

# HTML5-GETTING STARTED

## BRIDGE COURSE



GRADE-7

### PRIMARY PREVIEW

- ⊙ HTML
- ⊙ HTML Editor
- ⊙ Structure of an HTML5 Document
- ⊙ Displaying a Web Page in a Web Browser
- ⊙ Editing an Existing HTML Document
- ⊙ History of HTML
- ⊙ Tags and Attributes
- ⊙ Creating and Saving an HTML Document
- ⊙ Basic HTML Tags
- ⊙ Features of HTML5
- ⊙ Rules for Writing HTML5 Code
- ⊙ Comments



### HTML

HTML (HyperText Markup Language) is the standard language for creating web content like text, images, links, videos and audio. HTML5, released in 2014, is the latest version. To work with it, you need a web browser and an HTML editor.

A web page is a single page on the Internet with text, images, videos or links. A website is a collection of linked web pages under one address, written in HTML.

### HYPertext

HyperText is text with links (hyperlinks) that take you to another page, resource or section when clicked.

### HINTS & HACKS

The default colour of a hyperlink is blue. If you click on it once, it changes to purple by default.

### MARKUP LANGUAGE

A markup language controls how text, images and elements appear on a page. It uses special tags to define formatting, layout and display in a web browser.

Think Tank



Suppose, writing HTML5 code was like casting a spell. What kind of digital spells would you create and what effects would they have on your web page?



## HISTORY OF HTML

Tim Berners-Lee, a CERN scientist, invented the first version of HTML to help scientists share research. He also laid the foundation for the World Wide Web.



## FEATURES OF HTML5

The main features of HTML5 are:

- ❖ It works on any device—computer, tablet or phone.
- ❖ It is easy to learn and doesn't need complicated skills.
- ❖ It lets you create links to other web pages.
- ❖ It is not case-sensitive. Tags work the same in uppercase or lowercase.
- ❖ It can be used to create all kinds of web pages, from simple to complex ones.
- ❖ It lets you add pictures, videos and music to your web page.

### FACT File

In 1990, Tim Berners-Lee made the first web browser.



## HTML EDITOR

HTML files are generally called HTML documents. They are created in an HTML editor and saved with the extension .html.

HTML editors can be of two types: WYSIWYG editors and Text editors.

### WYSIWYG EDITOR

WYSIWYG (What You See Is What You Get) editors let developers see the final appearance while creating a page. They offer graphical tools for design. Examples include Adobe Dreamweaver, CKEditor and Google Web Designer.

### TEXT EDITOR

HTML documents can be created with text editors like Notepad or WordPad, but you must know HTML tags and their usage.

### RAPID RECALL

Tick (✓) if you know this.

1. HTML stands for HyperText Markup Language.
2. HTML lets you add pictures, videos and music to your web page.



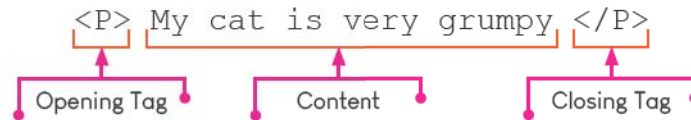
## TAGS AND ATTRIBUTES

Tags are HTML building blocks used to structure web content like headings, paragraphs, links and images. Enclosed in `< >`, each tag has a specific meaning interpreted by the browser.

**Syntax:**

```
<TAG_NAME> content </TAG_NAME>
```

**For example:**



Most HTML tags have opening and closing tags. The opening tag `< >` starts an element and the closing tag `</ >` ends it. Together with the content, they form an element.

### TYPES OF TAGS

HTML5 tags can be classified into two types:

- ❖ **Container Tags:** Container tags have opening and closing tags that enclose data. The closing tag has a forward slash. Examples include `<P>...</P>`, `<HTML>...</HTML>`, `<HEAD>...</HEAD>`, `<BODY>...</BODY>` and `<H1>...</H1>`.
- ❖ **Empty Tags:** An empty tag is a tag that does not have a closing tag. It is used by itself to add something to a web page. Examples of empty tags include `<HR>` and `<BR>`.

### NESTING TAGS

Nesting tags means placing one HTML tag inside another. Tags follow LIFO (Last In First Out): the last opened tag must be closed first.

**For example:**

```
<BODY> <H1> Web Browser </H1> </BODY>
```

### ATTRIBUTE

An attribute adds extra information to an HTML tag. It has a name and value, is placed in the opening tag and the value is enclosed in quotes.

**Syntax:**

```
<TAG_NAME ATTRIBUTE_NAME="VALUE">...</TAG_NAME>
```



## RULES FOR WRITING HTML5 CODE

Some of the basic rules for writing HTML5 code are:

- ❖ Content should be placed between opening and closing tags.

- ❖ There should not be any space within the tag. For example, < T A G> is incorrect.
- ❖ All container tags require a closing tag with a forward slash followed by the tag name.
- ❖ Tag names must be enclosed in angle brackets without spaces.
- ❖ When nesting, the inner tag should be closed before closing the outer tag.
- ❖ An attribute should be present in the opening tag.



## STRUCTURE OF AN HTML5 DOCUMENT

The basic structure of an HTML document is as follows:

```

<!DOCTYPE HTML>

<HTML>
<HEAD>
<TITLE>Title of the web page</TITLE>
</HEAD>

<BODY>
Content of the Web page
</BODY>
</HTML>

```

Diagram annotations: A pink box highlights the <HEAD> section, with a label 'Head Section' pointing to it. Another pink box highlights the <BODY> section, with a label 'Body Section' pointing to it.

### THE <!DOCTYPE HTML> TAG

All HTML5 documents start with <!DOCTYPE HTML>, telling the browser to interpret the document as HTML5.

### THE <HTML> TAG

The <HTML> tag is the root of an HTML document. The <HTML> tag is the container tag for all other HTML elements, except for the <!DOCTYPE HTML> declaration.

### THE <HEAD> TAG

The <HEAD> tag contains metadata about the web page. It includes tags that provide information about the web page but are not displayed directly on the page itself. Tags that can be placed inside the <HEAD> tag include <TITLE>, <STYLE>, <SCRIPT> and <META>.

### THE <TITLE> TAG

The <TITLE> tag is a container tag. It defines the title of the document. It can only contain text and it is displayed on the web browser's title bar or the page's tab.

## THE <BODY> TAG

The <BODY> tag is a container tag. It defines the section of the HTML document that is visible in the web browser. It contains all other tags that define the content and presentation elements, such as images, text, lists, tables and links for navigating between web pages.



## CREATING AND SAVING AN HTML DOCUMENT

To create your own web page, you need a text editor. You can use any text editor, such as Notepad, Sublime Text, Vim or VS Code and view the page in a web browser, like Microsoft Edge, Google Chrome or Mozilla Firefox. Notepad is the default text editor in Windows 11.

To create and save an HTML document, follow the given steps:

1 Open the Notepad text editor and write the HTML code.

2 Click on the File menu from the Menu bar.

3 Click on the Save option from the drop-down menu.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Welcome to My First Web Page </TITLE>
</HEAD>
<BODY> Welcome to My First Web Page!!!
</BODY>
</HTML>
```

The Save as dialog box appears on the screen.

**SHORT SIGN**

To save the current file with a different name:  
Ctrl + Shift + S

5 Type the desired name for your document in the File name text box, followed by the .html extension.

4 Choose the location where you want to save the document.

6 Click on the Save button.

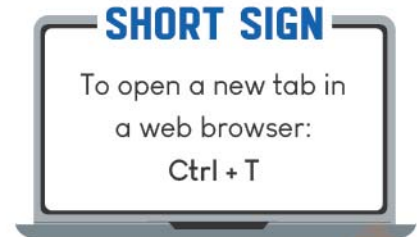
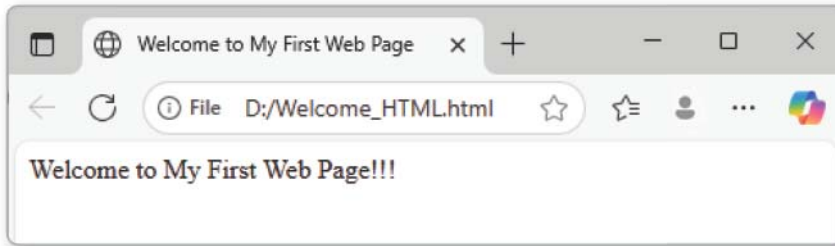
File name: Welcome\_HTML.html  
Save as type: Text documents (\*.txt)  
Encoding: UTF-8

The document will be saved with the given name.



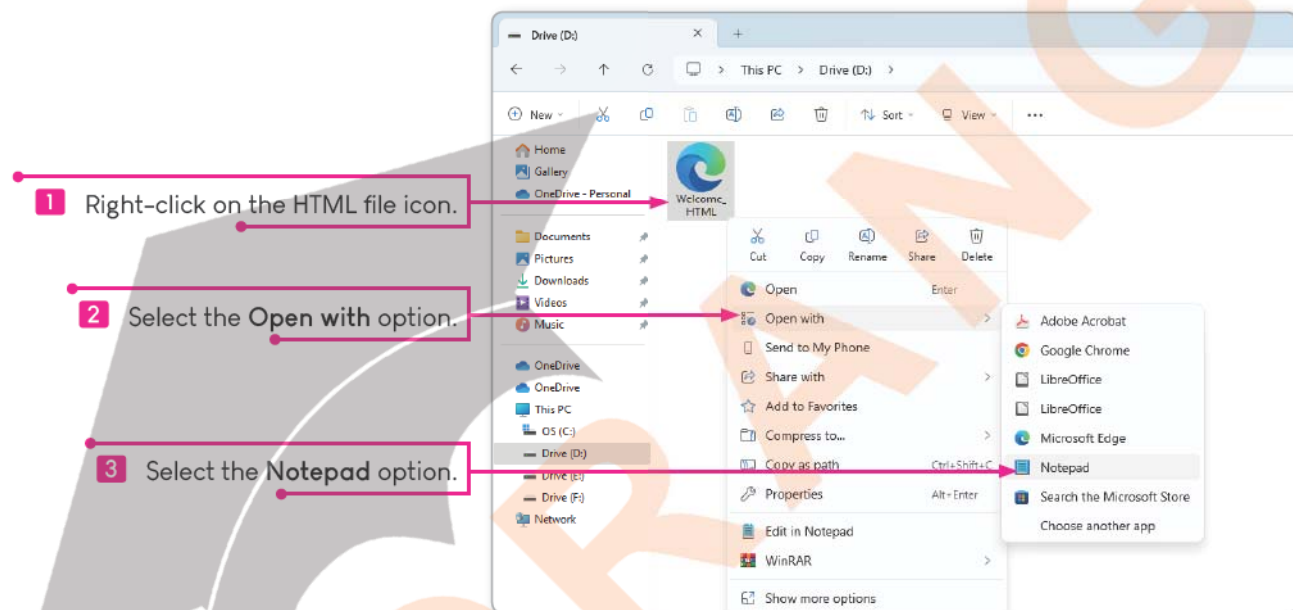
## DISPLAYING A WEB PAGE IN A WEB BROWSER

Once you have created and saved an HTML document, you need to open it in a web browser to view it. To do this, go to the folder where the file is saved and double-click the file. The web page will automatically open in your default web browser.



## EDITING AN EXISTING HTML DOCUMENT

Editing an HTML document means opening the file, making changes, saving it and viewing the updated page in a browser. To edit an HTML document, follow the given steps:



This will open your HTML document in Notepad so that you can make changes to the file. After making the required modifications, you need to save the file by pressing the **Ctrl+S** keys.

If your web page is already open in a Web browser, you need to press the **F5** key to see the modification you have made.



Create an HTML web page using the title The Water. Use the `<H1>` tag for the heading and `<P>` tag to add a description.

+ | Study





## BASIC HTML TAGS

HTML provides various tags such as `<Hn>`, `<P>`, `<BR>`, `<HR>`, `<B>` and many more. Let's now discuss tags in detail.

### THE `<Hn>` TAG

`<Hn>` tags define headings in HTML, from `<H1>` (largest) to `<H6>` (smallest). They are container tags used to organise web page content.

The syntax for using the heading tags is as follows:

```
<Hn> Content of the Heading </Hn>
```

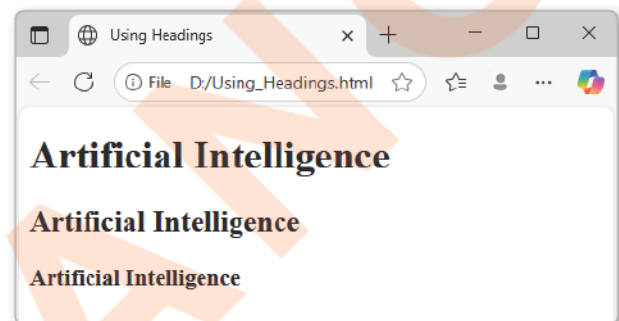
### HINTS & HACKS

When you use a heading tag, web browsers automatically add space (margins) above and below the heading.

Code  
1

Write the HTML code to present the given web page using the `<Hn>` tag.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Using Headings </TITLE>
</HEAD>
<BODY>
<H1>Artificial Intelligence </H1>
<H2>Artificial Intelligence </H2>
<H3>Artificial Intelligence </H3>
</BODY>
</HTML>
```



### THE `<BR>` TAG

Pressing Enter in HTML doesn't create a new line; text flows continuously. Use the empty `<BR>` tag for line breaks.

Code  
2

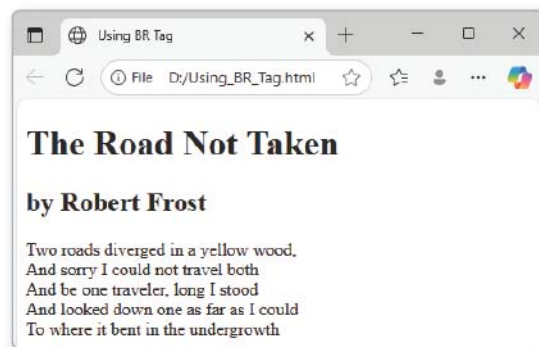
Write the HTML code to present the given web page using the `<BR>` tag.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Using BR Tag </TITLE>
</HEAD>
```

```

<BODY>
<H1> The Road Not Taken</H1>
<H2> by Robert Frost</H2>
Two roads diverged in a yellow wood, <BR>
And sorry I could not travel both <BR>
And be one traveler, long I stood <BR>
And looked down one as far as I could <BR>
To where it bent in the undergrowth
</BODY>
</HTML>

```



## THE <HR> TAG

The <HR> tag is used in HTML to insert a horizontal rule that visually separates sections of content on a web page. It is typically used to divide sections within the page.

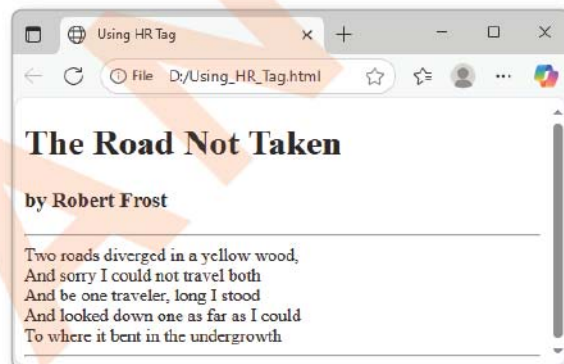
Code  
3

Write the HTML code to present the given web page using <HR> tag.

```

<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Using HR Tag </TITLE>
</HEAD>
<BODY>
<H1> The Road Not Taken</H1>
<H3> by Robert Frost</H3>
<HR>
Two roads diverged in a yellow wood, <BR>
And sorry I could not travel both <BR>
And be one traveler, long I stood <BR>
And looked down one as far as I could <BR>
To where it bent in the undergrowth
<HR>
</BODY>
</HTML>

```



## THE <P> TAG

The <P> tag is used to define a new paragraph in HTML5, which starts with <P> and ends with </P>. It is a container tag. By default, paragraphs are left-aligned.

The syntax for using the <P> tag is as follows:

```
<P> Paragraph Content </P>
```

Code  
4

Write the HTML code to display the given web page using the <P> tag.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE> Using Paragraph Tag
</TITLE><BODY>
<H1>Bengal Tiger</H1>
<P>
The Bengal Tiger is a majestic and powerful predator native to the
Indian subcontinent. Bengal Tigers are found in a variety of habitats,
including forests, grasslands and mangrove swamps.
</P>
</BODY>
</HTML>
```



## THE <B> TAG

The <B> tag is used to make text bold. It is a container tag

For example: <P><B>iPhone</B> is a popular smartphone. </P>

Output: **iPhone** is a popular smartphone.

## THE <I> TAG

The <I> tag is used to italicise text. It is a container tag.

For example: <P><I>iPhone</I> is a popular smartphone. </P>

Output: *iPhone* is a popular smartphone.

## THE <U> TAG

The <U> tag is used to underline text. It is a container tag. The <U> tag in HTML5 is used to represent a span of text that is not clearly explained but is clearly highlighted for important meaning.

For example: <P><U>iPhone</U> is a popular smartphone. </P>

Output: iPhone is a popular smartphone.

## THE <SUP> TAG

The <SUP> tag is used to show superscript text. It displays smaller text above the normal line. It is a container tag. For example,  $x^2 + y^2$  is coded as  $x<SUP>2</SUP> + y<SUP>2</SUP>$ .

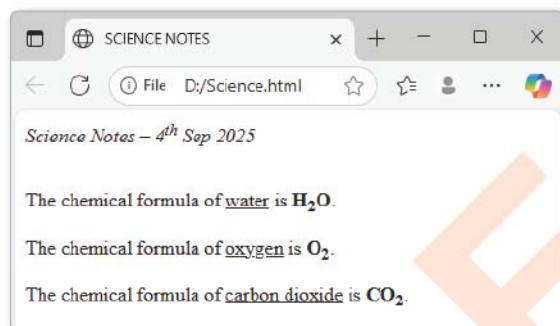
## THE <SUB> TAG

The <SUB> tag is used to show subscript text. It display the text smaller than the normal text and below the margin line of text. It is a container tag. For example, H<sub>2</sub>O is coded as H<SUB>2</SUB>O.

Code  
5

Write the HTML code to display the given web page using the <B>, <I>, <U> <SUP> and <SUB> tags.

```
<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE>SCIENCE NOTES</TITLE>
</HEAD>
<BODY>
<I>Science Notes -
4<SUP>th</SUP> Sep 2025</I><BR><BR> <P>
The chemical formula of <U>water</U> is <B>H<SUB>2</SUB>O</B>.
</P>
<P>
The chemical formula of <U>oxygen</U> is <B>O<SUB>2</SUB></B>.
</P>
<P>
The chemical formula of <U>carbon dioxide</U> is <B>CO<SUB>2</SUB></B>.
</P>
</BODY>
</HTML>
```



LIVE ((O))  
LEARNING

Create a web page by following these instructions:

- Title: Teacher's Day.
- Heading: Thank You, Teacher.
- Write a paragraph expressing gratitude towards your teacher.

### RAPID RECALL

Tick (✓) if you know this.

- Tags are the building blocks of HTML used to create and structure content on the web.
- An attribute provides additional information or properties for an HTML tag.



## COMMENTS

HTML comments add explanations in code and are not shown on the web page. They start with `<!--` and end with `-->`.

The syntax for using comments in HTML is as follows:

```
<!-- REMARKS CAN BE ADDED HERE -->
```

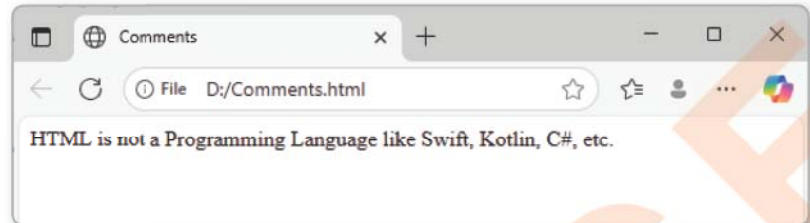
Code  
6

Write the HTML code to present the given web page using the `<!-- -->` tag.

```

<!DOCTYPE HTML>
<HTML>
<HEAD>
<TITLE>Comments</TITLE>
</HEAD>
<BODY>
<!-- This line will not be displayed on the web page. -->
HTML is not a Programming Language like Swift, Kotlin, C#, etc.
</BODY>
</HTML>

```



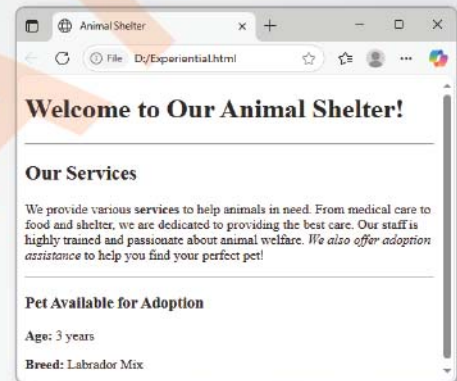
### EXPERIENTIAL LEARNING

Create a web page on "Animal Shelter" in HTML5 similar to the one given below using the following instructions:

- The title of the web page should be **Animal Shelter**.
- Add the heading as **Welcome to Our Animal Shelter!**.
- Write paragraphs describing the **animal shelter**, its services and the animals available for adoption.

21st  
Century  
Skills

#Information Literacy  
#Creativity



### TECH

### TERMS

- Syntax:** Syntax refers to the rules that define the structure and arrangement of statements in a programming language.
- Case-sensitive:** Case-sensitive means that uppercase and lowercase letters are treated as different and distinct.
- Metadata:** Metadata is data that provides information about other data, like the author or date of creation or description.

## REWIND RUN

- HTML (HyperText Markup Language) is the standard language for creating web content like text, images, links, videos and audio.
- WYSIWYG (What You See Is What You Get) editors let developers see the final appearance while creating a page.
- HTML documents can be created with text editors like Notepad or WordPad.
- Tags are HTML building blocks used to structure web content like headings, paragraphs, links and images.
- An attribute adds extra information to an HTML tag.
- Editing an HTML document means opening the file, making changes, saving it and viewing the updated page in a browser.
- `<Hn>` tags define headings in HTML, from `<H1>` (largest) to `<H6>` (smallest).
- HTML comments add explanations in code and are not shown on the web page.

