**HTML**

**1.Explain What is HTML**

* HTML stands for Hyper Text Markup Language and invented by Tim Berners-Lee in 1991.
* HTML is the standard markup language for creating Web pages
* HTML describes the structure of a Web page and consists of a series of elements. These HTML elements tell the browser how to display the content.
* HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

**2.Explain the structure of a basic HTML pages**

* The <!DOCTYPE html> declaration defines that this document is a HTML5 document
* The <html> element is the root element of an HTML page
* The <head> element contains meta information about the HTML page
* The <title> element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
* The <body> element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc. The content inside the <body> section be displayed in a browser.

**3.Explain HTML Elements**

* An HTML element is defined by a start tag, some content, and an end tag.The HTML **element** is everything from the start tag to the end tag.
* Some HTML elements have no content (like the <br> element). These elements are called empty elements. Empty elements do not have an end tag.
* HTML elements can be nested (this means that elements can contain other elements)

**4.What is the relation between webbrowser and html**

* The purpose of a web browser (Chrome, Edge, Firefox, Safari) is to read HTML documents and display them correctly.A browser does not display the HTML tags, but uses them to determine how to display the document.

**5.** **How to View HTML Source?**

* Right-click in an HTML page and select "View Page Source" (in Chrome) or "View Source" (in Edge), or similar in other browsers. This will open a window containing the HTML source code of the page//Right-click on an element (or a blank area), and choose "Inspect" or "Inspect Element" to see what elements are made up of (you will see both the HTML and the CSS). You can also edit the HTML or CSS on-the-fly in the Elements or Styles panel that opens.

**6.Html Attribute**

* All HTML elements can have **attributes**
* Attributes provide **additional information** about elements and always specified in **the start tag**
* Attributes usually come in name/value pairs like: **name="value"**
* The <a> tag defines a hyperlink. The href attribute specifies the URL of the page the link goes to or otherwise href attribute indicates the link's destination.
* The <img> tag is used to embed an image in an HTML page. The src attribute specifies the path to the image to be displayed. It should also contain the width and height attributes, which specifies the width and height of the image (in pixels). The required alt attribute for the <img> tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to slow connection, or an error in the src attribute, or if the user uses a screen reader.
* The style attribute is used to add styles to an element, such as color, font, size, and more. <tagname style="property:value;">
* You should always include the lang attribute inside the <html> tag, to declare the language of the Web page. This is meant to assist search engines and browsers.

**7.** **There are two ways to specify the URL in the src attribute**

* **Absolute URL** - Links to an external image that is hosted on another website. Example: src="https://www.w3schools.com/images/img\_girl.jpg".
* **Notes:** External images might be under copyright. If you do not get permission to use it, you may be in violation of copyright laws. In addition, you cannot control external images; it can suddenly be removed or changed.
* **Relative URL** - Links to an image that is hosted within the website. Here, the URL does not include the domain name. If the URL begins without a slash, it will be relative to the current page. Example: src="img\_girl.jpg". If the URL begins with a slash, it will be relative to the domain. Example: src="/images/img\_girl.jpg".
* **Tip:** It is almost always best to use relative URLs. They will not break if you change domain.

**9.** **Html Formatting elements**

* Formatting elements were designed to display special types of text. **HTML Formatting** is a process of formatting text for better look and feel.
* In HTML the formatting tags are divided into two categories:

Physical tag: These tags are used to provide the visual appearance to the text. Example:

<b> - It is used to bold the text written between it.

<i> - It is used to make text italic.

Logical tag: These tags are used to add some logical or semantic value to the text.. Example:

<strong> - It looks like bold text but tells the browser that the text is important.

<em> - It is used to display content in italic but it tells the browser that the text is emphasized.

* <mark> - Marked text or used to highlight text.
* <small> - Smaller text
* <del> - This tag is used to display the deleted content.
* <ins> - Inserted text. This tag displays the content which is added.
* <sub> - It displays the content slightly below the normal line.
* <sup> - It displays the content slightly above the normal line.
* <u> - This tag is used to underline text written between it.

**10.** **What is CSS**

* CSS stands for Cascading Style Sheets.
* CSS saves a lot of work. It can control the layout of multiple web pages all at once.
* With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more<mark> - Marked text
* CSS can be added to HTML documents in 3 ways:
* **Inline** - by using the style attribute inside HTML elements. An inline CSS is used to apply a unique style to a single HTML element.
* **Internal** - by using a <style> element in the <head> section. An internal CSS is used to define a style for a single HTML page.
* **External** - by using a <link> element to link to an external CSS file. An external style sheet is used to define the style for many HTML pages. The file must not contain any HTML code, and must be saved with a .css extension.

**11.** **What is CSS Padding, Margin.**

* The CSS padding property defines a padding (space) between the text and the border.
* The CSS margin property defines a margin (space) outside the border.

**12.** **Explain about link tag or anchor tag .**

* Links allow users to click their way from page to page. You can click on a link and jump to another document.<a href="*url*">*link text*</a>
* The most important attribute of the <a> element is the href attribute, which indicates the link's destination.
* 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.
* The target attribute specifies where to open the linked document.
* The target attribute can have one of the following values:
* \_self - Default. Opens the document in the same window/tab as it was clicked
* \_blank - Opens the document in a new window or tab.
* \_parent - Opens the document in the parent frame.
* \_top - Opens the document in the full body of the window.

**13.** **How to create a bookmark in html page.**

* Bookmarks can be useful if a web page is very long.
* To create a bookmark, first create the bookmark by using id attribute , then add a link to it.
* When the link is clicked, the page will scroll down or up to the location with the bookmark.

**14.** **How to hide a element in CSS.**

* display:none
* visibility:hidden
* position:absolute;

**15.** **What is marquee tag.**

* The marquee tag is **a non-standard HTML element which causes text and to scroll up, down, left or right automatically**.

**16.** **What is <map> element.**

* The HTML <map> tag defines an image map. An image map is an image with clickable areas. The areas are defined with one or more <area> tags.

<img src="workplace.jpg" alt="Workplace" usemap="#workmap">  
   
 <map name="workmap">  
   <area shape="rect" coords="34,44,270,350" alt="Computer" href="com puter.htm">  
   <area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">  
   <area shape="circle" coords="337,300,44" alt="Coffee" href="coffee.htm">  
 </map>

**17.** **What is background-repeat/cover/stretched.**

* If the background image is smaller than the element, the image will repeat itself, horizontally and vertically, until it reaches the end of the element. To avoid the background image from repeating itself, set the background-repeat property to no-repeat.
* The background-size property specifies the size of the background images. If you want the background image to cover the entire element, you can set the background-size property to cover. If you want the background image to stretch to fit the entire element, you can set the background-size property to 100% 100%.
* Also, to make sure the entire element is always covered, set the background-attachment property to fixed:

**18.** **When to <picture> element.**

* The <picture> element contains one or more <source> elements, each referring to different images through the srcset attribute. This way the browser can choose the image that best fits the current view and/or device.

<picture>  
  <source media="(min-width: 650px)" srcset="img\_food.jpg">  
  <source media="(min-width: 465px)" srcset="img\_car.jpg">  
  <img src="img\_girl.jpg">  
</picture>

**19.** **What is Favicon..**

* A favicon is a small image displayed next to the page title in the browser tab. add a <link> element to your "index.html" file, after the <title> element, like this.

<link rel="icon" type="image/x-icon" href="/images/favicon.ico">

**20.** **What is Box Model.**

* The CSS box model is essentially a box that wraps around every HTML element. It consists of: margins, borders, padding, and the actual content. It want to define us that  when you set the width and height properties of an element with CSS, you just set the width and height of the **content area**. To calculate the full size of an element, you must also add padding, borders and margins.

**21.** **What is Table colspan/rowspan.**

* To make a cell span over multiple columns, use the colspan attribute. The value of the colspan attribute represents the number of columns to span.
* To make a cell span over multiple rows, use the rowspan attribute.

**22.** **What is Table colgroup.**

* The <colgroup> element is used to style specific columns of a table.
* If you want to style the two first columns of a table, use the  <colgroup> and inside it use <col> elements.
* The span attribute specifies how many columns that gets the style.
* [width](https://www.w3schools.com/cssref/css3_pr_dim_width.asp) property  
  [visibility](https://www.w3schools.com/cssref/css3_pr_dim_width.asp) property  
  [background](https://www.w3schools.com/cssref/css3_pr_background.asp) properties  
  [border](https://www.w3schools.com/cssref/css3_pr_border.asp) properties

<table>  
  <colgroup>  
    <col span="2" style="background-color: #D6EEEE">  
  </colgroup>  
  <tr><th>MON</th><th>TUE</th><th>WED</th></tr>……………………………

**23.** **What is Unordered List.**

* An unordered list starts with the <ul> tag. Each list item starts with the <li> tag.
* The list items will be marked with bullets (small black circles) by default.
* The CSS list-style-type property is used to define the style of the list item marker. It can have one of the following values: disc, circle , square and none.

**24.** **What is Ordered List.**

* An unordered list starts with the <ol> tag. Each list item starts with the <li> tag. The list items will be marked with numbers (1,2..) by default. And others are a,A(all uppercase and lowercase letters)

I(Uppercase Roman Numbers), i(Lowercase Roman Numbers)

**25.** **What is Description List.**

* A Description list starts with the <dl> tag. The <dt> tag defines the term (name), and the <dd> tag describes each term.
* A description list is a list of terms, with a description of each term.

<dl>  
  <dt>Coffee</dt>  
  <dd>- black hot drink</dd>  
  <dt>Milk</dt>  
  <dd>- white cold drink</dd>  
</dl>

**26.** **What is Control List Counting.**

* By default, an ordered list will start counting from 1. If you want to start counting from a specified number, you can use the start attribute inside the <ol> tag:

<ol start="50">  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>

**27.** **What is Block element.**

* A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element.
* It always takes up the full width available (stretches out to the left and right as far as it can).
* Two commonly used block elements are: <p> and <div>.

**28.** **What is Inline element.**

* An inline element does not start on a new line.
* An inline element only takes up as much width as necessary.

**29.** **What is div element.**

* The <div> element is often used as a container for other HTML elements.

**30.** **What is span element.**

* The <span> element is an inline container used to mark up a part of a text, or a part of a document.
* When used together with CSS, the <span> element can be used to style parts of the text.
* The <span> element has no required attributes, but style, class and id are common.

**31.** **What is Class attribute.**

* The HTML class attribute is used to specify a class for an HTML element.
* Multiple HTML elements can share the same class.
* To create a class; write a period (.) character, followed by a class name. Then, define the CSS properties within curly braces {}.
* The HTML class attribute specifies one or more class names for an single element. To define multiple classes, separate the class names with a space, e.g. <div class="city main">.
* The class name can also be used by JavaScript to perform certain tasks for specific elements. JavaScript can access elements with a specific class name through the getElementsByClassName() method.

**32.** **What is ID attribute.**

* The HTML id attribute is used to specify a unique id for an HTML element.
* Multiple HTML elements can share the same id.
* The id can also be used by JavaScript to perform certain tasks for specific elements. JavaScript can access elements with a specific id through the getElementsById() method.
* The syntax for id is: write a hash character (#), followed by an id name. Then, define the CSS properties within curly braces {}.

**33.** **What is Iframe.**

* An HTML <iframe>  is used to display a web page within a web page.
* The HTML <iframe> tag specifies an inline frame. An inline frame is used to embed another document within the current HTML document.
* ­­
* <iframe src="demo\_iframe.htm" height="200" width="300" title="Iframe Example"></iframe>.
* An iframe can be used as the target frame for a link or <a> tag. The target attribute of the link must refer to the name attribute of the iframe:

<iframe src="demo\_iframe.htm" name="iframe\_a" title="Iframe Example"></iframe>  
<p><a href="https://www.w3schools.com" target="iframe\_a">W3Schools.com</a></p>

**34.** **What is html script tag.**

* The HTML <script> tag is used to define a client-side script (JavaScript).
* The <script> element either contains script statements, or it points to an external script file through the src attribute.
* Common uses for JavaScript are image manipulation, form validation, and dynamic changes of content.

**35.** **What is** <head>  **tag.**

* The <head> element is a container for metadata (data about data) and is placed before the <body> tag.
* The HTML <head> element is a container for the following elements:
* The <title> element defines the title of the document. The title must be text-only, and it is shown in the browser's title bar or in the page's tab. The contents of a page title is very important for search engine optimization (SEO)! The page title is used by search engine algorithms to decide the order when listing pages in search results.
* The <style> element is used to define style information for a single HTML page.
* The <link> tag is most often used to link to external style sheets to html pages.
* The <meta> element is typically used to specify the character set, page description, keywords, author of the document, and viewport settings. The content of <meta> element not displayed on the page, but are used by browsers (how to display content or reload page), by search engines (keywords), and other web services. The <meta> tag let web designers take control over the viewport (the user's visible area of a web page).

**36.** **What is HTML layout elements.**

* HTML has several semantic elements that define the different parts of a web page:
* <header> - Defines a header for a document or a section
* <nav> - Defines a set of navigation links
* <section> - Defines a section in a document
* <article> - Defines an independent, self-contained content
* <aside> - Defines content aside from the content (like a sidebar)
* <footer> - Defines a footer for a document or a section
* <details> - Defines additional details that the user can open and close on demand
* <summary> - Defines a heading for the <details> element.

**37.How to create Multicolumn Layout.**

* There are four different techniques to create multicolumn layouts: CSS framework, CSS float property(**Disadvantages:** Floating elements are tied to the document flow, which may harm the flexibility.), CSS flexbox, CSS grid.

**38.What is Responsive Web Design.**

* Responsive web design is about creating web pages that look good on all devices.
* A responsive web design will automatically adjust for different screen sizes and viewports.

**39.How to became a image responsive.**

* If the CSS width property for the image is set to 100%, the image will be responsive and scale up and down.
* If the max-width property is set to 100%, the image will scale down if it has to, but never scale up to be larger than its original size.

**40.What are the computer code elements.**

* HTML contains several elements for defining user input and computer code. The content inside these is displayed in the browser's default monospace font.
* The HTML <kbd> element is used to define keyboard input.

<p>Save the document by pressing <kbd>Ctrl + S</kbd></p>

* The HTML <samp> element is used to define sample output from a computer program.

<p><samp>File not found.<br>Press F1 to continue</samp></p>

* The HTML <code> element  is used to define a piece of computer code. <code>x = 5; y = 6; z = x + y;</code>.  The <code> element does not preserve extra whitespace and line-breaks. To fix this, you can put the <code> element inside a <pre> element:<pre><code>x = 5; y = 6; z = x + y;</code></pre>.The <pre> element defines preformatted text.
* The HTML <var> element  is used to define a variable in programming or in a mathematical expression. The content inside is typically displayed in italic.<p>The area of a triangle is: 1/2 x <var>b</var> x <var>h</var>, where <var>b</var> is the base, and <var>h</var> is the vertical height.</p>

**41.Explain Sematic and Non-Sematic elements.**

* A semantic element clearly describes its meaning to both the browser and the developer. Otherwise its non-sematic elements. Example for sematic is form,header,p,h1-h6,footer etc and for nonsematic is div, span etc.

**42.Explain** <figure> **and** <figcaption>**elements.**

* The <figure> tag specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.
* The <figcaption> tag defines a caption for a <figure> element. The <figcaption> element can be placed as the first or as the last child of a <figure> element.
* The <img> element defines the actual image/illustration.

<figure>  
  <img src="pic\_trulli.jpg" alt="Trulli">  
  <figcaption>Fig1. - Trulli, Puglia, Italy.</figcaption>  
</figure>

**43.Explain HTML Entities.**

* HTMLCharacter entities are used to display reserved characters in HTML.
* Symbols(mathematical, technical, and currency symbols) that are not present on your keyboard can also be added by using entities.
* If we use the charecters directly {less than (<) or greater than (>) signs} in our text, the browser might mix them with tags.
* Advantage of using an entity name: An entity name is easy to remember.
* Disadvantage of using an entity name: Browsers may not support all entity names, but the support for entity numbers is good.
* To display a less than sign (<) we must write: &lt; or &#60; for(>), use &gt/&#62, for &,use &amp/&#38,for””,use &quot/&#34 etc

**44.Explain HTML vs XHTML.**

* HTML is SGML-based while XHTML is XML-based.
* HTML is short for Hypertext Markup Language. XHTML stands for Extensible Hypertext Markup Language.
* HTML is not case sensitive But XHTML is case sensitive.
* HTML can use open tags, such as<br> But All unclosed tags must be closed in XHTML.
* Attribute values are not significant in HTML But Attribute values are important in XHTML

**45.Explain HTML Forms.**

* An HTML form is used to collect user input. The user input is most often sent to a server for processing.
* The <form> element is a container for different types of input elements, such as:input, text fields, checkboxes, radio buttons, submit buttons, etc.

The <button> element defines a clickable button

**46 .Explain different attributes of HTML Form Element.**

* The action attribute defines the action to be performed when the form is submitted. Usually, the form data is sent to a file on the server when the user clicks on the submit button. If the action attribute is omitted, the action is performed to the current page.<form action="/action\_page.php">
* The target attribute specifies where to display the response that is received after submitting the form. The target attribute can have one of the following values:

1. \_self which means that the response will open in the current window.
2. \_blank which means that the response will open in the new window or tab.
3. \_parent which means that the response will open in parent frame.
4. \_top which means that the response will open in the full body of the window.

* The method attribute specifies the HTTP method to be used when submitting the form data. The form-data can be sent as URL variables (with method="get"{Default HTTP method}) or as HTTP post transaction (with method="post").

<form action="/action\_page.php" method="post">

* The autocomplete attribute specifies whether a form should have autocomplete on or off. When autocomplete is on, the browser automatically complete values based on values that the user has entered before. <form action="/action\_page.php" autocomplete="on">
* The novalidate attribute is a boolean attribute. When present, it specifies that the form-data (input) should not be validated when submitted. <form action="/action\_page.php" novalidate>

**47.Explain Difference between http method get and post.**

* Appends(LINKS) the form data to the URL, in name/value pairs. When use the get method, the submitted form data is visible in the URL!. The length of a URL is limited (2048 characters). GET is good for non-secure data, like query strings in Google. It is useful for form submissions where a user wants to bookmark the result
* Appends the form data inside the body of the HTTP request. When use the post method, the submitted form data is not shown in the URL. The length of a URL is unlimited. POST is good for secure data. It can be used to send large amounts of data. The post method is used for form submissions but here user cannot bookmarked the result.

The http Request Body is where we put additional information that we are going to send to the server. In the body of the request we are free to place virtually whatever we want. From the username and password of a person trying to login to our system, to the answers of a complex form of a survey.

**48.Explain HTML Input Elements.**

* The HTML <input> element is the most used form element.
* An <input> element can be displayed in many ways, depending on the type attributes:text,radio,checkbox,radio,email,number,

password,date etc.

**1.**<input type="text"> defines a **single-line text input field**.

**2.**<input type="password"> defines a **password field**.

**3.**<input type="submit"> defines a button for **submitting** form data to a **form-handler**.

**4.**<input type="reset"> defines a **reset button** that will reset all form values to their default values.

**5.**<input type="radio"> defines a **radio button** that let a user select ONLY ONE from a limited number of choices:

**6.** <input type="checkbox"> defines a **checkbox** that let a user select ZERO or MORE options from a limited number of choices.

**7.** The <input type="color"> is used for input fields that should contain a color.

**8.** The <input type="date"> is used for input fields that should contain a date.

**9.** The <input type="email"> is used for input fields that should contain an e-mail address.

**10.**The <input type="tel"> is used for input fields that should contain a telephone number.

**11.** The <input type="url"> is used for input fields that should contain a URL address. Depending on browser support, the url field can be automatically validated when submitted.

**12.** The <input type="month"> allows the user to select a month and year.

**13.** The <input type="number"> defines a **numeric** input field. You can also set restrictions on what numbers are accepted.

**14.** The <input type="range"> defines a control for entering a number whose exact value is not important (like a slider control). Default range is 0 to 100. However, you can set restrictions on what numbers are accepted with the min, max, and step attributes.

<label for="vol">Volume (between 0 and 50):</label>  
<input type="range" id="vol" name="vol" min="0" max="50">

**15.** The <input type="search"> is used for search fields (a search field behaves like a regular text field).

**16.**The <input type="file"> defines a file-select field and a "Browse" button for file uploads.

**17.** The <input type="time"> allows the user to select a time (no time zone). Depending on browser support, a time picker can show up in the input field.<form>  
   <label for="appt">Select a time:</label>  
   <input type="time" id="appt" name="appt">  
 </form>

**18.**The <input type="hidden"> defines a hidden input field (not visible to a user).

**19.** The <input type="week"> allows the user to select a week and year.

**49.Explain Label element.**

* The <label> tag defines a label for many form elements.
* The <label> element is useful for screen-reader users, because the screen-reader will read out loud the label when the user focus on the input element.
* The <label> element also help users who have difficulty clicking on very small regions (such as radio buttons or checkboxes) - because when the user clicks the text within the <label> element, it toggles the radio button/checkbox.
* The for attribute of the <label> tag should be equal to the id attribute of the <input> element to bind them together.

**50.Explain Select element.**

* The <select> element defines a drop-down list. Between <select>, the <option> elements defines an option that can be selected.
* By default, the first item in the drop-down list is selected. To define a pre-selected option, add the selected attribute to the option.
* Use the size attribute to specify the number of visible values.
* Use the multiple attribute in <select> to allow the user to select more than one value.

<select id="cars" name="cars" size="4"multiple>  
  <option value="volvo" selected>Volvo</option>  
  <option value="saab">Saab</option>  
  <option value="fiat">Fiat</option>  
  <option value="audi">Audi</option>  
</select>

**51.Explain Text-area element.**

* The <textarea> element defines a multi-line text input field (a text area).
* The rows attribute specifies the visible number of lines in a text area. The cols attribute specifies the visible width of a text area.

<textarea name="message" style="width:200px; height:600px;">  
The cat was playing in the garden.  
</textarea>

**52.Explain Fieldset and Legend element.**

* The <fieldset> element is used to group related data in a form.
* The <legend> element defines a caption for the <fieldset> element.

**53.Explain datalist element.**

* The <datalist> element specifies a list of pre-defined options for an <input> element. Users will see a drop-down list of the pre-defined options as they input data.
* The list attribute of the <input> element, must refer to the id attribute of the <datalist> element.

<form action="/action\_page.php">  
  <input list="browsers">  
  <datalist id="browsers">  
    <option value="Internet Explorer">  
    <option value="Firefox">  
    <option value="Chrome">  
    <option value="Opera">  
    <option value="Safari"></datalist> </form>

**54.Explain Output element.**

* The <output> element represents the result of a calculation (like one performed by a script).

**55.Explain Input form Attributes**

**56.Explain Input Attributes.**

* The input value attribute specifies an initial value for an input field.
* The input readonly attribute specifies that an input field is read-only which cannot be modified (however, a user can tab to it, highlight it, and copy the text from it). <input type="text" id="fname" name="fname" value="John" readonly>
* The input disabled attribute specifies that an input field should be disabled.
* The input size attribute specifies the visible character width of an input field. The default value for size is 20. The size attribute works with the following input types: text, search, tel, url, email, and password. <input type="text" id="fname" name="fname" size="50">
* The input maxlength attribute specifies the maximum number of characters allowed in an input field. When a maxlength is set, the input field will not accept more than the specified number of characters. <input type="text" id="pin" name="pin" maxlength="4" size="4">
* The input min and max attributes specify the minimum and maximum values for an input field. The min and max attributes work with the following input types: number, range, date, datetime-local, month, time and week. Use the max and min attributes together to create a range of legal values.
* The input multiple attribute specifies that the user is allowed to enter more than one value in an input field.The multiple attribute works with the following input types: email, and file.
* The input pattern attribute specifies a regular expression that the input field's value is checked against, when the form is submitted. The pattern attribute works with the following input types: text, date, search, url, tel, email, and password. Use the global [title](https://www.w3schools.com/tags/att_global_title.asp) attribute to describe the pattern to help the user. <input type="text" id="country\_code" name="country\_code"  
    pattern="[A-Za-z]{3}" title="Three letter country code">
* The input placeholder attribute specifies a short hint that describes the expected value of an input field (a sample value or a short description of the expected format).The short hint is displayed in the input field before the user enters a value.The placeholder attribute works with the following input types: text, search, url, tel, email, and password.
* The input required attribute specifies that an input field must be filled out before submitting the form. The required attribute works with the following input types: text, search, url, tel, email, password, date pickers, number, checkbox, radio, and file.
* The input step attribute specifies the legal number intervals for an input field. Example: if step="3", legal numbers could be -3, 0, 3, 6, etc.
* The input autofocus attribute specifies that an input field should automatically get focus when the page loads.
* The input height and width attributes specify the height and width of an <input type="image"> element. Define an image as the submit button, with height and width attributes
* The input list attribute refers to a <datalist> element that contains pre-defined options for an <input> element.
* The input autocomplete attribute specifies whether a form or an input field should have autocomplete on or off.

**57.What is HTML Canvas.**

* The HTML <canvas> element is used to draw graphics on a web page, on the fly, via JavaScript.
* A canvas is a rectangular area on an HTML page. By default, a canvas has no border and no content.
* Canvas is raster based.
* Canvas gives better performance with smaller surface.

<canvas id="myCanvas" width="200" height="100"></canvas>

* Some details pending………………….

**58.What is HTML SVG Element.**

* SVG stands for Scalable Vector Graphics
* SVG is used to define graphics for the Web.
* The HTML <svg> element is a container for SVG graphics.
* SVG has several methods for drawing paths, boxes, circles, text, and graphic images.
* SVG is vector based .
* SVG gives better performance with larger surface.

<svg width="100" height="100">  
  <circle cx="50" cy="50" r="40" stroke="green" stroke-width="4" fill="yellow" />  
</svg>

<svg width="400" height="100">  
  <rect width="400" height="100" style="fill:rgb(0,0,255);stroke-width:10;stroke:rgb(0,0,0)" />  
</svg>

<svg width="400" height="180">  
  <rect x="50" y="20" rx="20" ry="20" width="150" height="150"  
  style="fill:red;stroke:black;stroke-width:5;opacity:0.5" />  
</svg>

<svg width="300" height="200">  
  <polygon points="100,10 40,198 190,78 10,78 160,198"  
  style="fill:lime;stroke:purple;stroke-width:5;fill-rule:evenodd;" />  
</svg>

**59.Explain SVG vs Canvas.**

* SVG stands

**60.Explain HTML Video Elements.**

* The HTML <video> element is used to show a video on a web page.
* The controls attribute adds video controls, like play, pause, and volume.
* It is a good idea to always include width and height attributes. If height and width are not set, the page might flicked while the video loads.
* The <source> element allows you to specify alternative video files which the browser may choose from. The browser will use the first recognized format.
* The text between the <video> and </video> tags will only be displayed in browsers that do not support the <video> element.

<video width="320" height="240" controls>  
  <source src="movie.mp4" type="video/mp4">  
  <source src="movie.ogg" type="video/ogg">  
Your browser does not support the video tag.  
</video>

* To start a video automatically, use the autoplay attribute:

<video width="320" height="240" autoplay>

* Add muted after autoplay to let your video start playing automatically (but muted):

**61.Explain HTML Audio Elements.**

* The HTML <audio> element is used to play an audio file on a web page. And expl is same as Videos

<audio controls>  
  <source src="horse.ogg" type="audio/ogg">  
  <source src="horse.mp3" type="audio/mpeg">  
Your browser does not support the audio element.  
</audio>

**62.Html youtube and plugins**