HTML

SIMPLIFIED

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A HTML Cheatsheet PDF in Pack

www.geekshelp.in

Introduction to HTML

○ HTML stands for Hypertext Markup Language.

○ It is used to create the structure of the webpage.

○ HTML is a markup language not a programming language.

○ With only HTML we can create static website.

○ It is used to display the data or content on the web browser.

○ HTML contains tags and attributes to create webpages.

○ Most of the HTML tags are self closing tags.

Structure of HTML

A basic template or piece of code which defines the structure of the HTML document.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title> HTML Series Document Title </title>
</head>
<body>
    <!-- Body content here -->
</body>
</html>
```

- **DOCTYPE:** It defines the type of document.

- **html:** Root element of the html document from where we start writing html code.

- **head:** It is used to contain meta data.

- **title:** Defines the title of the web page.

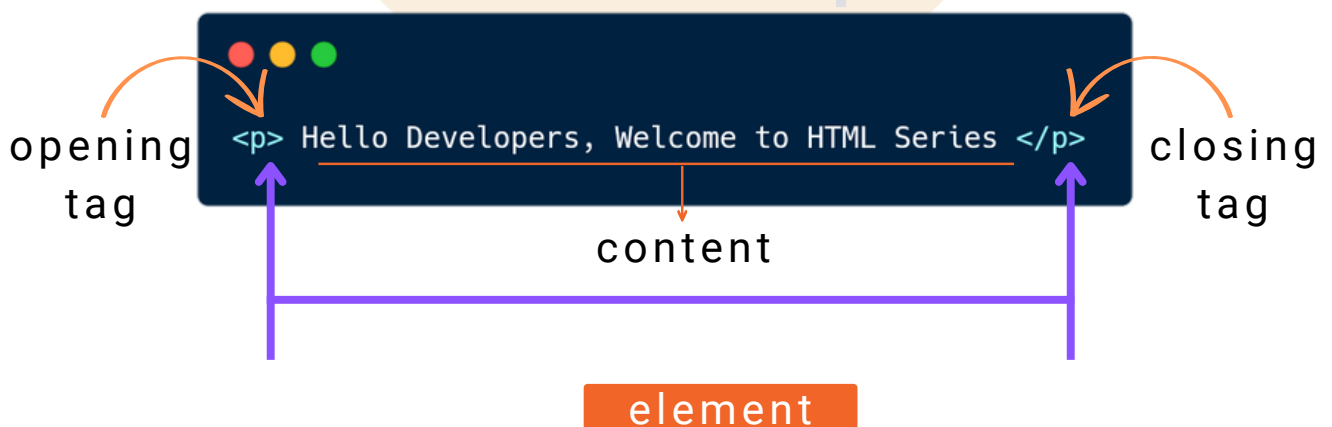- **body:** It contains all the content which will be displayed on the web browser.

HTML Tags:

Tags are used to markup the html elements or use to hold the html elements.

Example: <h1>, <p>, <br>, <table>, <img>, etc.

HTML Element:

HTML element defines that how to display the content of HTML document on the web browser.

opening tag   `<p> Hello Developers, Welcome to HTML Series </p>`   closing tag

content

element

HTML Attributes:

Attributes provides the additional information of the element. And it defines in the starting tag.

```
<a href="https://www.geekshelp.in"> Visit Now </a>
```

It specifies the URL
of the page.

HTML Tags

○ Tags define what will be the format of the content displayed on the web browser.

○ HTML Tags mainly have two parts opening tag and closing tag.

○ Some HTML tags are self-closing tags.

Using HTML Tags:

Heading

- As the name suggests heading tag is used to create the heading on web pages.
- There are 6 headings available in HTML. From h1 to h6.
- h1 is the largest heading and h6 is the smallest heading.

```
<h1> This is h1 heading </h1>
<h2> This is h2 heading </h2>
.............................
<h6> This is h6 heading </h6>
```

Navbar

- <nav> tag is used to create navbar.

```
<nav> It is used to create navbar </nav>
```

Header

- <header> is used to create page header.

```
<header> It is used for the page header </header>
```

Main

- Used to create main content section of webpage.

```
<main> This is the main content section. </main>
```

Div

- <div> tag is used to create division on webpage.

```
<div> This is div tag </div>
```

Section

- <section> is used to the particular section. It can contain more than one HTML tags.

```
<section> This is section </section>
```

Paragraph

- <p> tag is used to create paragraph

```
<p> Hello Developers, Welcome to HTML Series </p>
```

Span

- <span> is used to style the part of text.

```
<span> This is span tag </span>
```

Anchor

- <a> tag is used to create hyperlink.

```
<a href="https://www.geekshelp.in"> Visit Now </a>
```

Footer

- <footer> tag is used to create footer for webpage.

```
<footer> It is used to create footer </footer>
```

Mark

- <mark> tag is used to highlight the background of the text.

```
<mark> This is mark tag </mark>
```

Strike

- <strike> used to place horizontal lines on the text.

```
<strike> This is strike text </strike>
```

Button

- <button> tag used to create button on web page.

```
<button> Click Button </button>
```

Small

- <small> used to display small text.

```
<small> This is small text </small>
```

Pre

- <pre> tag is used to create pre-formatted text.

```
<pre> This is pre-formatted text </pre>
```

List

- `<li>` tag is used to create lists.

```html
<li> My HTML List </li>
```

Code

- `<code>` tag is used to display source code on web page.

```html
<code> alert('JavaScript'); </code>
```

Superscript

- `<sup>` tag is used to create superscript text.

```html
<p>(a+b)<p/><sup>2</sup>
```

Subscript

- `<sub>` tag is used to create subscript text.

```html
<p>H<sub>2</sub>0<p/>
```

Meter

- `<meter>` defines the scale for measurement within the given range and a fractional value.

```html
<meter value="4" min="0" max="10"></meter>
```

Progress

- <progress> is used to create progress bar.

```
<progress value="32" max="100"> 32% </progress>
```

Time

- <time> is used to define time in our webpage.

```
<p>Time start from: <time>10:00</time> to <time>21:00</time> every day.</p>
```

kbd

- <kbd> tag is used to show keyboard key.

```
<p> Press: <kbd>ctr</kbd> + <kbd>c</kbd> for copy to clipboard </p>
```

Datalist

- <datalist> provides the autocomplete feature.

```
<input list="languages" id="" name="" />
    <datalist id="languages">
        <option value="HTML">
        <option value="CSS">
        <option value="JavaScript">
    </datalist>
```

Abbreviation

- <abbr> defines the abbreviation or acronym.

```
<p> Hover on <abbr title="Search Engine Optimization">SEO</abbr> to know the abbrivation </p>
```

Details

- It show/hide the details of summary tag.

```
<details>
        <summary>Do Epic Shit </summary>
        <p>In his first book Ankur Warikoo talks about success and failures,
            importance of habits, self-awareness, entrepreneurship, money and relationships.
        </p>
    </details>
```

Cite

- <cite> it is basically used to render text in italic.

```
<p> <cite>HTML Simplified</cite> by Raju Webdev</p>
```

Canvas

- <canvas> mainly used to draw graphics on a web page.

```
<canvas id="myCanvas" width="200" height="100" style="border:1px solid
#000000;">
</canvas>
```

Text Formatting

○ Text formatting tags are used to format the text of HTML documents.

○ These are mainly used to display the text in a special type.

Bold

- <b> tag is used to bold the text

```
<b>This is bold text</b>
```

Strong

- <strong> tag is also used to bold but it used to give more importance to the text.

```
<strong> This is special strong text </strong>
```

Italic

- <i> tag is used to italic the text.

```
<i> This is an italic text </i>
```

Emphasized

- <em> defines the emphasized text.

```
<em> This is empphasized text </em>
```

Underline

- `<u>` is used to under-line the text.

```
<u> This is underline text </u>
```

Delete

- `<del>` tag is used to define the deleted text.

```
<p>In paragraph <del>is deleted</del></p>
```

Insert

- `<ins>` defines a text that has been inserted into the document.

```
<ins> This is an inserted text </ins>
```

Lists

- Lists are used to group the items in a list.
- In HTML, list are: Ordered List, Unordered List, and Description Lists
- List items are created using `<li>` tag.

Ordered Lists

- Ordered List are created using <ol> tag.
- This type of lists show the data and information in given order.

Unordered Lists

- Unordered List are created using <ul> tag.
- This type of list represents the data without any specific order.

Description Lists

- This type of List represents elements in definition form like a dictionary.

Ordered Lists

- Ordered List are created using <ol> tag.
- This type of lists show the data and information in given order.
- Types of ordered list are: 1, A, a, I, i

Example

```
<ol type="A">
    <li> HTML Simplified </li>
    <li> CSS Master </li>
    <li> JavaScript Doctory </li>
</ol>
```

Unordered Lists

○ Unordered List are created using <ul> tag.

○ This type of list represents the data without any specific order.

○ Type of ordered list are: disc, circle, square, none.

Example

```
<ul type="circle">
    <li> HTML Simplified </li>
    <li> CSS Master </li>
    <li> JavaScript Doctory </li>
</ul>
```

Description Lists

○ It is used to represent elements in definition form like a dictionary.

<dl> tag defines the description list, <dt> tag defines the term, and the <dd> tag describes each term in

Example

```
<dl>
    <dt>HTML Simplified</dt>
        <dd> This is the complete series of HTML </dd>
    <dt> CSS Master </dt>
        <dd> This series will help you to master the CSS </dd>
</dl>
```

Table

- Tables are used to represent data in tabular form on the webpage.
- Tables are the collection or rows or columns.
- Table created using **\<table>** tag.

Tags used in Table

Table

\<table> tag is used to create table.

Table Header

The \<thead> tag defines the header section of a table.

Table Body

\<tbody> is used to group the body content in a table.

Table Footer

\<tfoot> is used to create footer for the table.

Table Head

\<th> used to define the header of table columns.

Table Row

\<tr> tag is used to create table row.

Table Column

\<td> used to create columns in the table.

Example:

```
<table>
    <thead>
        <th> Name </th>
        <th> Role </th>
    </thead>
    <tbody>
        <tr>
            <td> Raju </td>
            <td> Frontend Developer </td>
        </tr>
        <tr>
            <td> Rehana </td>
            <td> Content Creator </td>
        </tr>
    </tbody>
    <tfoot>
        <tr>
            <td colspan="2"> Creators on Instagram </td>
        </tr>
    </tfoot>
</table>
```

Output:

Name	Role
Raju	Frontend Developer
Rehana	Content Creator
Creators on Instagram	

Table Attributes

- We have already discussed that attributes provide additional information about the element.
- Let's see table attributes.

Attributes in Table:

border

It is used to set the border on table.

bgcolor

This attributes used to set the background color of the table.

colspan

This attribute specify the number of columns a cell should span.

rowspan

This attribute specify the number of rows a cell should span.

Example:

```html
<table border="1" bgcolor="#cb4cff">
    <thead>
        <th> Name </th>
        <th> Role </th>
    </thead>
    <tbody>
        <tr>
            <td> Raju </td>
            <td rowspan="2"> Frontend Developer </td>
        </tr>
        <tr>
            <td> CodeWithHarshad </td>
        </tr>
        <tr>
            <td colspan="2"> Book Mentorship Now </td>
        </tr>
    </tbody>
    <tfoot>
        <tr>
            <td colspan="2"> Web Development Mentor </td>
        </tr>
    </tfoot>
</table>
```
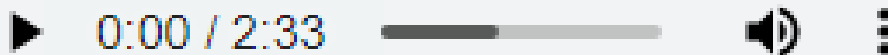
Multimedia Tags

○ Multimedia Tags are used to show multimedia files on a web page.

○ Media files contain multimedia elements such as audio and video.

Audio

<audio> element is used to play an audio file on a web page.

```
<audio controls>
    <source src="myMusic.mp3" type="audio/ogg">
        Audio Cannot play on your device
</audio>
```

Output:

▶ 0:00 / 2:33 ━━━━━━━━━━━━━ 🔊 ⋮

Video

<audio> element is used to show video on a web page.

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

Embed

<embed> element is used to embed the files like audio, video, and HTML Document on the web page.

```
<embed width="20%" height="auto" src="video.mp4">
```

Object

<object> tag is used to add an external object, multimedia files like audio, images, pdf, flash, video, and other webpages on our webpage.

```
<object data="video.mp4" width="25%" height="auto">
    Visit Geeks Help
</object>
```
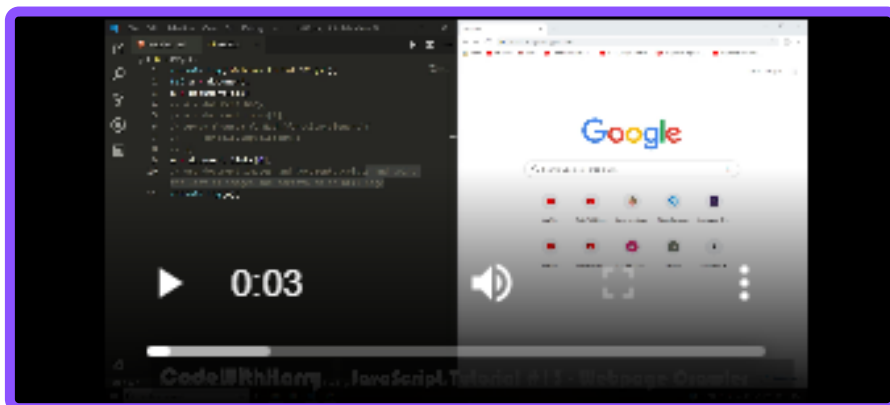
Output:

Image Tag

- <img> tag is used to add the image on our webpage.
- <img> tag don't required any closing tags

Image Attributes

- **src:** It is used to specify the path of the image.
- **alt:** If users are unable to see an image then they will see the alt value.
- **style:** This attribute is used to add the style on the image like, width, height, etc.
- **width:** It is used to specify the width to the image.
- **height:** It is used to specify the height to the image.
- **title:** This attribute is used to set the title on the image.

Using Image Tag

```html
<img src="myImage.png"
     width="50px"
     height="50px"
     alt="raju_webdev image"
     title="I am raju Frontend Web Developer">
```

Output:

I am raju Frontend Web Developer

Anchor Tag

- <a> tag is used to create hyperlinks on the web page.

- It contains the content between the opening and closing tag which will be hyper content.

Anchor Tag Attributes

- **href:** This attribute is used to set the URL.

- **target**: This will specify that where the linked content will be opened.
  - **_blank:** This will open the link in a new tab.
  - **_self:** This will open the link in a current browser tab.
  - **_top:** This works the same as _self.

Using Anchor Tag

```
<a href="https://www.geekshelp.in" target="_blank"> Geeks Help </a>
```

Output:

Geeks Help

Let's do some cool things

i). Link to an email address:

```
<a href="mailto:contact.geekshelp.@gmail.com"> Send Email</a>
```

ii). Link a phone number:

```html
<a href="tel:+91123456789">123456789</a>
```

iii). Go to a section on webpage:

```html
<a href="#section"> Go to Section </a>
```

HTML Form

- Form is a collection of input tags in a HTML document.
- Mainly forms are used to take the data from the user to serve on the server.
- Forms are created using <form> tag.

Form Attributes

- **action:** This attribute specifies what action will be taken aft submitting the form.
- **target:** This specifies on which browser tab the response wil be displayed after form submission.
- **method:** This attribute is used to define the HTTP method us to submit the form.

What a Form Contains?

<input>

<label>

<select>

<option>

<textarea>

<button>

Simple Form Example:

```html
<form action="/index.php" target="_blank" method="get">
    Name: <input type="text">
    Last Name: <input type="text">
    <button type="submit">Submit</button>
</form>
```

Output:

Name: [   ] Last Name: [   ] Submit

Input Tag

- Input tag specifies an input field where the user can enter data.
- Input filed is created using <input> tag.
- Input tag don't need any closing tag.

Types of Input Tag

Text:

```html
Name: <input type="text">
```

Output:

Name: [raju_webdev]

Color:

```
Color: <input type="color">
```

Color: ⬛

Date Time:

```
Date Time: <input type="datetime">
```

Date Time: 22-12-2022

DateTime Local:

```
DateTime Local: <input type="datetime-local">
```

DateTime Local: 03-08-2022 12:28 AM 📅

Email:

```
Email: <input type="email">
```

Email: contact.geekshelp@gmail.c

File:

```
File: <input type="file">
```

File: Choose File No file chosen

Image:

```
Image: <input type="image">
```

Image: Submit

Number:

```
Number<input type="number">
```

Number 20

Password:

```
Password: <input type="password">
```

Phone:

```
Phone: <input type="tel">
```

Range:

```
Range: <input type="range">
```

Radio:

```
Radio: <input type="radio">
```

Time:

```
Time: <input type="time">
```

Reset:

```
Reset: <input type="reset" value="reset">
```

Output:

Password: ●●●●●●●●●●●

Phone: 0123456789

Range: ●━━━━━━

Radio: ◉

Time: 04:24 PM 🕐

Reset: [reset]

URL:

```
URL: <input type="url" name="" id="">
```

URL: www.geekshelp.in

Week:

```
Week: <input type="week">
```

Week: Week 34, 2022

Checkbox:

```
Check: <input type="checkbox">
```

Check: ☑

Button:

```
Button: <input type="button" value="Button">
```

Button: Button

Input Tag Attributes

○ As in some previous posts, we have learned that attributes provide additional information.

○ Now we will learn most common used input tag attributes:

Attributes:

name:

This attribute is used to specify the name to the element.

```
Name: <input type="text" name="text">
```

placeholder:

It represent that what type of value you can insert in the input field.

```
Placeholder: <input type="text" placeholder="Enter your name ... ">
```

disabled:

It is used to disable the input field from the user side.

```
Disabled: <input type="text" disabled value="raju_webdev">
```

value:

This attribute is used to set the initial value to the input field.

```
Value: <input type="text" value="raju">
```

readonly:

This attribute is used to make read-only input field.

```
Readonly: <input type="text" readonly value="raju">
```

required:

This specifies that the input field must be filled.

```
Required: <input type="text" required>
```

Semantic Elements

- The elements in HTML which define their meaning are semantic elements.
- And also these elements describe their content.

Elements:

form

Used to take the data from the user to process on the server.

```
<form action="/index.php"> </form>
```

table

Used to represent the data in tabular form.

```
<table> </table>
```

article

Used to contain, blog posts, articles, comments, etc.

```
<article> </article>
```

header

It is used to create the header part on the web page.

```
<header> </header>
```

nav

It is used to create a navigation bar. And it contains many navigation links.

```
<nav> </nav>
```

main

This specifies the main content on the web page.

```
<main> </main>
```

footer

Used to create the footer of the web page.

```
<footer> </footer>
```

section

It is used to create sections on the web page.

```
<section> </section>
```

details

It is used to define additional details that a user can view or hide

```
<details> </details>
```

aside

It is used to create a sidebar on the webpage.

```
<aside> </aside>
```

Non-Semantic Elements

The elements in HTML which don't represent any meaning.

And these elements don't describe anything about their content.

Elements:

div

It is used to create the division of content on web page.

```
<div> </div>
```

span

It is used to mark up a part of the text.

```
<span> </span>
```

Block Elements

- Block elements take the full width of the browser window.
- Block elements start with new lines.

Elements:

- <article>
- <aside>
- <div>

- <form>
- h1...h6
- <header>

- <hr>
-
- <main>

- <nav>
-
- <p>
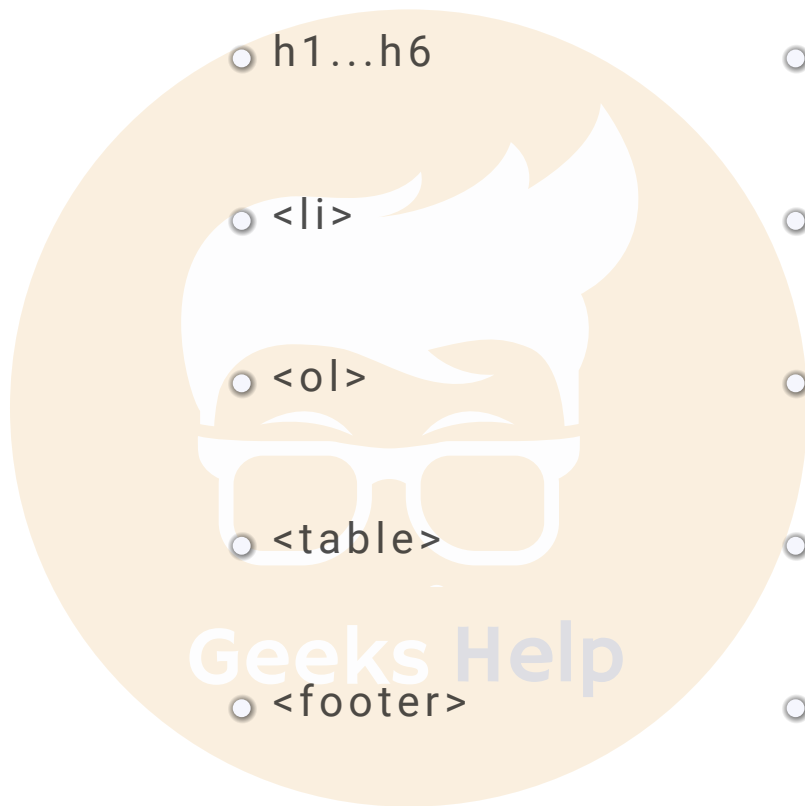
- <section>
- <table>
-

- <video>
- <footer>
- <pre>

Inline Elements

- Inline elements take the width which is necessary for the element.
- Inline elements don't start with new lines.

Elements:

- <a>
- <abbr>
- <b>

-
- <cite>
- <code>

- <em>
- <i>
- <img>

- <input>
- <kbd>
- <small>

- <span>
- <strong>
- <sub>

- <sup>
- <textarea>
- <time>

iframe

- iframes are used to embed different pages on the current web page.
- Mainly used to embed videos and advertisements on a single web page.
- iframes are created using **<iframe>** tag.

Syntax:

```html
<iframe src="url" title="description" frameborder="1"></iframe>
```

Attributes:

src: Specify the URL of the web page which you want to embed.

title: It is used to describe the contents of the frame.

frameborder: It is used to draw a border around the frame.

height: It is used to set the height to the iframe.

width: It is used to set the width to the iframe.

style: style attribute is used to add custom style on the iframe.

Using iframe

No, it's time to see, how iframe really used and how we can see the iframe output.

```html
<iframe src="https://www.geekshelp.in"
        title="Website for web developers and computer science students"
        frameborder="1"
        height="300px"
        width="400px"
        style="border: 5px solid purple;">
</iframe>
```

Output:

HTML Entities

- In HTML, entities are used to display reserved characters.
- HTML entities start with an (&) and ends with a semicolon (;).

HTML Entities are:

Entity Name	Description	Output
&	ampersand	&
<	less than	<
>	greater than	>
	non-breaking space	
£	pound	£
©	copyright	©
®	registered trademark	®
¢	cent	¢
'	single quotation mark (apostrophe)	'
¥	yen	¥

Using HTML Entities:

```html
<p> &copy; All Rights Resered - Geeks Help</p>
```

Output:

© All Rights Resered - Geeks Help

Favicon

- A favicon is an image displayed before the title of our web page.
- `<link>` tag is used add favicon on web page.

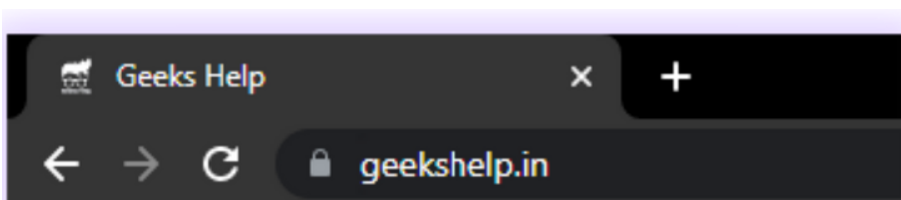This is favicon
for
geekshelp.in

Example:

```
<!DOCTYPE html>
<html>
<head>
    <title> Geeks Help </title>
    <link rel="icon" type="image/x-icon" href="./favicon.ico">
</head>
<body>


</body>
</html>
```
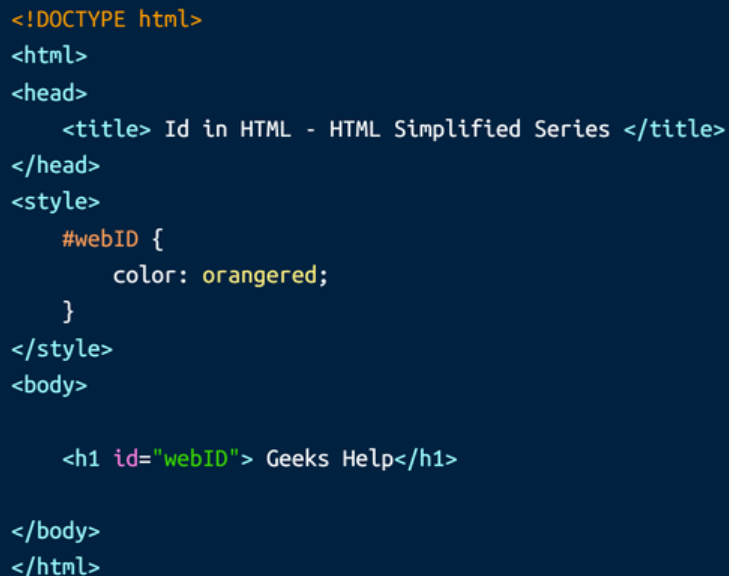
Output:

Id

- Id is used to specify a unique id for an HTML element.
- We cannot add a single id to the multiple HTML elements.
- Id for an HTML element will be unique in the entire HTML document.
- Id is specified using **id** attribute in the HTML element.

Example:

```html
<!DOCTYPE html>
<html>
<head>
    <title> Id in HTML - HTML Simplified Series </title>
</head>
<style>
    #webID {
        color: orangered;
    }
</style>
<body>

    <h1 id="webID"> Geeks Help</h1>

</body>
</html>
```

Uses of Id

- In stylesheet it is used to target the specific element.
- Used to access the element in JavaScript.
- Used to jump on the specific section on our Webpage
- In CSS elements with id is accessed using (#) hash.

Classes

- class is used to target the multiple elements from the HTML doucment.
- We can add the same class to the multiple elements.
- One elements can one or more than one classes.

Example:

```
<!DOCTYPE html>
<html>
<head>
    <title> Class in HTML - HTML Simplified Series </title>
</head>
<style>
    .myPara {
        color: green;
    }
</style>
<body>

    <p class="myPara"> This is first paragraph </p>
    <p class="myPara"> This is second paragraph </p>

</body>
</html>
```

Uses of class

- It used when we want to add the same style on multiple elements with css.
- Also in JavaScript classes are used to access multiple elements.
- In CSS elements with class are accessed using (.) dot.

<!-- -->	<button>	<embed>
<!DOCTYPE>	**<canvas>**	**<fieldset>**
<a>	<caption>	<figure>
<abbr>	<center>	<footer>
<acronym>	<cite>	<form>
<address>	<code>	<frameset>
<applet>	**<datalist>**	**<h1> to <h6>**
<article>	<dd>	<head>
<aside>	<del>	<header>
<audio>	<details>	<hr>
<b>	<dfn>	<html>
<big>	<div>	**<i>**
<blockquote>	<dl>	<iframe>
<body>	<dt>	<img>
 	<em>	<input>
<ins>	<script>	<thead>
<kbd>	**<section>**	<time>
<label>	<select>	<title>
<legend>	<small>	<tr>

-
- **<mark>**
- <meta>
- <meter>
- **<nav>**
- **<object>**
-
- <option>
- **<p>**
- <pre>
- <progress>
- <base>
- **<bdo>**
- <data>
- <map>
- <optgroup>
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- <style>
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- <output>
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