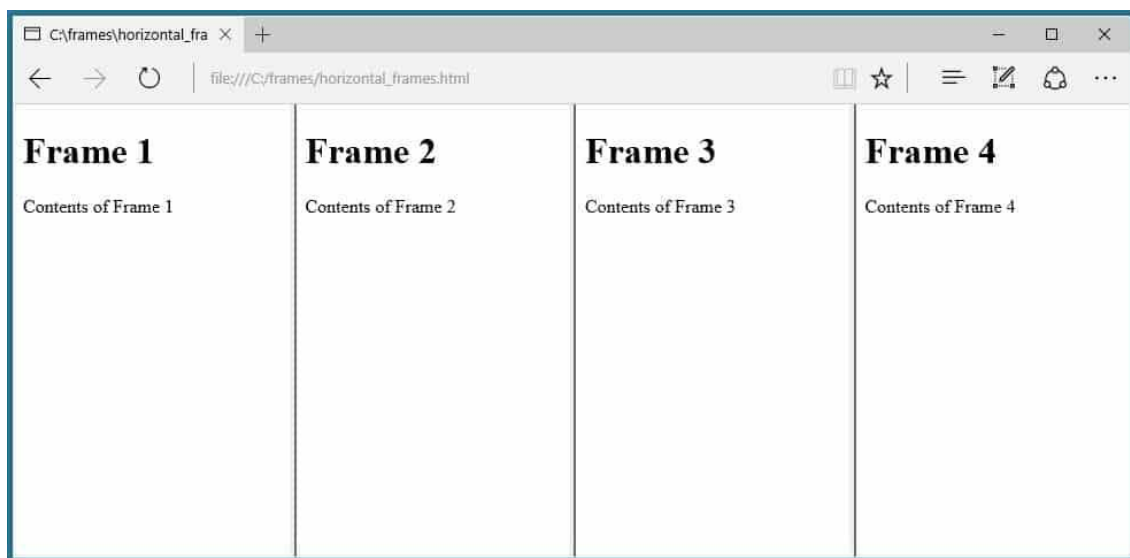
# HTML Frames

- HTML Frames are used to divide the web browser window into multiple sections where each section can be loaded separately.
- A frameset tag is the collection of frames in the browser window.
- Instead of using body tag, use frameset tag in HTML to use frames in web browser. But this Tag is deprecated in HTML 5.
- The frameset tag is used to define how to divide the browser. Each frame is indicated by frame tag and it basically defines which HTML document shall open into the frame.
- To define the horizontal frames use row attribute of frame tag in HTML document and to define the vertical frames use col attribute of frame tag in HTML document.

**Example:** This example illustrates the col attribute of frameset tag.

```
<html>
  <head>
    <title>Example of HTML Frames Using col Attribute</title>
  </head>
  <frameset cols = "25%, 25%, 25%, 25%">
    <frame name = "first" src = "C:/Users/abc/Desktop/frame1.html" />
    <frame name = "second" src = "C:/Users/abc/Desktop/frame2.html"/>
    <frame name = "third" src = "C:/Users/abc/Desktop/frame3.html"/>
    <frame name = "fourth" src = "C:/Users/abc/Desktop/frame4.html"/>
  </frameset>
  <body>The browser you are working does not support
frames.</body>
</frameset>
</html>
```

**OUTPUT:**



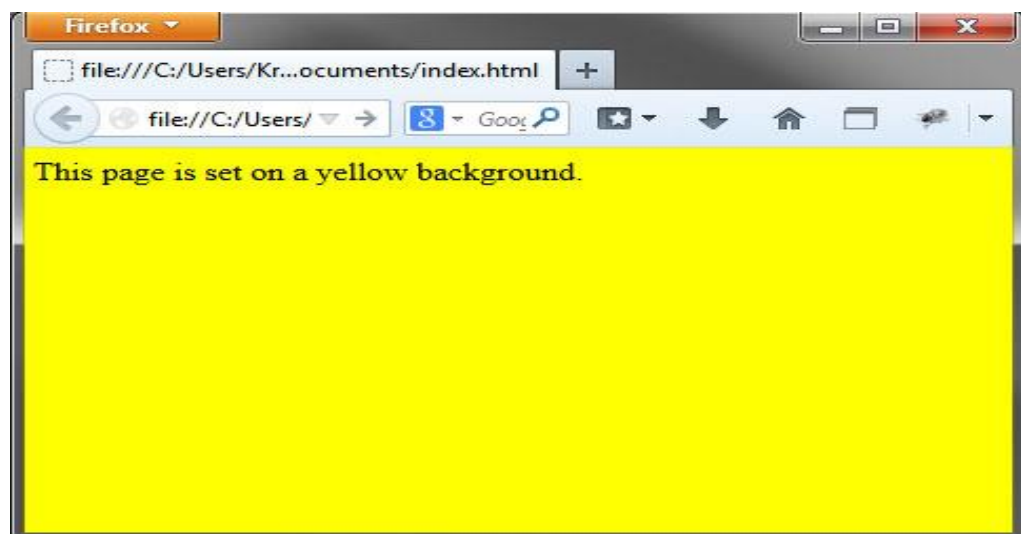
# HTML font and background color

- The **HTML <font> color Attribute** is used to *specify the text color inside the <font> element*.
- **Syntax:**  
`<font color="color_name|hex_number|rgb_number">`
- The **HTML <body> bgcolor Attribute** is used to define a Background color of a Document.
- **Syntax:**  
`<body bgcolor="color_name | hex_number | rgb_number">`
- **Attribute Values:**
  - **color\_name:** It specifies the name of the Background color of the Document.
  - **hex\_number:** It specifies the hex code of the Background color in the Document.
  - **rgb\_number:** It specifies the rgb value of the Background color in the Document.

## Example:

```
<html>
<head>
  <title>
    HTML body Bgcolor Attribute
  </title>
</head>
<!-- body tag starts here. This is just a comment. -->
<body bgcolor="yellow">
  <p>
    This page is set on a yellow background.
  </p>
</body>
<!-- body tag ends here -->
</html>
```

OUTPUT:



### Answer the following questions:

#### 1. What is the use of target and href attribute in anchor element?

**Ans:** **target** : specifies where to open the linked document.

**href** : Specifies the linked document, resource, or location.

#### 2. What is the purpose of the following tags:

a) **<table>** → to create a new table in HTML document.

b) **<td>** → It defines a cell in a table.

c) **<th>** → It defines a header cell in a table.

#### 3. Does a hyperlink only apply to text?

**Ans:** No, we can use hyperlinks on text and images both. The HTML anchor tag defines a hyperlink that links one page to another page. The "href" attribute is the most important attribute of the HTML anchor tag.

#### 4. Can you create a multi-colored text on a web page?

**Ans:** Yes. To create a multicolor text on a web page you can use `<font color ="color"> </font>` for the specific texts you want to color.

#### 5. Write an HTML table tag sequence that outputs the following:

50 pcs 100 500

10 pcs 5 50

**Ans:**

```
<table>
  <tr>
    <td>50 pcs</td>
    <td>100</td>
    <td>500</td>
  </tr>
  <tr>
    <td>10 pcs</td>
    <td>5</td>
    <td>50</td>
  </tr>
</table>
```

#### 6. How are active links different from normal links?

**Ans:** The default color for normal and active links is blue. Some browsers recognize an active link when the mouse cursor is placed over that link; others recognize active links when the link has the focus. Those that don't have a mouse cursor over that link are considered a normal link.

## 7. How do you make a picture into a background image of a web page?

**Ans:** To do this, place a tag code after the </head> tag as follows:

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

Replace image.gif with the name of your image file. This will take the picture and make it the background image of your web page.

## 8. When is it appropriate to use frames?

**Ans:** Frames can make navigating a site much easier. If the main links to the site are located in a frame that appears at the top or along the edge of the browser, the content for those links can be displayed in the remainder of the browser window.

## 9. Explain any five input types provided by HTML for forms.

**Ans:**

- <input type="text"> defines a **single-line text input field**.
- <input type="password"> defines a **password field**.
- <input type="submit"> defines a button for **submitting** form data to a **form-handler**. The form-handler is typically a server page with a script for processing input data.
- <input type="radio"> defines a **radio button**. Radio buttons let a user select **ONLY ONE** of a limited number of choices
- <input type="checkbox"> defines a **checkbox**. Checkboxes let a user select **ZERO or MORE** options of a limited number of choices.

## 10. What happens if the number of values in the rows or cols attribute doesn't add up to 100 percent?

**Ans:** The browser sizes the frames relative to the total sum of the values. If the cols attribute is set to 100%, 200% the browser displays two vertical frames with the second being twice as big as the first.