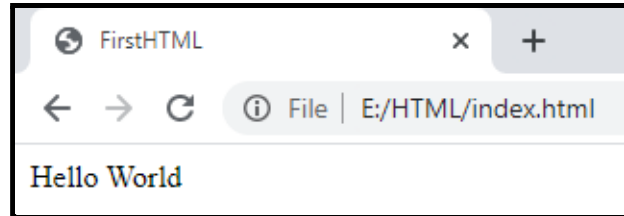HTML
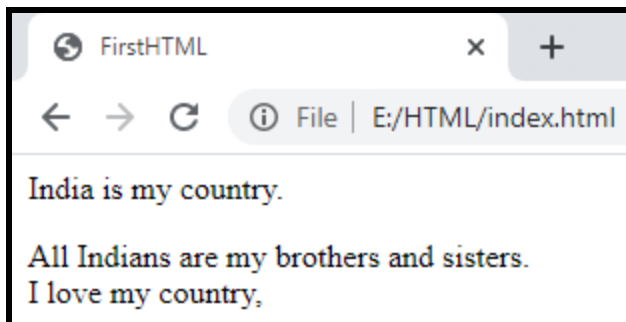1. Task1 :Create one HTML file and load in Browser
    a. New Tags: html, head, body

```
<html>
    <head>
        <title>FirstHTML</title>
    </head>
    <body>
        Hello World
    </body>
</html>
```

> FirstHTML   ×   +
>
> ← → C ⓘ File | E:/HTML/index.html
>
> Hello World

2. Task2: Check Paragraph tag and line break tag

```
<html>
    <head>
        <title>FirstHTML</title>
    </head>
    <body>
        <p>India is my country.</p>
        <p>All Indians are my brothers and sisters.<br>I love my country,</p>
    </body>
</html>
```

> FirstHTML   ×   +
>
> ← → C ⓘ File | E:/HTML/index.html
>
> India is my country.
>
> All Indians are my brothers and sisters.
> I love my country,

3. Task 3: Header Tags (h1, h2, h3, h4, h5, h6)

```
<body>
    <h1>India is my country.</h1>
    <h2>India is my country.</h2>
    <h3>India is my country.</h3>
    <h4>India is my country.</h4>
    <h5>India is my country.</h5>
    <h6>India is my country.</h6>

</body>
```

India is my country.

India is my country.

India is my country.

India is my country.

India is my country.

India is my country.

4. Bold, Italic, Underline and Strike

```
<body>
    <p><strong>India</strong> is my country.</p>
    <p><em>India</em> is my country.</p>
    <p><u>India</u> is my country.</p>
    <p><strike>xyz</strike></p>
</body>
```

India is my country.

India is my country.

<u>India</u> is my country.

~~xyz~~

5. Inline Text Formatting (not recommended)

```
<body>
    <p><font face="areal" size="20" color="red">India is my country.</font></p>
</body>
```

India is my country.

6. Unordered List

```
<body>
    <h2>Unordered List</h2>
    <ul>
        <li>Maharashtra</li>
        <li>Gujrat</li>
        <li>MP</li>
        <li>UP</li>
    </ul>
</body>
```
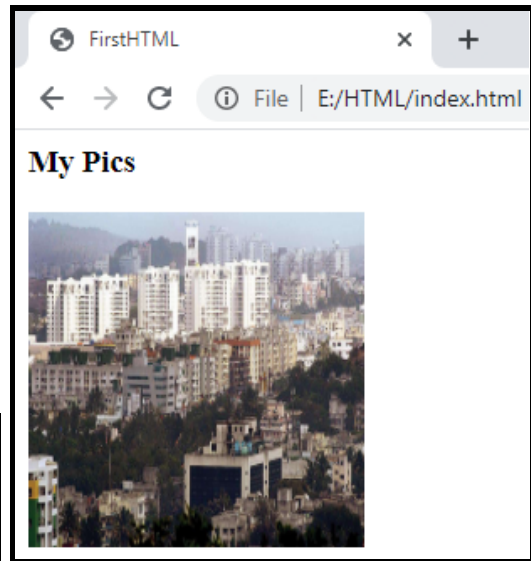
Unordered List

- Maharashtra
- Gujrat
- MP
- UP

7. Ordered List

```
<body>
    <h2>Ordered List</h2>
    <ol>
        <li>Maharashtra</li>
        <li>Gujrat</li>
        <li>MP</li>
        <li>UP</li>
    </ol>
</body>
```

Ordered List

1. Maharashtra
2. Gujrat
3. MP
4. UP

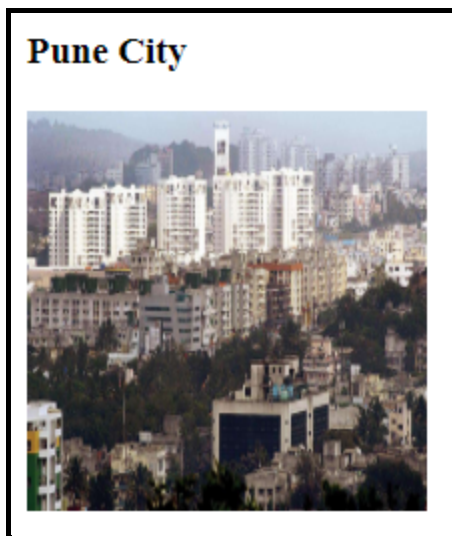8. Image Insertion (relative address)


```
<body>
    <h3>Pune City</h3>
    <img src="pune.jpg" width="200" height="200">
</body>
```

9. Image Insertion (Absolute address)

```
<body>
    <h3>Pune City</h3>
    <img src="https://cdn.dnaindia.com/sites/717763-buildings-12.jpg" width="200" height="200">
</body>
```


(**note : take any image address from net)

10. Youtube video Insertion

```html
<html>
    <head>
        <title>FirstHTML</title>
    </head>
    <body>
        <h3>Pune City</h3>
        <iframe width="560" height="315"
        src="https://www.youtube.com/embed/UB_xJQ4hUtI"
        frameborder="0" allow="accelerometer; autoplay;
        encrypted-media; gyroscope; picture-in-picture"
        allowfullscreen></iframe>
    </body>
</html>
```
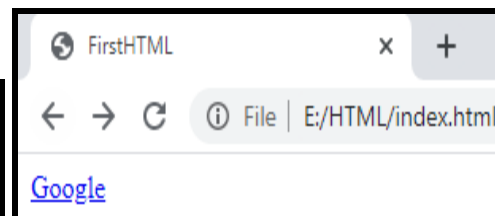

(Note: Go to youtube, open the video you want, click on share, click on embed and get above code)

11. HTML Link Insertion

```html
</head>
<body>
    <a href="https://www.google.com">Google</a>
</body>
```

12. HTML Table

```html
<html>
    <head>
        <title>FirstHTML</title>
    </head>
    <body>
        <table border="1">
            <tr>
                <th>Month</th>
                <th>Days</th>
            </tr>
            <tr>
                <td>January</td>
                <td>31</td>
            </tr>
            <tr>
                <td>February</td>
                <td>28/29</td>
            </tr>
        </table>
    </body>
</html>
```
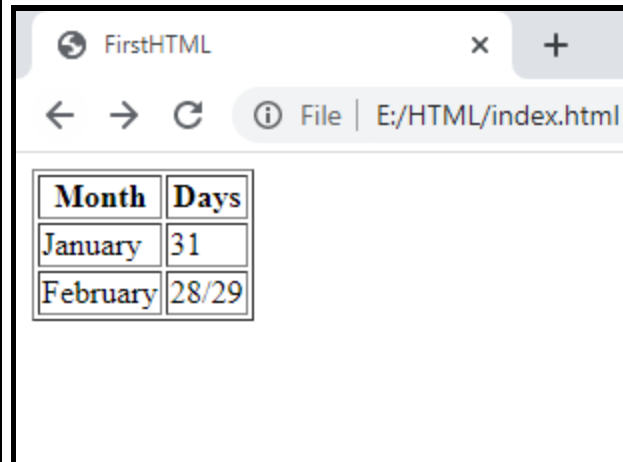
Month	Days
January	31
February	28/29

13. HTML Form
   a. Difference between Post and Get

14. HTML Form Input Text Field

```html
<body>
    <form action="/action">
        <label for="fname">First name:</label>
        <input type="text" id="fname" name="fname"><br><br>
        <label for="lname">Last name:</label>
        <input type="text" id="lname" name="lname"><br><br>
        <input type="submit" value="Submit">
    </form>
</body>
```
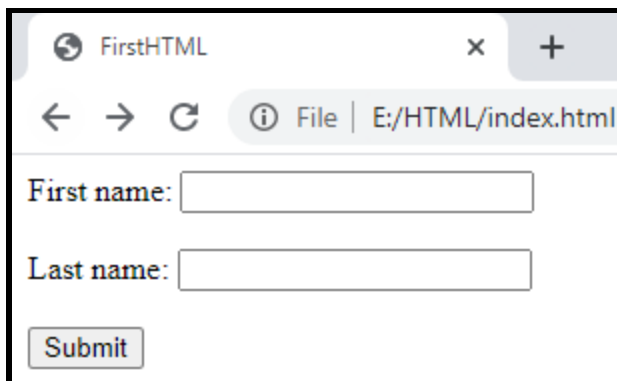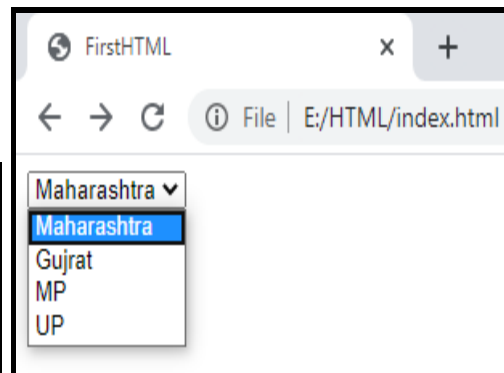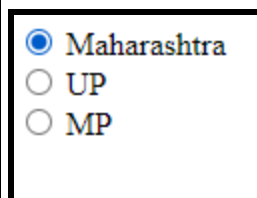
First name: [   ]

Last name: [   ]

[Submit]

15. HTML Form (Drop Down)

```
<select id="state" name="state">
    <option value="Maharashtra">Maharashtra</option>
    <option value="Gujrat">Gujrat</option>
    <option value="MP">MP</option>
    <option value="UP">UP</option>
</select>
```


16. HTML Form (Radio Button)

```
<input type="radio" id="mh" name="state" value="Maharashtra">
<label for="mh">Maharashtra</label><br>
<input type="radio" id="UP" name="state" value="UP">
<label for="UP">UP</label><br>
<input type="radio" id="MP" name="state" value="MP">
<label for="MP">MP</label>
```


17. HTML Form (Check Box)

```
<input type="checkbox" id="mh" name="state" value="Maharashtra">
<label for="mh">Maharashtra</label><br>
<input type="checkbox" id="UP" name="state" value="UP">
<label for="UP">UP</label><br>
<input type="checkbox" id="MP" name="state" value="MP">
<label for="MP">MP</label>
```
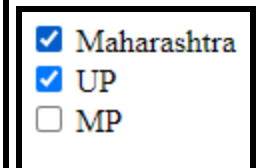
Home Work:

Try all below tags in your HTML Page

1. Document Summary
   a. <html> … </html>   Beginning and end of an HTML document
   b. <head> … </head>   Page info like title tags, meta data, and links etc
   c. <title> … </title>   title for that page
   d. <body> … </body>   All content that will be shown to users

   Example (Create one html file, paste below code and open in browser)

```
<html>
 <head>
 <title>HefShine Softwares</title>
 </head>
 <body>

 </body>
</html>
```

2. Document Information
   a. <base/>   The Base URL, useful for all relative links
   b. <meta/>   Additional information about the page
   c. <link/>   Relationships with external pages, including style sheets.
   d. <style> … </style>   Document style information (CSS)
   e. <script> … </script>   scripting information
      Example (this file requires css file, so don't run this as of now till you learn CSS)

```
<html>
 <head>
 <meta charset="utf-8">
 <base href="http://hefshine.com" target="_blank" />
 <title>HefShine Softwares</title>
 <link rel="stylesheet" href="/css/master.css">
 <script type="text/javascript">
 var MyVar = 0;
 </script>
 </head>
 <body>

 </body>
</html>
```

3. Document Structure

a. <h1..h6> … </h1..h6> All six levels of Headings
b. <div> … </div>   Used to denote a page section/ block.
c. …   Used for grouping styling elements.
d. <p> … </p>   This foundational tag is used to organize paragraphs of text.
e.
        Creates a line break
f. <hr/>   Creates a horizontal rule, a sectional break
Example (Add this code in above file and run it)

```
<div>
 <h1>Are you looking for placement?</h1>
 <p>You need <span>FullStack</span> Knowledge to increase your placement
chances</p>
 <hr/>
 <h2>Only theoretical knowledge will not work</h2>
 <p>Practical Knowledge is <span>most</span> important.<br/>Project is a
common issue among most of the applicants. So you must have a project in
your CV.
Make sure you have a source code of the same project on your laptop. If
source code is in your laptop then obviously you must have carried that laptop
along with you in the interview.
<br/> On top of all this, you must be in a position to explain each and every line
of code and logic. (in short, that should be your own Project) </p>
</div>
```

4. Text
   a. … Displays bold in most browsers.
   b. …   Another way to create bold text
   c. …   emphasizing text or phrases displayed as italics
   d. <i> … </i>   Another way to add italics to text
   e. <cite> … </cite>   Tags used to cite or reference information
   f. <del> … </del>   Helps denote a previously deleted section of text.
   g. <strike> … </strike> text with a line through it)
   h. <ins> … </ins>   Section of text that's been inserted in the document.
   i. <blockquote> </blockquote> Reserved for long paragraphs of quotations.
   j. <q> … </q>   These are used for shorter quotations.
   k. <abbr> … </abbr> help denote abbreviations & full form available.
   l. <code> … </code> Code text Displays code snippets
   m. _…   Subscript text- placing it a half line lower
   n. […]   Superscript text- half line higher
   o. <small> … </small> Small size text
   (Add one new paragraph in above HTML file and apply all these tags)
5. Links
   a. …   Anchor text for hyperlink.

b. … Pull up an outgoing message to a specific email
c. … A link to make phone numbers clickable
d. … Useful for bringing users to specific document elements.
e. … An anchor link that brings users specifically to a div element.
(Add address info in above HTML file and apply all these tags)

6. Images
a. <img />   An image tag to include and display image files.
b. src="url"   The URL or file of the image to display.
c. alt="text"   Alternative text that helps explain the image content
d. height=""   The ability to specify image height in pixels or percentages.
e. width=""   The ability to specify width in pixels or percentages.
f. align=""   The alignment of the image
g. border=""   Explains the border thickness (if any).
h. vspace=""   Denote spacing on top or the bottom of the image.
i. hspace=""   Denote spacing on top or the bottom of the image.
j. <map> … </map> Helps you tell users that this is an interactive image with clickable areas.
k. <map name=""> … </map> Name of the map
l. <area />   Specify the area of the image map.
(Add two images in above HTML file and apply all these tags)
(One image from local machine and one from google, using URL)

7. Lists
a. … Create numbered (ordered) lists
b. … Display a bulleted (unordered) list
c. …   Specifies each list item to be bulleted or numbered.
d. <dl> … </dl> Reserved specifically for list items definitions.
e. <dt> … </dt> The definition of a single term inline with body content.
f. <dd> … </dd> The description for the defined term.
(Add lists in above HTML file and apply all these tags)

8. Tables
a. <table> … </table>The table tag identifies and contains all table related content.
b. <caption> …</caption> Description of what the table is
c. <tbody> … </tbody> Table's data or information.
d. <tfoot> … </tfoot>   Footer content.
e. <tr> … </tr>   Information to be included in a single row of the table.
f. <th> … </th> Actual information or data in a single header item.
g. <td> … </td> Contains the actual information or data in a single table cell.
h. <colgroup> … </colgroup>   Groups column for formatting purposes.
i. <col /> Defines a single column of information inside a table.
Example (Add below code in above HTML. Also check all tags)

```
<table>
 <colgroup>
 <col span="2" style="background-color:#FFFFFF">
 <col style="background-color:#FFFFFF">
 </colgroup>
 <tr>
 <th>SN</th>
 <th>Technology</th>
 <th>Exam Duration</th>
 </tr>
 <tr>
 <td>1</td>
 <td>Core Java</td>
 <td>2 hrs</td>
 </tr>
 <tr>
 <td>2</td>
 <td>Advanced Java</td>
 <td>1.5 Hrs</td>
 </tr>
 <tr>
 <td>3</td>
 <td>SQL</td>
 <td>1 Hr</td>
 </tr>
 </table>
```

9. iFrames
    a. <iframe> … </iframe> Allow you to embed external file
       Example (Create a new html file and paste below code in it and open in browser)

```
<!DOCTYPE html>
<html>
<body>
        <iframe src="https://hefshine.com/index.html" height="1000"
width="1200"></iframe>
</body>
</html>
```

10. Embed
    a. <embed> … </embed> Acts as a container for another external application or
       additional plug-in.
       Example (Create a new html file and paste below code in it and open in browser)

```
<!DOCTYPE html>
<html>
<body>
        <embed src="https://www.youtube.com/embed/25pqydh5Ji4"
width=1400 height=900></embed>
</body>
</html>
```

11. Few new Tags in HTML5
    a. <header> … </header>   Defines the header block for a document (or individual section).
    b. <footer> … </footer> Identifies the footer block for the document (or an individual section).
    c. <main> … </main>   Describes the main content of a document.
    d. <article> … </article> Identifies an article inside a document.
    e. <aside> … </aside>   Specifies content contained in a document sidebar.
    f. <section> … </section>   Specifies a section block in the document.
    g. <details> … </details>   Describes additional facts or information that the user can view or hide.
    h. <dialog> … </dialog> A dialog box or window.
    i. <figure> … </figure> An independent content block featuring diagrams, photos, illustrations or more.
    j. <figcaption> … </figcaption> The <figure> element caption that helps describe the figure.
    k. <mark> … </mark> Displays a portion of highlighted text within the page content.
    l. <nav> … </nav>   Navigation links for the user in a document.
    m. <menuitem> … </menuitem> The specific menu item that a user can raise from a popup menu.
    n. <meter> … </meter> Describes the scalar measurement within a known array.
    o. <progress> … </progress>   Displays the progress of a task, usually used for progress bar.
    p. <rp> … </rp> Displays text within browsers that do not support ruby annotations.
    q. <rt> … </rt>   Displays East Asian typography character details.
    r. <summary> … </summary> Contains a visible heading for a <details> element.
    s. <bdi> … </bdi>   Helps you format part of text in a different direction from other text.
    t. <time> … </time>   Identifies the time and date.
    u. <wbr> A line-break within the content.
12. Forms
    a. <form> … </form> The form element creates a form
        i. action="url"   Where data is to be sent when a site visitor submits the form.

      ii.   method=""HTTPmethod (Get, Post),which dictates how to send the form data

      iii.   enctype="" This attribute dictates how the form-data is to be encoded when submitting information back to the web server (for method="post" only).

      iv.   autocomplete :Dictates whether a form should have autocomplete on or off.

      v.   Novalidate: Dictates whether the form should not be validated when submitted.

      vi.   Accept-charsets: Identifies the character encodings upon the form submission.

      vii.   Target: Tells where to display the form response after being submitted, generally one of the following:_blank, _self, _parent, _top

b.   <fieldset> … </fieldset> : Identifies the group of all fields on the form.

c.   <label>…</label> A simple field label, telling the user what to enter in each field.

d.   <legend>…</legend> The form legend acts as a caption for the fieldset element.

e.   <input />   The form input attribute defines the type of field information to receive from a user.Input type attributes:

      i.   type="" Specifies the field input type,includes: text, password, date-time, checkbox, submit etc.

      ii.   name="" Describes the name of the form.

      iii.   value="" Describes the value of input field information.

      iv.   size="" Specifies the input element width in characters.

      v.   maxlength="" Identifies the maximum input element character numbers allowed.

      vi.   Required: Is it mandatory field

      vii.   step=""Identifies the legal number intervals for an input field.

      viii.   width=""Specifies the width (in pixels) of an <input> element.

      ix.   height=""Dictates the height (again, in pixels) of an <input> element.

      x.   placeholder=""Provides a helpful hint to the user, describing what the <input> element value should be.

      xi.   pattern="" Identifies a regular expression that the <input> element gets checked against, making sure the user entered the correct information.

      xii.   min="" The minimum value allowed for each <input> element.

      xiii.   max="" The maximum value allowed for each <input> element.

      xiv.   Autofocus: Says to make sure that the <input> element comes into focus after the page loads.

      xv.   Disabled: Disables an <input> element on the form.

f.   <textarea> … </textarea>   Specifies a large text input for longer messages.

g.   <select> … </select> Describes a drop-down box for user's to select one from a variety of options. Select attributes:

      i.   name="" The name for a drop down combination box.

      ii.   size="" Specifies the number of available, visible options in a drop-down.

iii.   Multiple: Allows for multiple selections to be made at one time.

iv.   Required: Is it mandatory?

v.   Autofocus: Specifies that a drop-down list automatically comes into focus after a page loads.

h.   <optgroup> … </optgroup>: Specifies the entire grouping of available options.

i.   <option> … </option> Defines one of the available options in the drop-down list

i.   value="" Explains the option value available for selection.

ii.   Selected: Defines the default selected option for users.

j.   <button> … </button>: Defines the clickable button for users to submit options.
Example (Add below code in your above HTML)

```
<form action="action.php" method="post">
 <fieldset>
 <legend>Your info:</legend>
 First name:<br>
 <input type="text" name="First Name" value="Sachin"
placeholder="First Name"><br>
 Last name:<br>
 <input type="text" name="Last Name" value="Tendulkar"
placeholder="Last Name"><br><br>
Favorite Bike:<br>
 <select>
 <option value="KTM">KTM</option>
 <option value="Royal Enfield">Royal Enfield</option>
 <option value="Bajaj Pulsar">Bajaj Pulsar</option>
 <option value="TVS Apache">TVS Apache</option>
 <option value="Honda Unicorn">Honda Unicorn</option>
 </select>
 <textarea name="description"></textarea>
 <input type="submit" value="Submit">
 </fieldset>
</form>
```