WHAT IS HTML

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HTML is an acronym which stands for **Hyper Text Markup Language** which is used for creating web pages and web applications. Let's see what is meant by Hypertext Markup Language, and Web page.

Hyper Text: HyperText simply means "Text within Text." A text has a link within it, is a hypertext. Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext. HyperText is a way to link two or more web pages (HTML documents) with each other.

Markup language: A markup language is a computer language that is used to apply layout and formatting conventions to a text document. Markup language makes text more interactive and dynamic. It can turn text into images, tables, links, etc.

Web Page: A web page is a document which is commonly written in HTML and translated by a web browser. A web page can be identified by entering an URL. A Web page can be of the static or dynamic type. **With the help of HTML only, we can create static web pages**.

Hence, HTML is a markup language which is used for creating attractive web pages with the help of styling, and which looks in a nice format on a web browser. An HTML document is made of many HTML tags and each HTML tag contains different content.

Let's see a simple example of HTML.

```
1. <!DOCTYPE>
2. <html>
3. <head>
4. <title>Web page title</title>
5. </head>
6. <body>
7. <h1>Write Your First Heading</h1>
8. <p>Write Your First Paragraph.</p>
9. </body>
10. </html>
```

Description of HTML Example

<!DOCTYPE>: It defines the document type or it instruct the browser about the version of HTML.

<html > :This tag informs the browser that it is an HTML document. Text between html tag describes the web document. It is a container for all other elements of HTML except <!DOCTYPE>

<head>: It should be the first element inside the <html> element, which contains the metadata(information about the document). It must be closed before the body tag opens.

<title>: As its name suggested, it is used to add title of that HTML page which appears at the top of the browser window. It must be placed inside the head tag and should close immediately. (Optional)

<body> : Text between body tag describes the body content of the page that is visible to the end user. This tag contains the main content of the HTML document.

<h1> : Text between <h1> tag describes the first level heading of the webpage.

<p> : Text between <p> tag describes the paragraph of the webpage.

Brief History of HTML

In the late 1980's , a physicist, Tim Berners-Lee who was a contractor at CERN, proposed a system for CERN researchers. In 1989, he wrote a memo proposing an internet based hypertext system.

Tim Berners-Lee is known as the father of HTML. The first available description of HTML was a document called "HTML Tags" proposed by Tim in late 1991. The latest version of HTML is HTML5.

HTML Versions

Since the time HTML was invented there are lots of HTML versions in market, the brief introduction about the HTML version is given below:

HTML 1.0: The first version of HTML was 1.0, which was the barebones version of HTML language, and it was released in1991.

HTML 2.0: This was the next version which was released in 1995, and it was standard language version for website design. HTML 2.0 was able to support extra features such as form-based file upload, form elements such as text box, option button, etc.

HTML 3.2: HTML 3.2 version was published by W3C in early 1997. This version was capable of creating tables and providing support for extra options for form elements. It can also support a web page with complex mathematical equations. It became an official standard for any browser till January 1997. Today it is practically supported by most of the browsers.

HTML 4.01: HTML 4.01 version was released on December 1999, and it is a very stable version of HTML language. This version is the current official standard, and it provides added support for stylesheets (CSS) and scripting ability for various multimedia elements.

HTML5 : HTML5 is the newest version of HyperText Markup language. The first draft of this version was announced in January 2008. There are two major organizations one is W3C (World Wide Web Consortium), and another one is WHATWG(Web Hypertext Application Technology Working Group) which are involved in the development of HTML 5 version, and still, it is under development.

Features of HTML

1) It is a very **easy and simple language**. It can be easily understood and modified.

2) It is very easy to make an **effective presentation** with HTML because it has a lot of formatting tags.

3) It is a **markup language**, so it provides a flexible way to design web pages along with the text.

4) It facilitates programmers to add a **link** on the web pages (by html anchor tag), so it enhances the interest of browsing of the user.

5) It is **platform-independent** because it can be displayed on any platform like Windows, Linux, and Macintosh, etc.

6) It facilitates the programmer to add **Graphics, Videos, and Sound** to the web pages which makes it more attractive and interactive.

7) HTML is a case-insensitive language, which means we can use tags either in lower-case or upper-case.

NOTE: It is recommended to write all tags in lower-case for consistency, readability, etc.

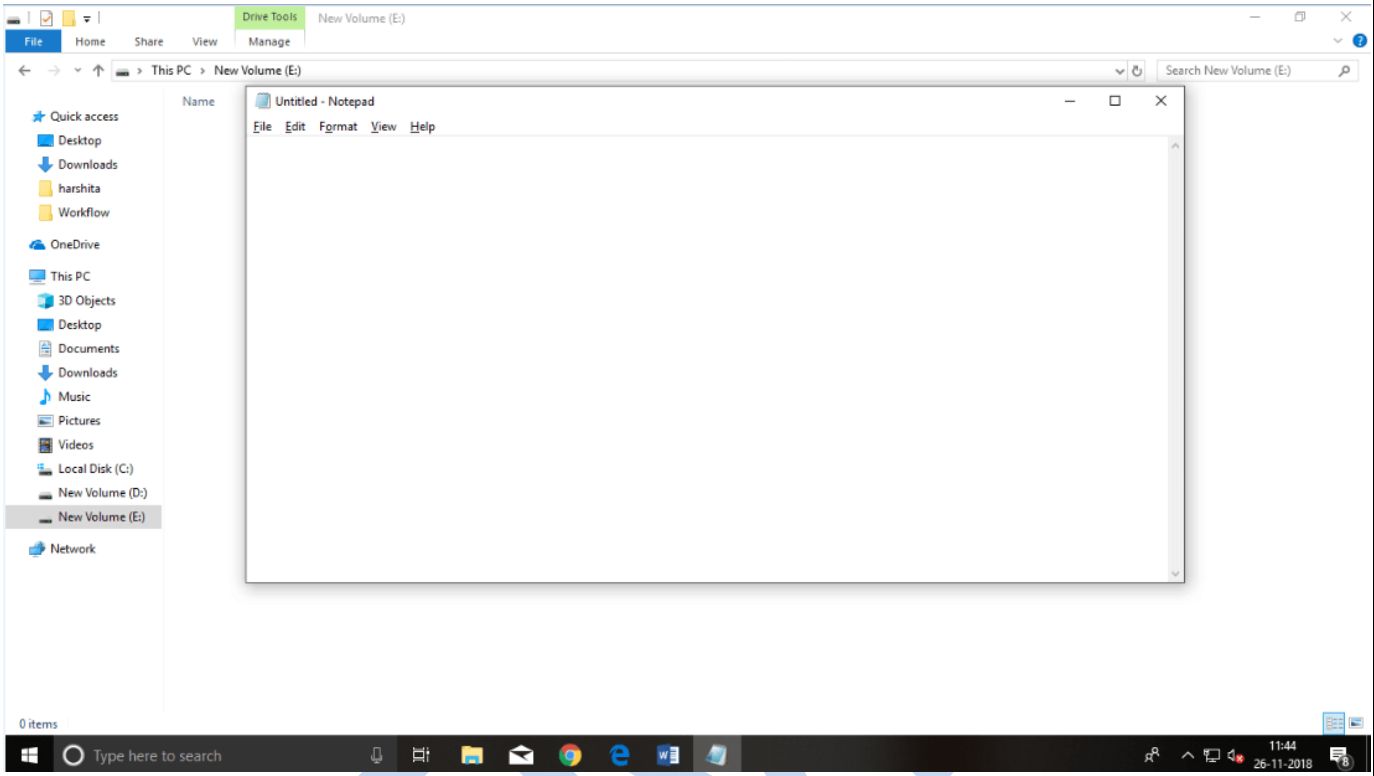
HTML TEXT EDITORS

- An HTML file is a text file, so to create an HTML file we can use any text editors.
- Text editors are the programs which allow editing in a written text, hence to create a web page we need to write our code in some text editor.
- There are various types of text editors available which you can directly download, but for a beginner, the best text editor is Notepad (Windows) or TextEdit (Mac).
- After learning the basics, you can easily use other professional text editors which are, **Notepad++, Sublime Text, Vim, etc**.
- In our tutorial, we will use Notepad and sublime text editor. Following are some easy ways to create your first web page with Notepad, and sublime text.

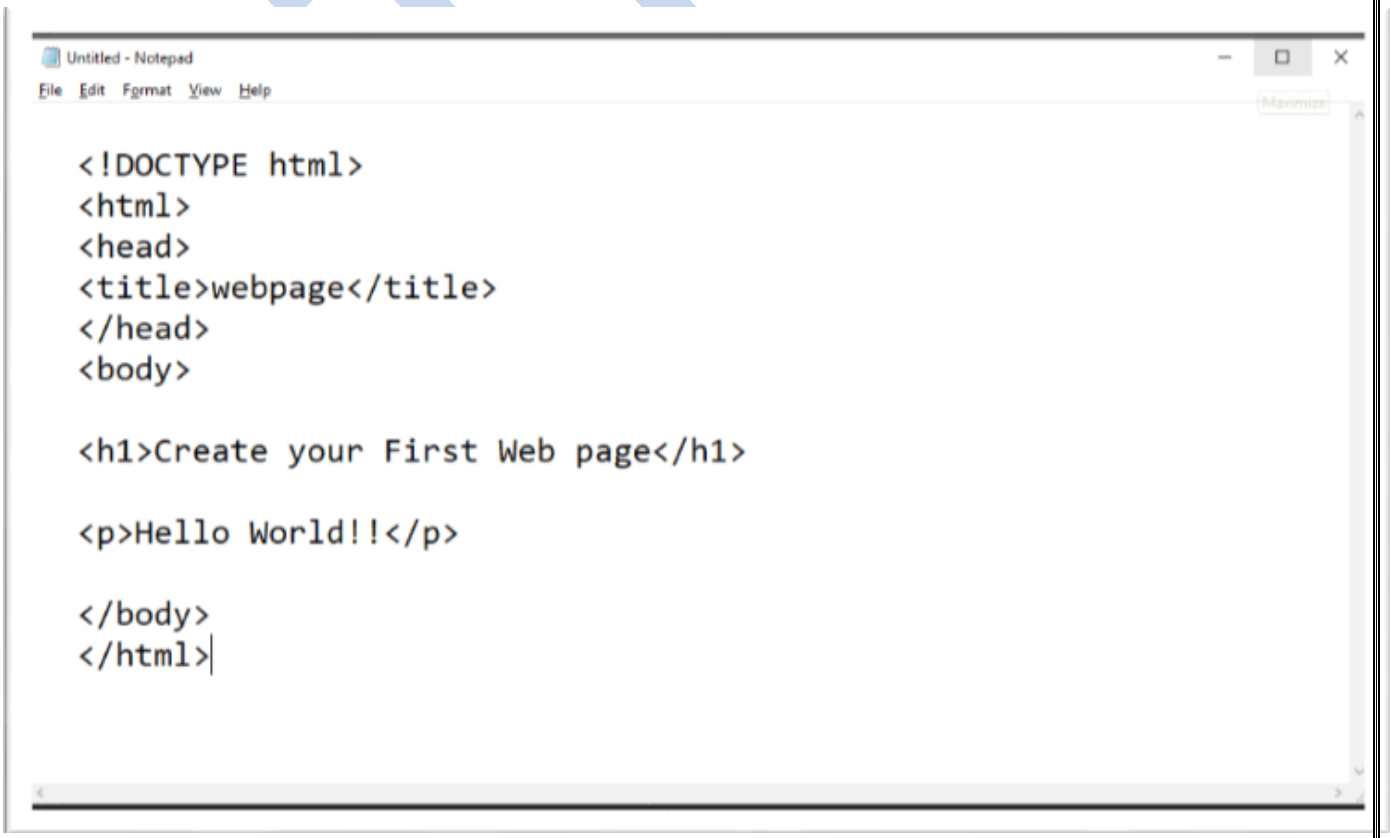
A. HTML code with Notepad. (Recommended for Beginners)

Notepad is a simple text editor and suitable for beginners to learn HTML. It is available in all versions of Windows, from where you easily access it.

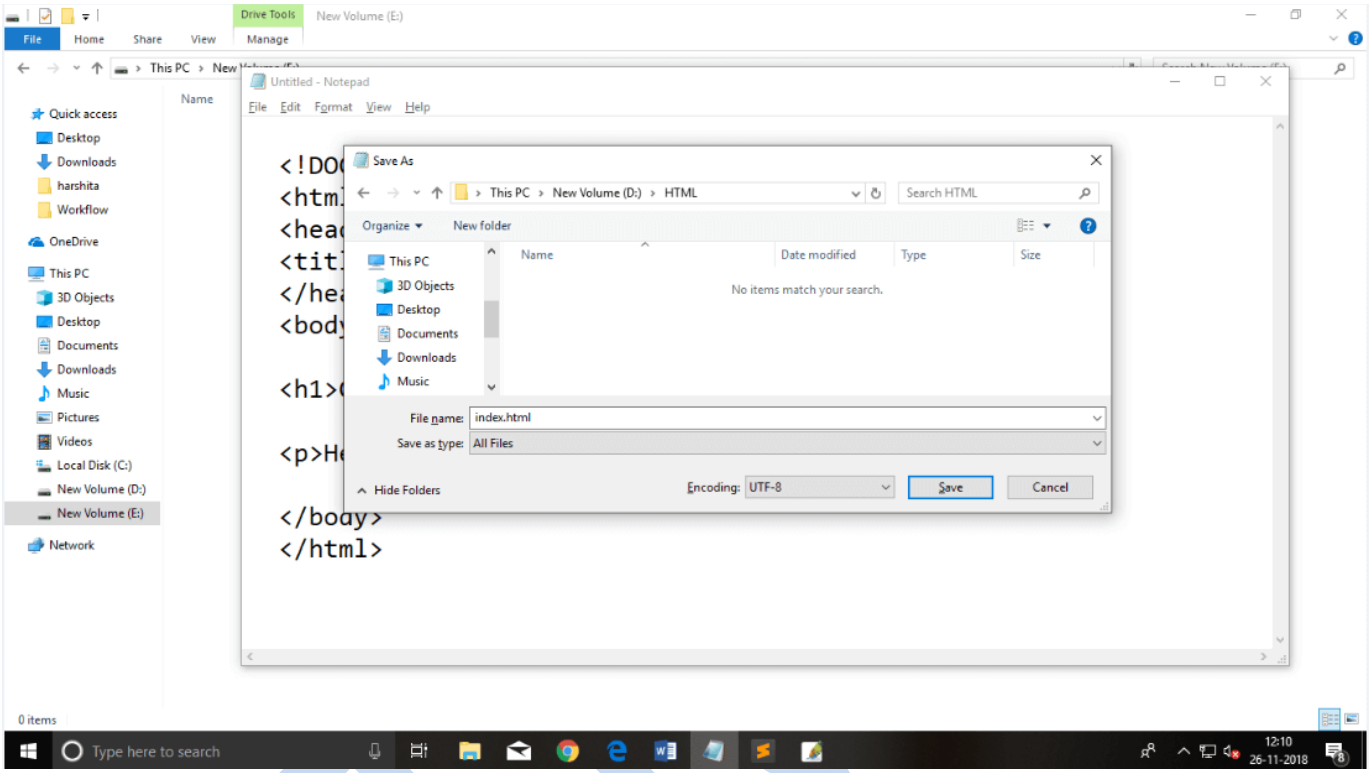
Step 1: Open Notepad (Windows)



Step 2: Write code in HTML

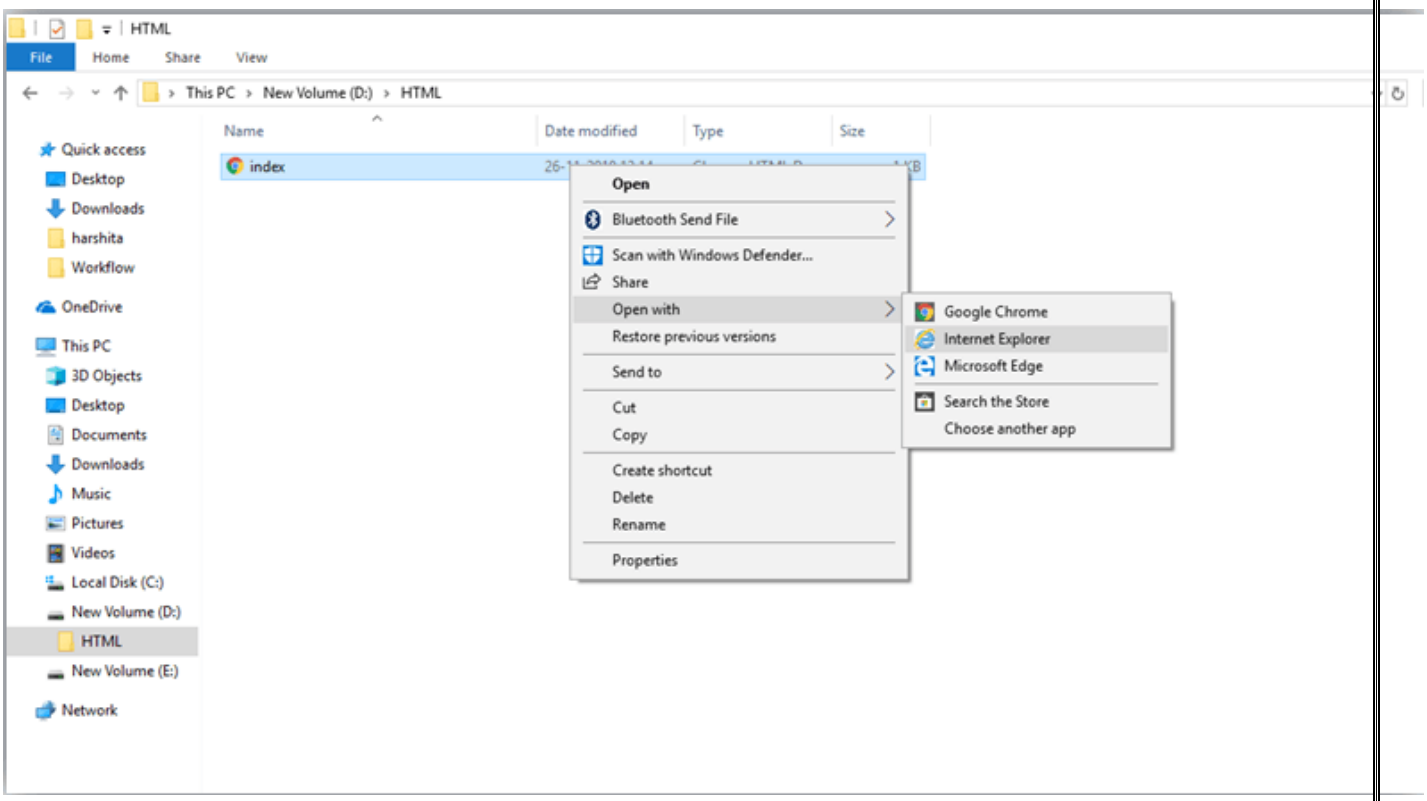


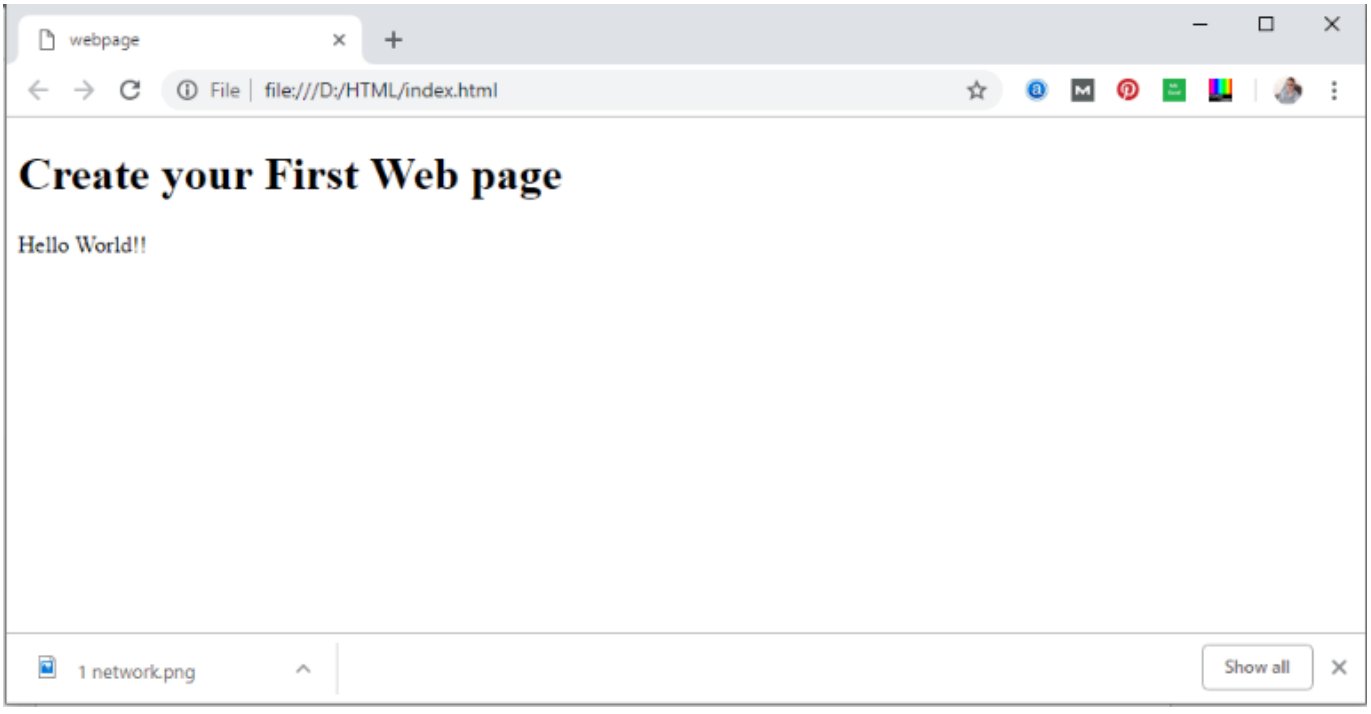
Step 3: Save the HTML file with .htm or .html extension.



Step 4: Open the HTML page in your web browser.

To run the HTML page, you need to open the file location, where you have saved the file and then either double-click on file or click on open with option


HTML
File
Home
Share
View
This PC › New Volume (D:) › HTML
Name
Date modified
Type
Size
index
Quick access
Desktop
Downloads
harshita
Workflow
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
New Volume (D:)
HTML
New Volume (E:)
Network
Open
Bluetooth Send File
Scan with Windows Defender...
Share
Open with
Restore previous versions
Send to
Cut
Copy
Create shortcut
Delete
Rename
Properties
Google Chrome
Internet Explorer
Microsoft Edge
Search the Store
Choose another app

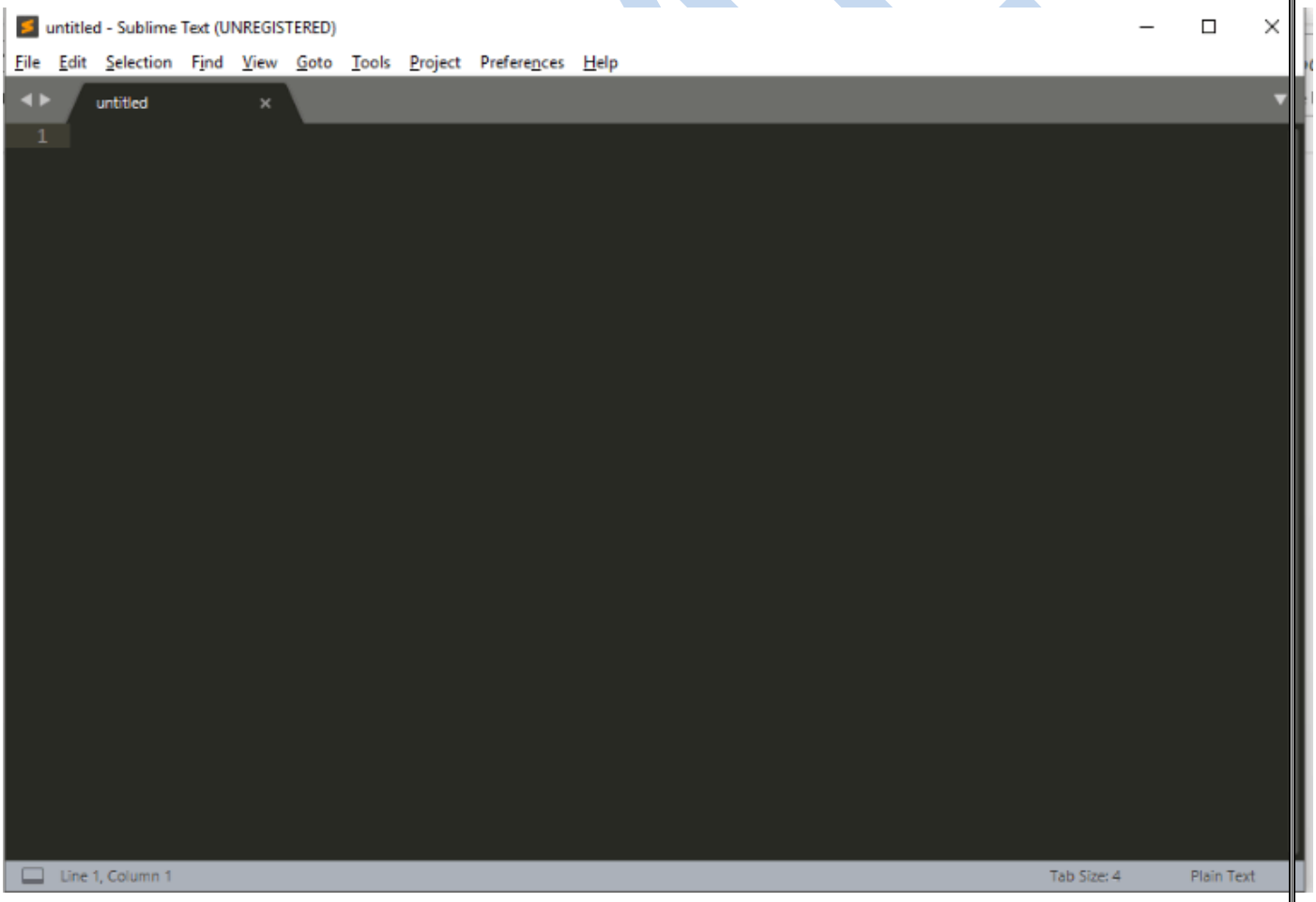

webpage
File | file:///D:/HTML/index.html
Create your First Web page
Hello World!!
1 network.png
Show all

B. HTML code with Sublime Text-editor.(Recommended after learning basics of HTML)

When you will learn the basics of HTML, then you can use some professional text editors, which will help you to write an efficient and fast code. So to use Sublime Text editors, first it needs to download and install from internet. You can easily download it from this https://www.sublimetext.com/download link and can install in your PC. When installation of Sublime text editor done then you can follow the simple steps to use it:

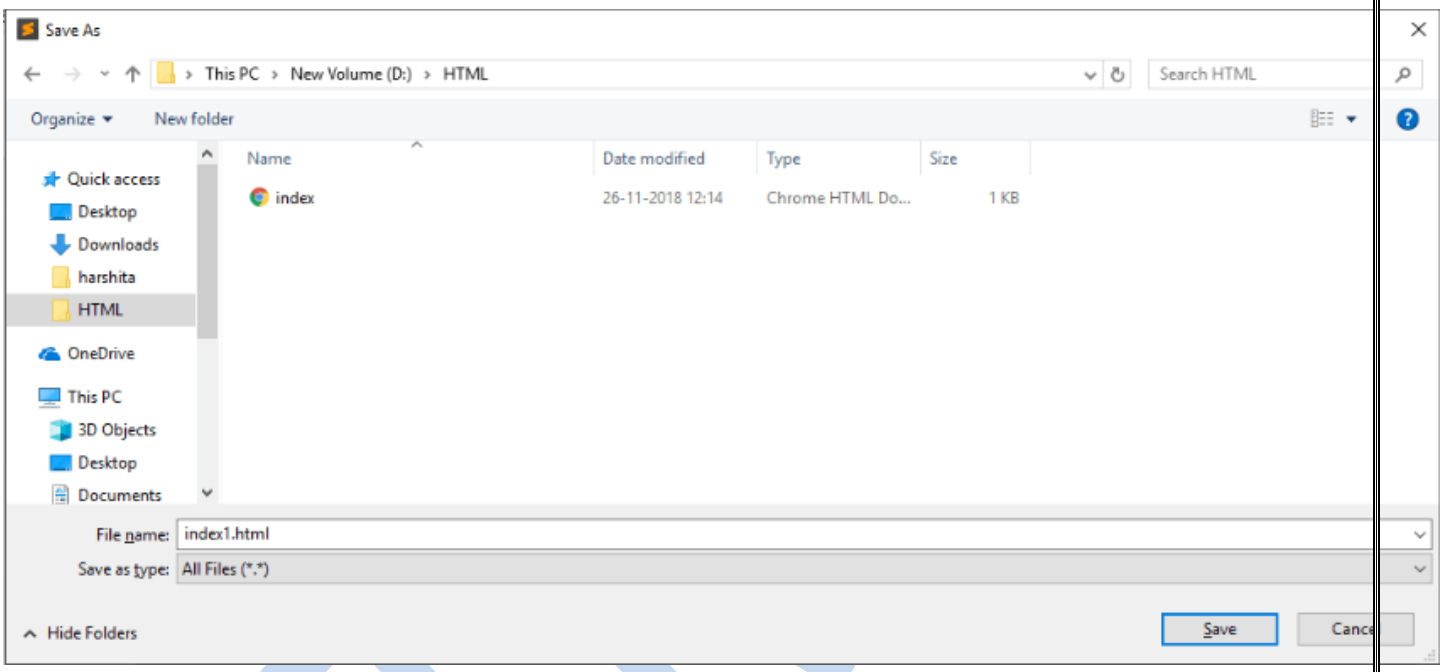
Step 1: Open Sublime Text editor(Windows 8):

To open Sublime Text editor go to **Start screen ⇢ type Sublime Text⇢ Open** it. To open a new page press **CTRL+N.**

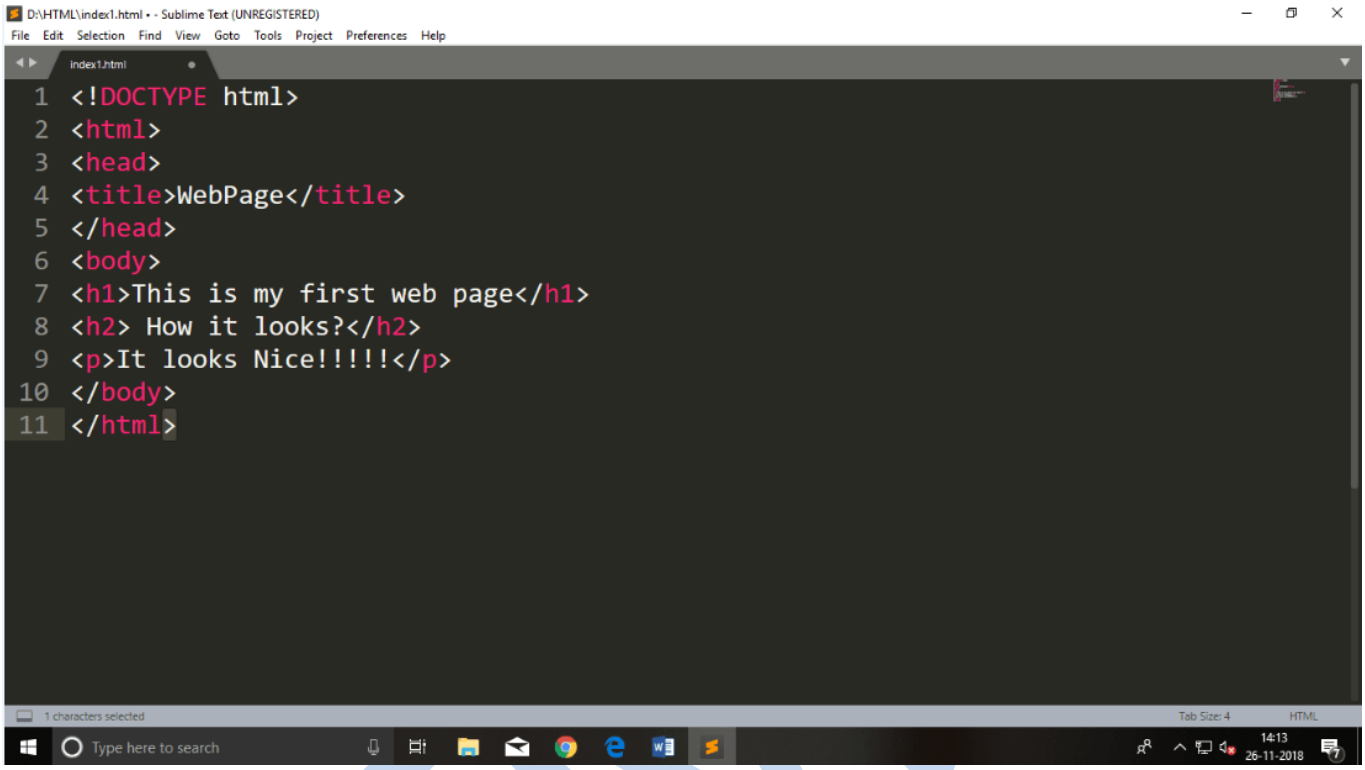


Step 2: Save the page before writing any code.

To save your page in Sublime Text press Ctrl+S or go to File option --> save, to save a file use extension .htm or .html. We recommend to save the file first then write the code because after saving the page sublime text editor will give you suggestions to write code.

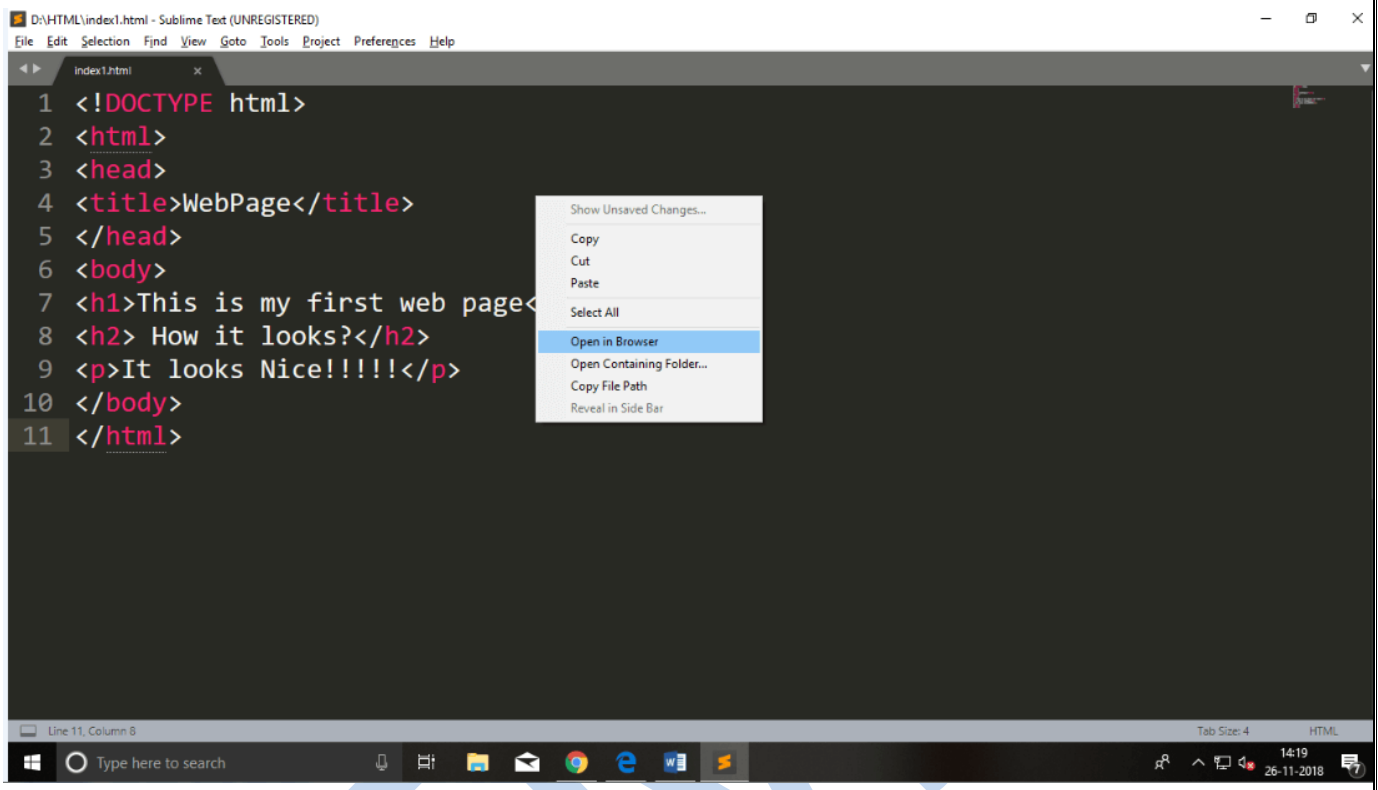


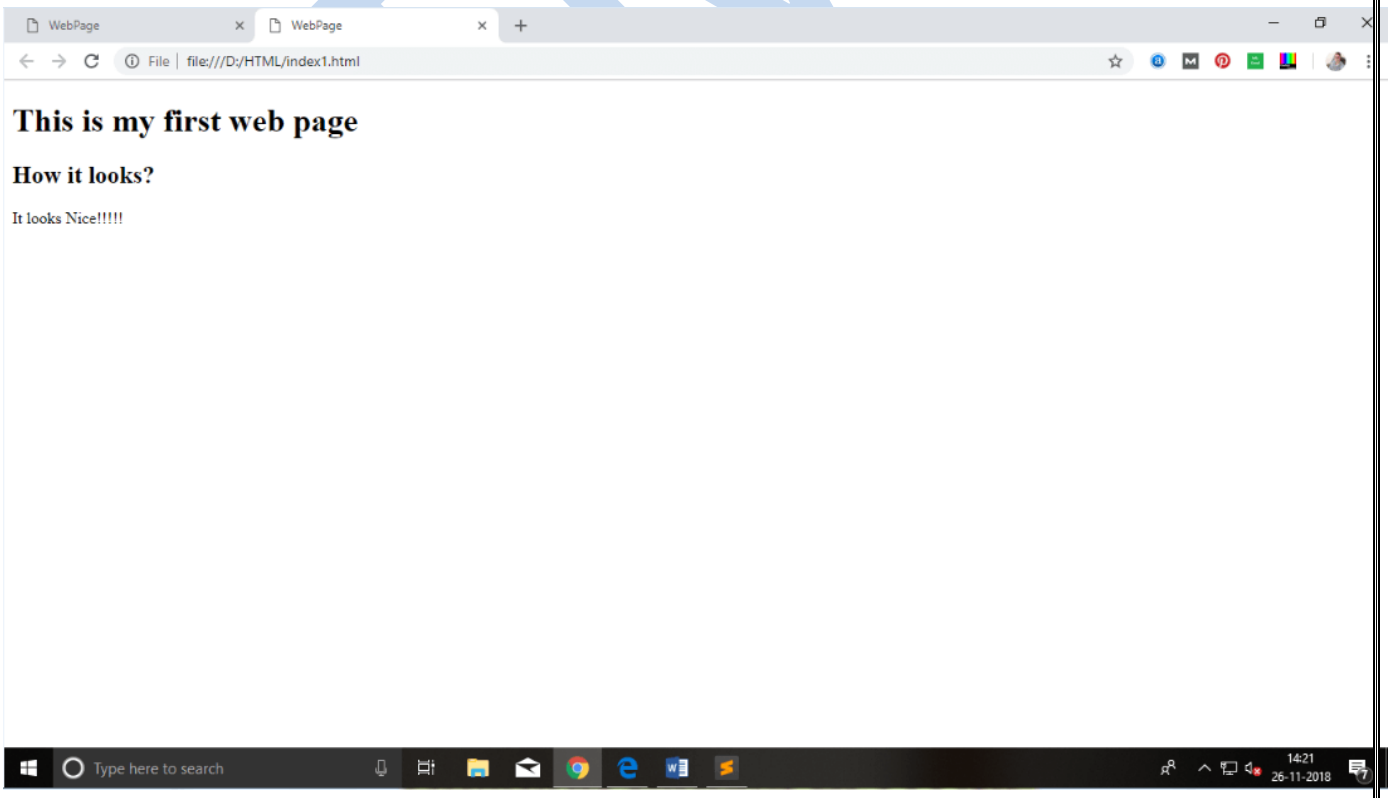
Step 3: Write the code in Sublime Text editor



Step 4: Open the HTML page in your Browser

To execute or open this page in Web browser just **right click** by mouse on sublime text page and click on **Open in Browser**.


D:\HTML\index1.html - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
index1.html
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>WebPage</title>
5 </head>
6 <body>
7 <h1>This is my first web page<
8 <h2> How it looks?</h2>
9 It looks Nice!!!!!
10 </body>
11 </html>
Show Unsaved Changes...
Copy
Cut
Paste
Select All
Open in Browser
Open Containing Folder...
Copy File Path
Reveal in Side Bar
Line 11, Column 8
Tab Size: 4
HTML
Type here to search
14:19
26-11-2018


WebPage
WebPage
File | file:///D:/HTML/index1.html
This is my first web page
How it looks?
It looks Nice!!!!!
Type here to search
14:21
26-11-2018

Note: You can execute HTML file in any browser, but there are some tags which are not supported by Some Web browser.

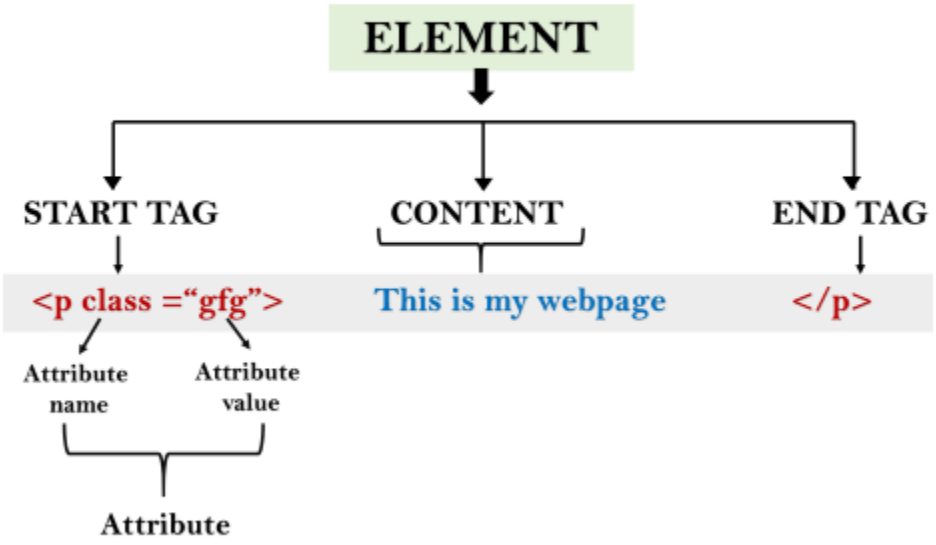
BUILDING BLOCKS OF HTML

An HTML document consist of its basic building blocks which are:

- **Tags:** An HTML tag surrounds the content and apply meaning to it. It is written between < and > brackets.
- **Attribute:** An attribute in HTML provides extra information about the element, and it is applied within the start tag. An HTML attribute contains two fields: name & value.

Syntax

1. <**tag** name attribute_name= " attr_value"> content </ **tag** name>
   - **Elements:** An HTML element is an individual component of an HTML file. In an HTML file, everything written within tags are termed as HTML elements.



Example:

```
<!DOCTYPE html>

<html>

 <head>

   <title>The basic building blocks of HTML</title>

 </head>

 <body>

     <h2>The building blocks</h2>


     <p>This is a paragraph tag</p>

     <p style="color: red">The style is attribute of paragraph tag</p>

     <span>The element contains tag, attribute and content</span>

 </body>

</html>
```

Output:

The building blocks

This is a paragraph tag

The style is attribute of paragraph tag

The element contains tag, attribute and content