

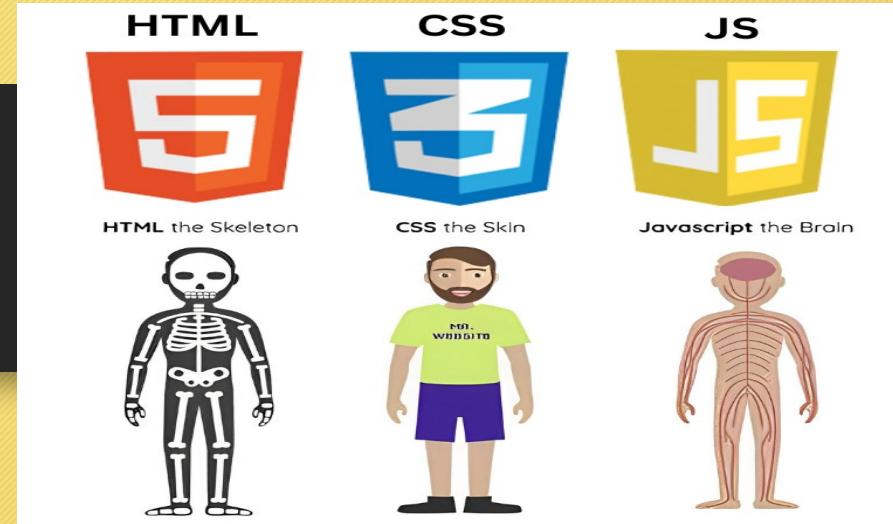


Web programming I

Section 1

Eng/ Mona AbdelAziz

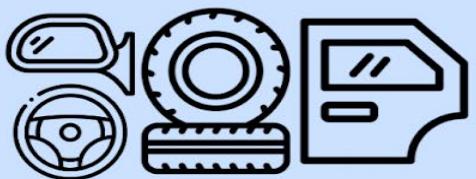
HTML,CSS&JS



- HTML, CSS, and JavaScript are one of the most important programming languages on the client side for the web development
- HTML (hyper text mark up language) :It describes the structure and semantics(meaning) of content rather than its appearance.
- CSS(cascading style sheet): CSS help in giving style to the websites
- JS(java script) :enables the developers in designing the interactive sites

HTML-CSS-JS

HTML



CSS



JS



HTML

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- 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

HTML Page Structure

HTML Page Structure

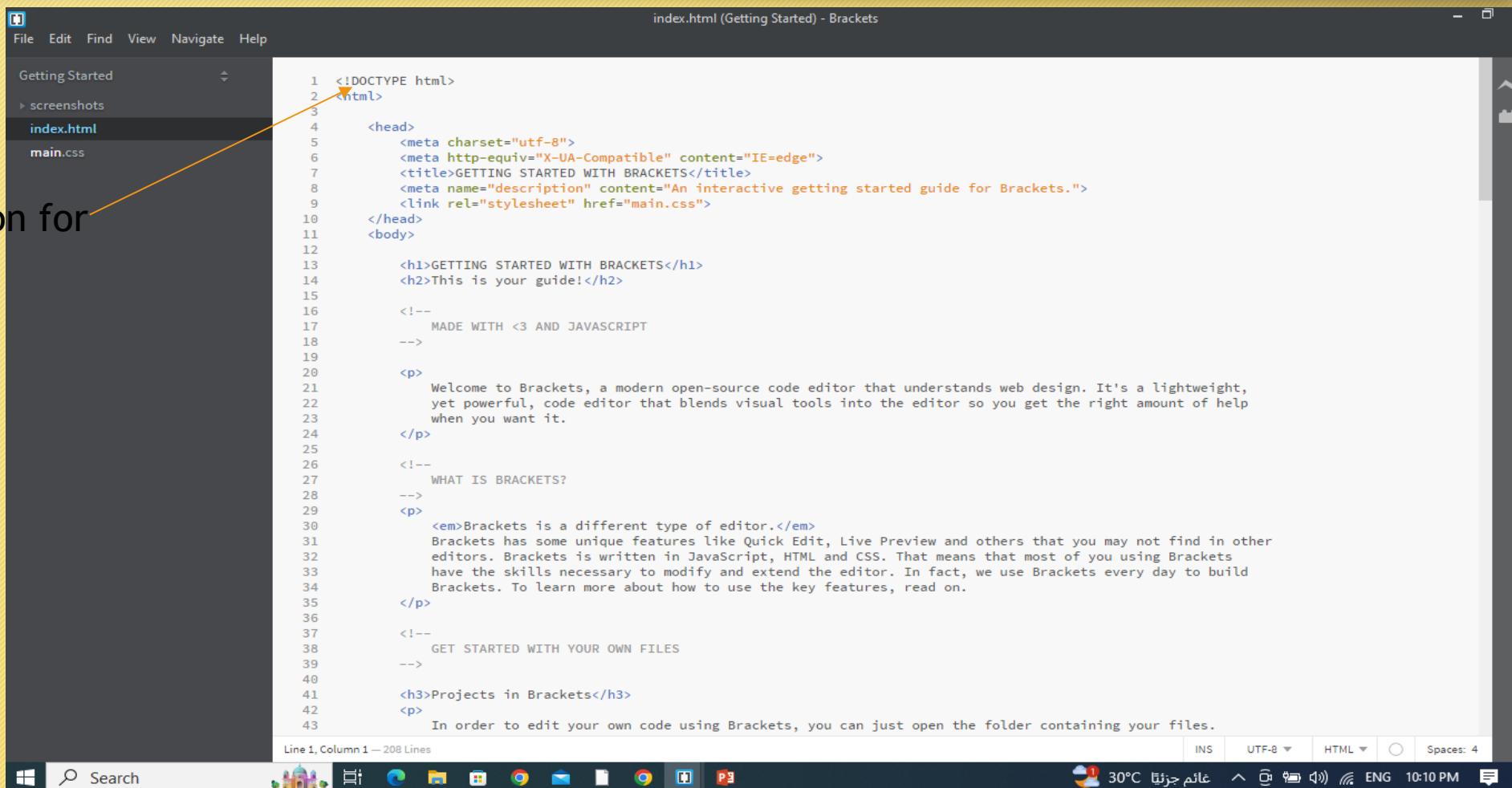
```
<!DOCTYPE html>           ← Tells version of HTML
<html>                  ← HTML Root Element
<head>                  ← Used to contain page HTML metadata
  <title>Page Title</title> ← Title of HTML page
</head>

<body>                  ← Hold content of HTML
  <h2>Heading Content</h2> ← HTML heading tag
  <p>Paragraph Content</p> ← HTML paragraph tag
</body>

</html>
```

WEBSITE DEVELOPMENT WITH HTML AND HTML5

declaration for
HTML5



The screenshot shows the Brackets code editor interface. The left sidebar displays a file tree with 'Getting Started' expanded, showing 'index.html' selected. The main editor area shows the following HTML code:

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <title>GETTING STARTED WITH BRACKETS</title>
    <meta name="description" content="An interactive getting started guide for Brackets.">
    <link rel="stylesheet" href="main.css">
  </head>
  <body>
    <h1>GETTING STARTED WITH BRACKETS</h1>
    <h2>This is your guide!</h2>
    <!--
      MADE WITH <3 AND JAVASCRIPT
    -->
    <p>
      Welcome to Brackets, a modern open-source code editor that understands web design. It's a lightweight, yet powerful, code editor that blends visual tools into the editor so you get the right amount of help when you want it.
    </p>
    <!--
      WHAT IS BRACKETS?
    -->
    <p>
      Brackets is a different type of editor.</em>
      Brackets has some unique features like Quick Edit, Live Preview and others that you may not find in other editors. Brackets is written in JavaScript, HTML and CSS. That means that most of you using Brackets have the skills necessary to modify and extend the editor. In fact, we use Brackets every day to build Brackets. To learn more about how to use the key features, read on.
    </p>
    <!--
      GET STARTED WITH YOUR OWN FILES
    -->
    <h3>Projects in Brackets</h3>
    <p>
      In order to edit your own code using Brackets, you can just open the folder containing your files.
    </p>
  </body>
</html>
```

The status bar at the bottom indicates 'Line 1, Column 1 — 208 Lines'. The bottom right corner shows system information: 30°C, 10:10 PM, ENG, and a battery icon.

Title



A screenshot of a web browser window titled "lab1". The address bar shows the URL "http://127.0.0.1:3000/2.html?serverWindowId=6c018e90-4463-41b0-aa74-". The main content area of the browser is completely blank, displaying a plain white page.

The browser interface includes standard controls like back/forward buttons, a refresh button, and a search bar. To the left of the browser window, there is a dark sidebar or panel containing some code snippets:

```
ml > html
<!doctype html>
<html>
  <title>web Programming I</title>
</head>
<body>
</html>
```

Explanation

- The `<!DOCTYPE html>` declaration defines that this document is an 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.

HTML Headings<h1> to<h6> Tags

The image shows a code editor interface with a dark theme. On the left, the code editor displays an HTML file named "2.html". The code contains a title and six levels of headings from h1 to h6, all labeled "HTML Basics". On the right, a browser window titled "lab1" shows the rendered HTML. The page has a large "Web Programming I" title at the top, followed by five "HTML Basics" sections, each corresponding to one of the heading levels defined in the code.

```
<!DOCTYPE html>
<html>
  <title>web Programming I</title>
  </head>
  <body>
    <h1>Web Programming I</h1>
    <h2>HTML Basics</h2>
    <h3>HTML Basics</h3>
    <h4>HTML Basics</h4>
    <h5>HTML Basics</h5>
    <h6>HTML Basics</h6>
  </body>
</html>
```

Web Programming I

HTML Basics

HTML Basics

HTML Basics

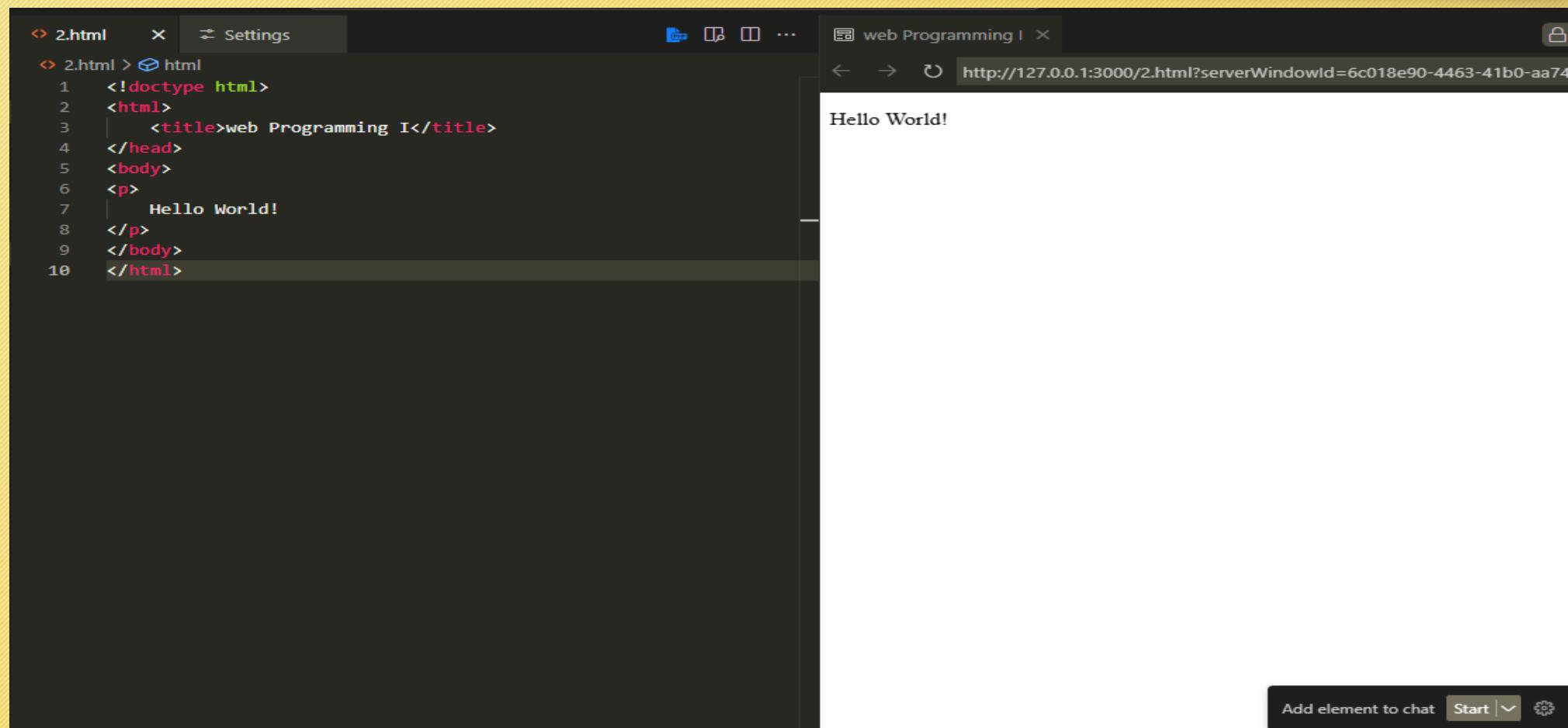
HTML Basics

HTML Basics

Explanation

- used to define HTML headings
- **<h1>defines the most important heading.**
- **<h6>defines the least important heading.**

<p> tag



A screenshot of a web development environment showing a code editor and a browser preview window.

The code editor on the left displays the following HTML code:

```
<!DOCTYPE html>
<html>
    <title>web Programming I</title>
    <head>
    <body>
        <p>
            Hello World!
        </p>
    </body>
</html>
```

The browser preview on the right shows the rendered output: "Hello World!"

At the bottom right of the browser window, there are buttons for "Add element to chat", "Start", and a gear icon.

Explanation

- <P> defines a paragraph in webpages
- Browsers automatically add margin before and after each paragraph
- Arabic text can be added
- <p> tag has some attributes like
 - title: shows text when mouse rollover
 - dir: determine text direction rtl or ltr(default)

HTML ATTRIBUTES

- All HTML elements can have **attributes**
- Attributes provide **additional information** about elements
- Attributes are always specified in **the start tag**
- Attributes usually come in name/value pairs like: **name="value"**

EX

The screenshot shows a web browser window titled "Web Programming" displaying the URL <http://127.0.0.1:3000/2.html?serverWindowId=6c018e90-4463-41b0-aa74->. The page content is "Hello World!" with a button labeled "greeting". To the left of the browser is a code editor window showing the HTML source code:

```
<!DOCTYPE html>
<html>
  <head>
    <title>web Programming I</title>
  </head>
  <body>
    <p title="greeting" dir="ltr" >
      Hello World!
    </p>
  </body>
</html>
```

The browser interface includes standard navigation buttons (back, forward, search) and a status bar at the bottom with options like "Add element to chat", "Start", and a gear icon.

<a>tag

- <a> used to link from one page to another
- href attribute indicates the link's destination.
- By default:
- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red

EX

Go Run ... ← → 🔍 lab1 ⌂

2.html X 1.html Settings

2.html > html > body

```
1 <!doctype html>
2 <html>
3   <title>web Programming I</title>
4 </head>
5 <body>
6 <p title="greeting" dir="ltr" >
7   Hello World!
8 </p>
9 <a href="1.html"> page1</a>
10 </body>
11 </html>
```

web Programming I X

← → ⚡ http://127.0.0.1:3000/2.html

Hello World!

[page1](#)

 tag

- Self closing tag (no need to close it)
- Used to add images in your web browser
- ** important attributes**
 - 1- **src** (Required) :Specifies the URL of the image.
 - 2- **alt** (Required): Provides alternative text for the image if it cannot be displayed.
 - 3- **height** : Specifies the height of the image in pixels or as a percentage.
 - 4- **width**: Specifies the width of the image in pixels or as a percentage.

Example

```
<!DOCTYPE html>
<html>
<body>

<h2>HTML Image</h2>

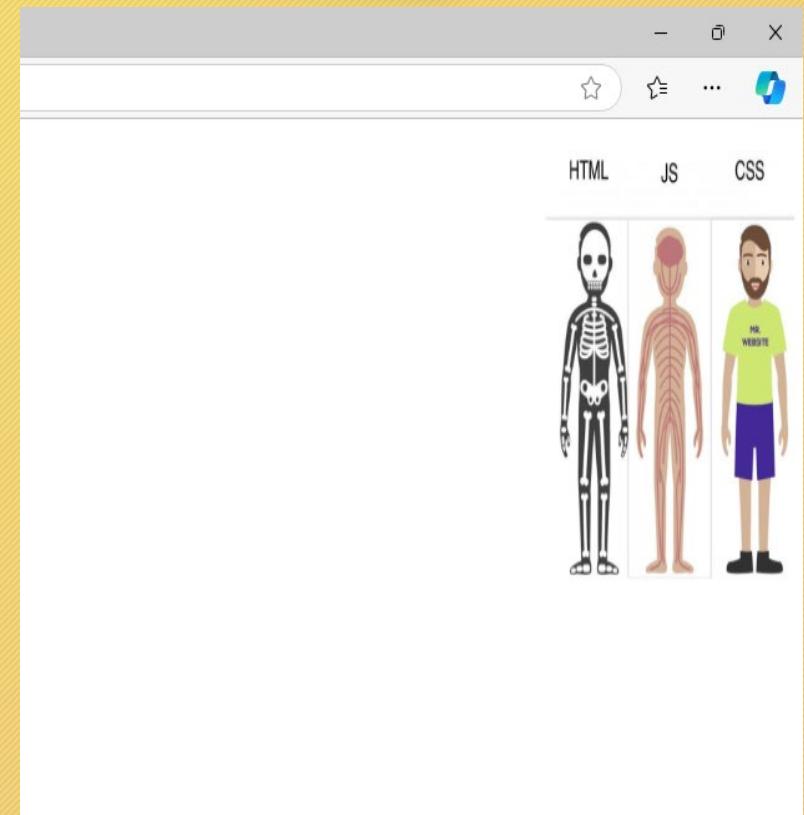

</body>
</html>
```

HTML Image

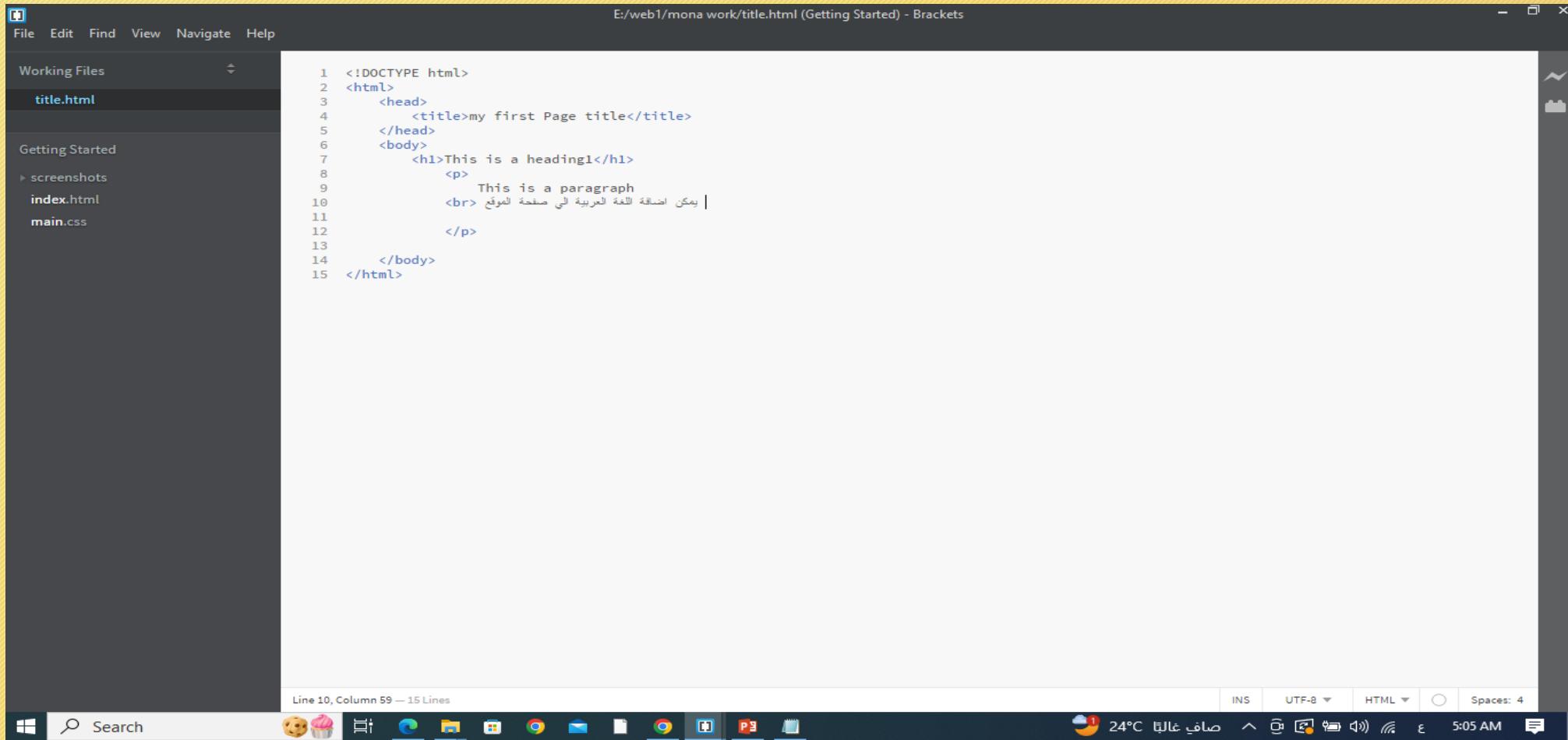


Example2

```
1 <!doctype html>
2 <html>
3   <head><title></title>
4   </head>
5 <body>
6   
7
8 </body>
9 </html>
```



 tag empty element



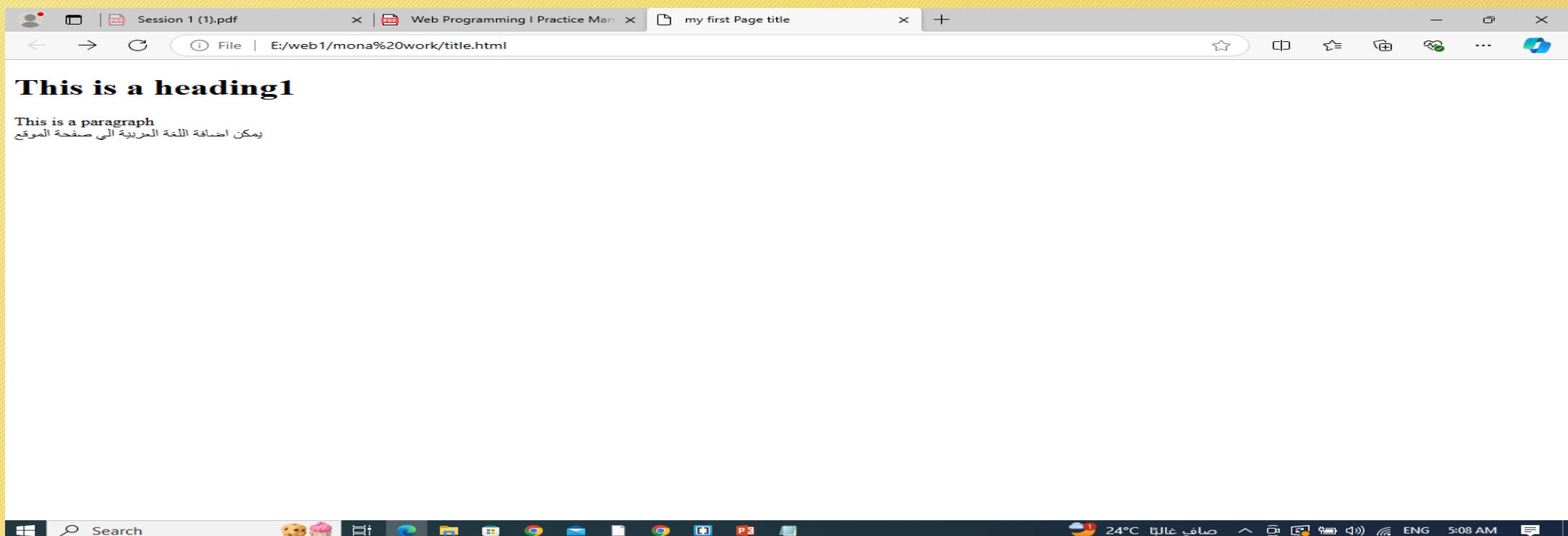
The screenshot shows the Brackets IDE interface. The title bar reads "E:/web1/mona work/title.html (Getting Started) - Brackets". The menu bar includes File, Edit, Find, View, Navigate, and Help. The left sidebar shows "Working Files" with "title.html" selected, and "Getting Started" sections for screenshots, index.html, and main.css. The main editor area contains the following HTML code:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>my first Page title</title>
5   </head>
6   <body>
7     <h1>This is a heading1</h1>
8     <p>
9       This is a paragraph
10      يمكن اضافة اللغة العربية الى صفحه الموقع
11    </p>
12
13
14   </body>
15 </html>
```

The cursor is positioned at line 10, column 59, which corresponds to the Arabic text "يمكن اضافة اللغة العربية الى صفحه الموقع". The status bar at the bottom shows "Line 10, Column 59 — 15 Lines", "INS", "UTF-8", "HTML", "Spaces: 4", and system icons.

Explanation & output

-
 used to show the text in a new line instead of showing it in the same line



Pre tag

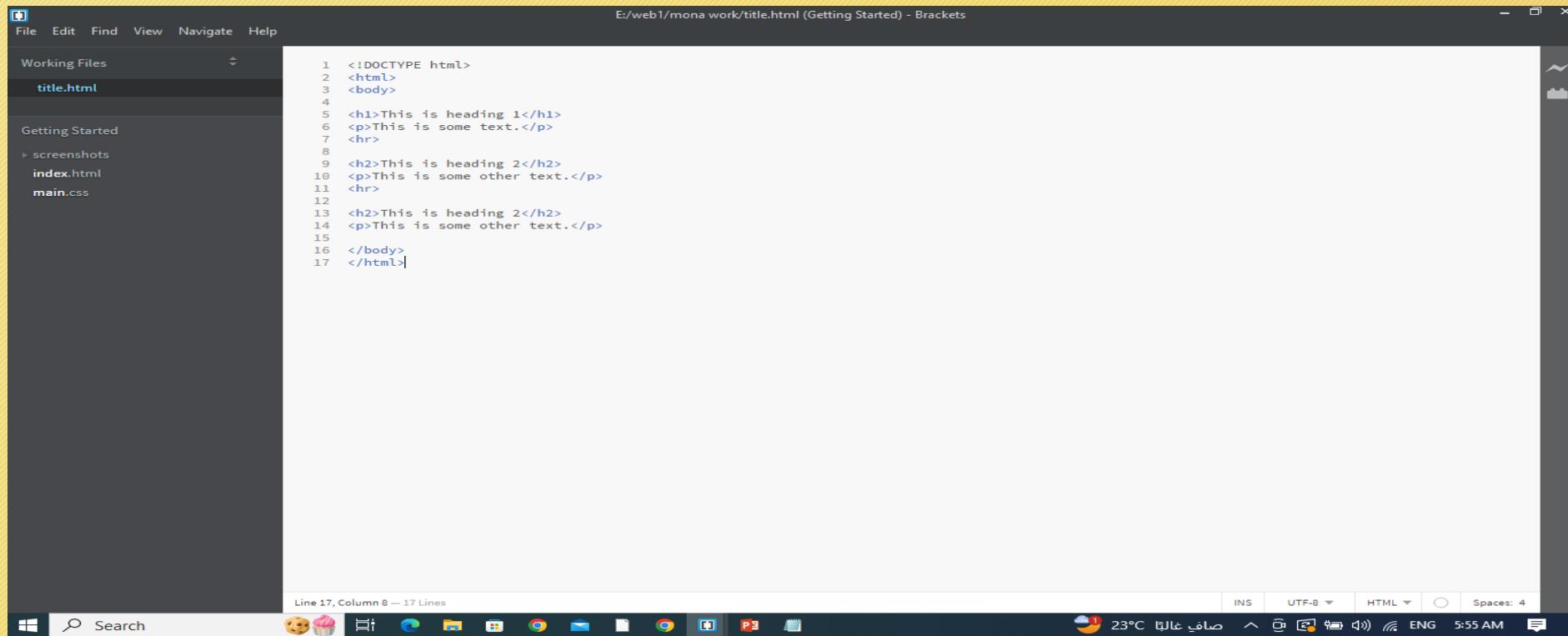
The screenshot shows the Brackets IDE interface. The title bar reads "E:/web1/mona work/title.html (Getting Started) - Brackets". The left sidebar shows "Working Files" with "title.html" selected. In the main editor area, the following HTML code is displayed:

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <p> pre tag defines pre-formatted text</p>
6
7 <pre>
8     My Bonnie lies over the ocean.
9
10    My Bonnie lies over the sea.
11
12    My Bonnie lies over the ocean.
13
14    Oh, bring back my Bonnie to me.
15 </pre>
16
17 </body>
18 </html>
```

The status bar at the bottom indicates "Line 5, Column 13 — 18 Lines". The bottom right corner shows system status: 23°C, صافى غالى, ENG, 5:51 AM.

<hr>tag

- Defines a thematic change in the content(line)



The screenshot shows the Brackets IDE interface. The title bar reads "E:/web1/mona work/title.html (Getting Started) - Brackets". The left sidebar shows "Working Files" with "title.html" selected. Below it, under "Getting Started", are "screenshots", "index.html", and "main.css". The main editor area contains the following HTML code:

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <h1>This is heading 1</h1>
6 <p>This is some text.</p>
7 <hr>
8
9 <h2>This is heading 2</h2>
10 <p>This is some other text.</p>
11 <hr>
12
13 <h2>This is heading 2</h2>
14 <p>This is some other text.</p>
15
16 </body>
17 </html>
```

The status bar at the bottom indicates "Line 17, Column 8 — 17 Lines". The bottom right corner shows system information: "23°C", "صافي غالباً", "INS", "UTF-8", "HTML", "Spaces: 4", "ENG", "5:55 AM", and a message icon.

OL

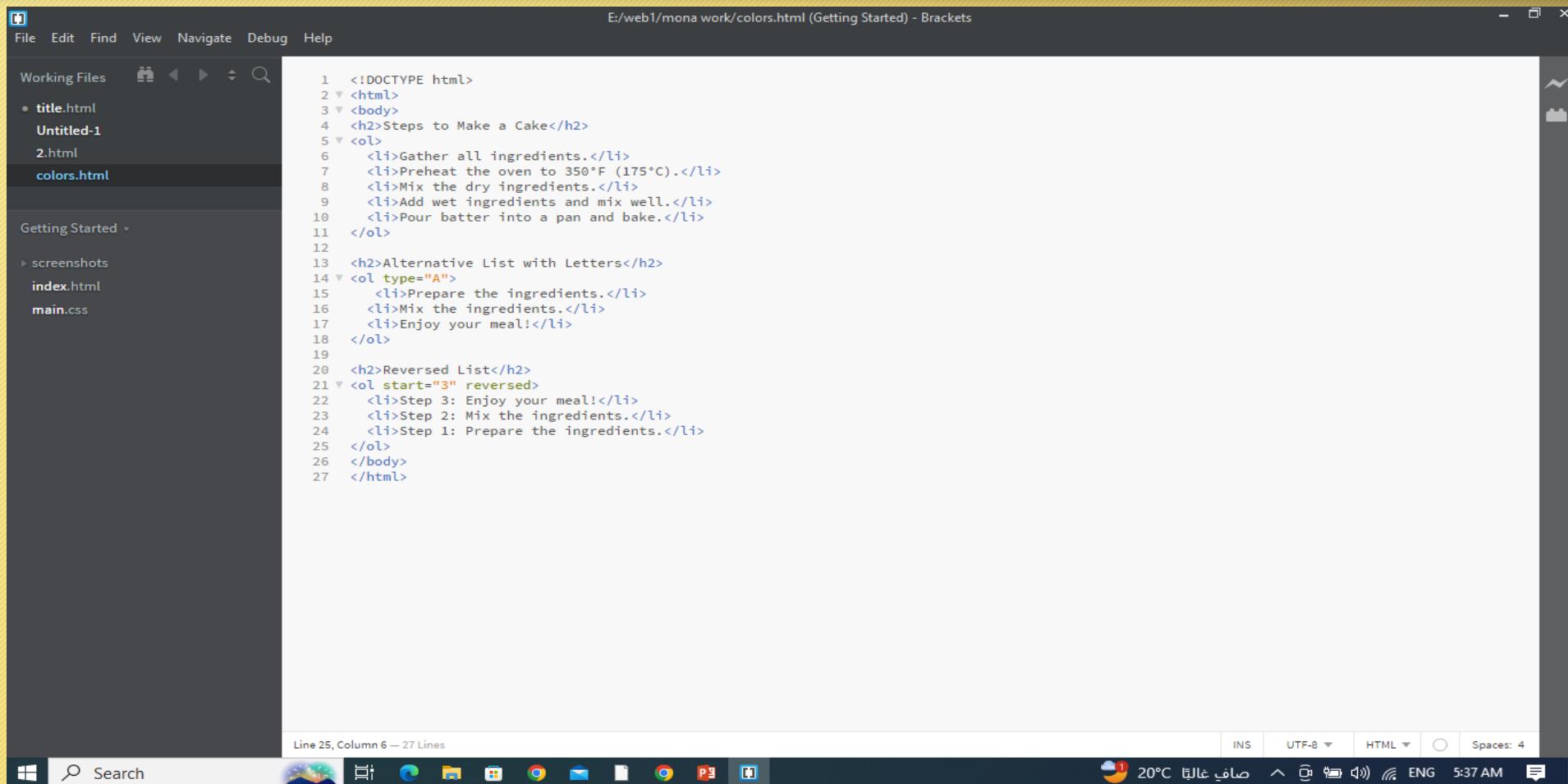
- **Ol :ordered list.** This type of list is used to display items in a specific sequence
- **Li:**list item
- **Attributes**
- **Type:** Specifies the type of numbering
- **Start:** Specifies the starting number for the list.
- **Reversed** When present, it indicates that the list should be displayed in reverse order.

Example

```
2.html > html > body > ol
1  <!doctype html>
2  <html>
3  |   <title>web Programming I</title>
4  </head>
5  <body>
6  <p title="greeting" dir="ltr" >
7  |   Hello World! <hr>
8  </p>
9  <a href="1.html"> page1</a>
10 <ol type="i">
11 |   <li>HTML</li>
12 |   <li>CSS</li>
13 |   <li>JavaScript</li>
14 </ol>
15
16 </body>
17 </html>
```



Example2



The screenshot shows the Brackets IDE interface with the following details:

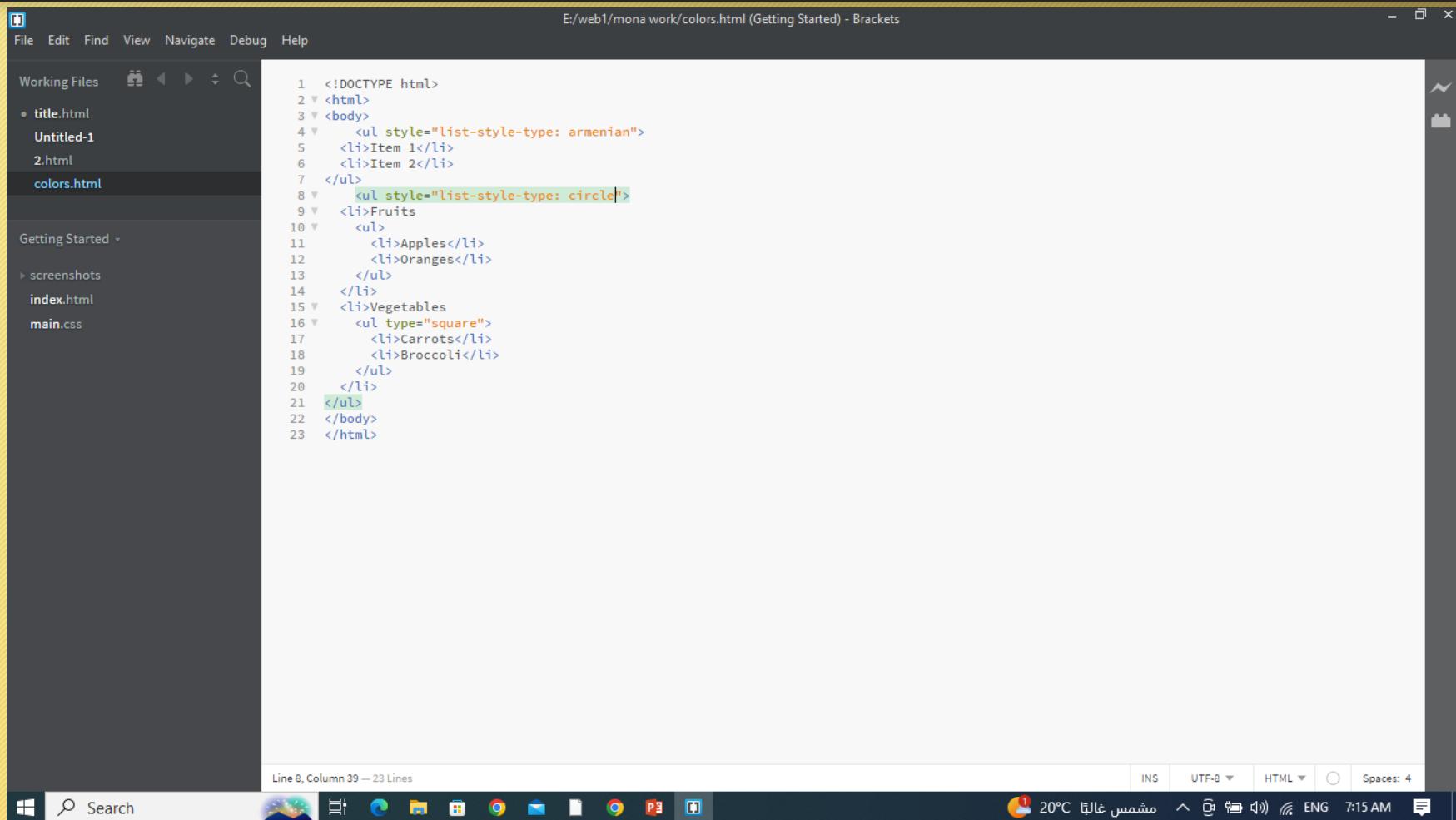
- Title Bar:** E:/web1/mona work/colors.html (Getting Started) - Brackets
- File Menu:** File Edit Find View Navigate Debug Help
- Working Files:** title.html, Untitled-1, 2.html, colors.html (selected)
- Getting Started:** screenshots, index.html, main.css
- Code Editor:** The code for colors.html is displayed:

```
1 <!DOCTYPE html>
2 <html>
3 <body>
4 <h2>Steps to Make a Cake</h2>
5 <ol>
6 <li>Gather all ingredients.</li>
7 <li>Preheat the oven to 350°F (175°C).</li>
8 <li>Mix the dry ingredients.</li>
9 <li>Add wet ingredients and mix well.</li>
10 <li>Pour batter into a pan and bake.</li>
11 </ol>
12
13 <h2>Alternative List with Letters</h2>
14 <ol type="A">
15 <li>Prepare the ingredients.</li>
16 <li>Mix the ingredients.</li>
17 <li>Enjoy your meal!</li>
18 </ol>
19
20 <h2>Reversed List</h2>
21 <ol start="3" reversed>
22 <li>Step 3: Enjoy your meal!</li>
23 <li>Step 2: Mix the ingredients.</li>
24 <li>Step 1: Prepare the ingredients.</li>
25 </ol>
26 </body>
27 </html>
```
- Status Bar:** Line 25, Column 6 — 27 Lines, INS, UTF-8, HTML, Spaces: 4
- Taskbar:** Shows the Windows Start button, a search bar, and various pinned application icons.
- System Tray:** Displays the date (20°C), battery status, network connection, and system time (5:37 AM).

UL

- unordered list This type of list is used to display items without a specific order
- The element supports a few attributes

Example

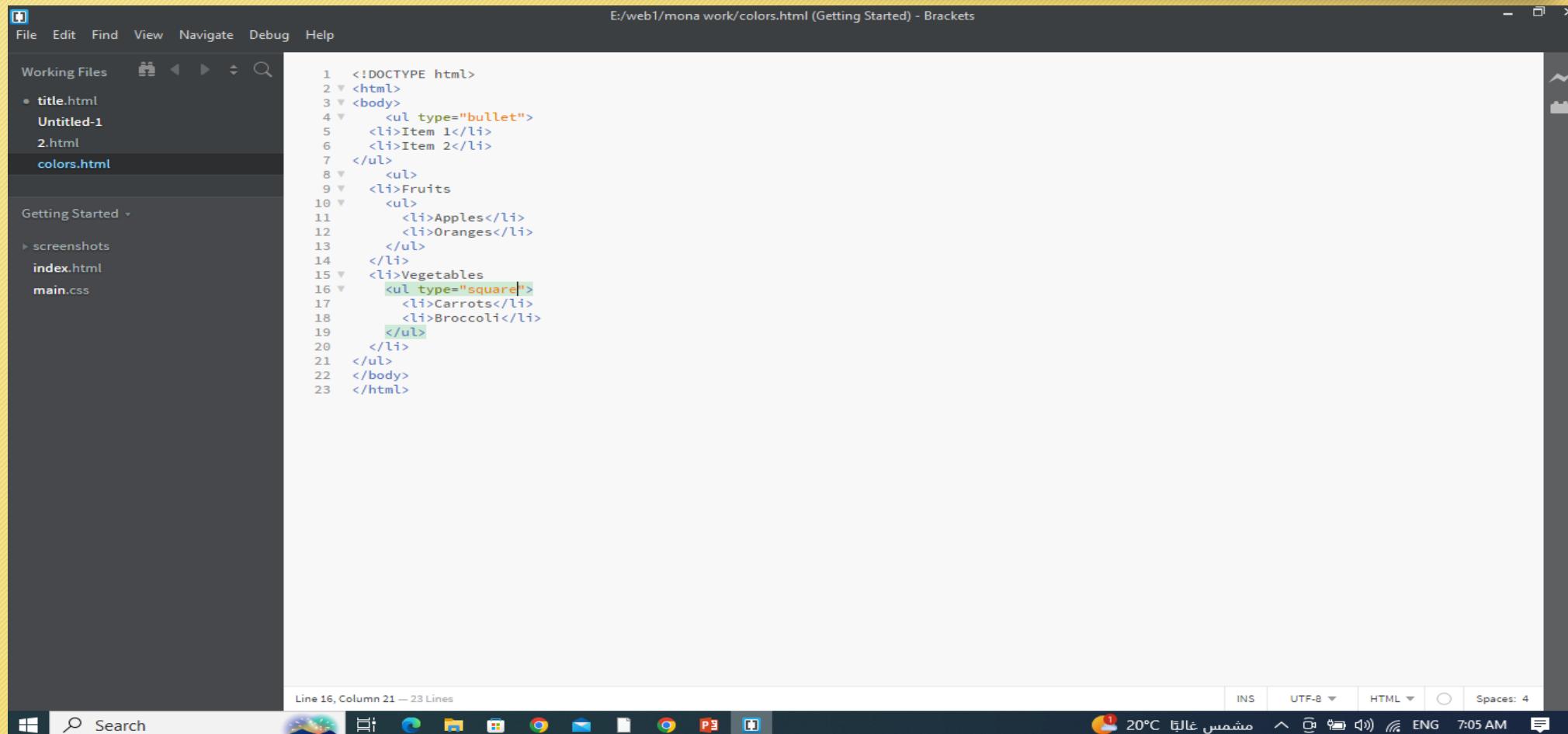


The screenshot shows the Brackets IDE interface with the following details:

- Title Bar:** E:/web1/mona work/colors.html (Getting Started) - Brackets
- File Menu:** File Edit Find View Navigate Debug Help
- Working Files:** title.html, Untitled-1, 2.html, colors.html
- Getting Started:** screenshots, index.html, main.css
- Code Editor:** The code for colors.html is displayed:

```
1 <!DOCTYPE html>
2 <html>
3   <body>
4     <ul style="list-style-type: armenian">
5       <li>Item 1</li>
6       <li>Item 2</li>
7     </ul>
8     <ul style="list-style-type: circle">
9       <li>Fruits
10      <ul>
11        <li>Apples</li>
12        <li>Oranges</li>
13      </ul>
14    </li>
15    <li>Vegetables
16      <ul type="square">
17        <li>Carrots</li>
18        <li>Broccoli</li>
19      </ul>
20    </li>
21  </ul>
22 </body>
23 </html>
```
- Status Bar:** Line 8, Column 39 — 23 Lines, INS, UTF-8, HTML, Spaces: 4
- System Tray:** Windows icon, Search icon, Task View icon, File Explorer icon, Edge icon, Mail icon, Google Chrome icon, File icon, Print icon, ENG, 7:15 AM, Chat icon.

Example with type



The screenshot shows the Brackets IDE interface with the following details:

- Title Bar:** E:/web1/mona work/colors.html (Getting Started) - Brackets
- File Menu:** File Edit Find View Navigate Debug Help
- Working Files:** title.html, Untitled-1, 2.html, colors.html
- Getting Started:** screenshots, index.html, main.css
- Code Editor:** Displays the contents of the colors.html file. The code uses the `type` attribute to specify bullet styles for different lists.

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4  <ul type="bullet">
5  <li>Item 1</li>
6  <li>Item 2</li>
7 </ul>
8 <ul>
9 <li>Fruits
10 <ul>
11 <li>Apples</li>
12 <li>Oranges</li>
13 </ul>
14 </li>
15 <li>Vegetables
16 <ul type="square">
17 <li>Carrots</li>
18 <li>Broccoli</li>
19 </ul>
20 </li>
21 </ul>
22 </body>
23 </html>
```

- Status Bar:** Line 16, Column 21 — 23 Lines, INS, UTF-8, HTML, Spaces: 4
- Taskbar:** Shows the Windows Start button, a search bar, and various pinned application icons (File Explorer, Edge, Google Chrome, Mail, etc.).
- System Tray:** Shows battery status (20°C), network connectivity, and system notifications.