What is HTML?

HTML is the standard markup language for creating Web pages.

- HTML stands for Hyper Text Markup Language
- HTML describes the structure of a Web page
- HTML elements are represented by tags
- HTML tags label pieces of content such as "heading", "paragraph", "table", and so on
  - The `<!DOCTYPE html>` declaration defines this document to be HTML
  - The `<html>` element is the root element of an HTML page
  - The `<head>` element contains meta information about the document
  - The `<title>` element specifies a title for the document
  - The `<body>` element contains the visible page content
  - The `<h1>` element defines a large heading
  - The `<p>` element defines a paragraph

A Simple HTML Document Example

```html
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

HTML Tags

HTML tags are element names surrounded by angle brackets `<>`:

- `<tagname>` content goes here...`</tagname>`

Tags are two types of tag.

1. Container tag: It have the **start tag** and the **end** tag both in a pair.
2. Empty tag: It have the **start** tag only.

**Notes:** HTML tags normally come in pairs like `<p>` and `</p>`. The first tag in a pair is the **start tag**, the second tag is the **end tag**. The end tag is written like the start tag, but with a **forward slash** inserted before the tag name.
HTML Page Structure

Below is a visualization of an HTML page structure:

```
<html>
    <head>
        <title>Page title</title>
    </head>
    <body>
        <h1>This is a heading</h1>
        <p>This is a paragraph.</p>
        <p>This is another paragraph.</p>
    </body>
</html>
```

Output:

```
<!DOCTYPE html>
<html>
    <head>
        <title>My First Heading</title>
    </head>
    <body>
        <h1>My First Heading</h1>
        <p>My first paragraph.</p>
    </body>
</html>
```
HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags. `<h1>` defines the most important heading. `<h6>` defines the least important heading:

Example

```
<html>
  <head></head>
  <body>
    <h1>This is heading 1</h1>
    <h2>This is heading 2</h2>
    <h3>This is heading 3</h3>
    <h4>This is heading 4</h4>
    <h5>This is heading 5</h5>
    <h6>This is heading 6</h6>
  </body>
</html>
```

HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag:

Example

```
<html>
  <head></head>
  <body>
    <p>This is a paragraph.</p>
    <p>This is another paragraph.</p>
  </body>
</html>
```

HTML Images

HTML images are defined with the `<img>` tag.

The source file (`src`), alternative text (`alt`), `width`, and `height` are provided as attributes:
HTML Lists

HTML lists are defined with the `<ul>` (unordered/bullet list) or the `<ol>` (ordered/numbered list) tag, followed by `<li>` tags (list items):

**Example**

```html
<!DOCTYPE html>
<html>
  <head>
    <title>Example</title>
  </head>
  <body>
    <h2>An Unordered HTML List</h2>
    <ul>
      <li>Coffee</li>
      <li>Tea</li>
      <li>Milk</li>
    </ul>
    <br/>
    <h2>An Ordered HTML List</h2>
    <ol>
      <li>Coffee</li>
      <li>Tea</li>
      <li>Milk</li>
    </ol>
  </body>
</html>
```

**Exercise:**

1. What is HTML?
2. What is tag?
3. What are the common attribute of `<img>` tag?