

# Intro to HTML.

Here's the code for a very basic HTML file:

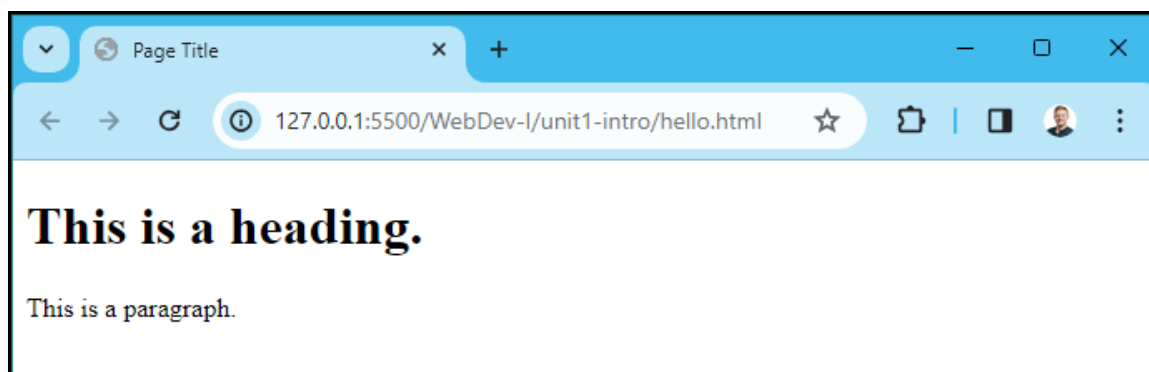
```
<!DOCTYPE html>
<html>

<head>
|   <title>Page Title</title>
</head>

<body>
|   <h1>This is a heading.</h1>
|   <p>This is a paragraph.</p>
</body>

</html>
```

And here's what that ends up looking like when we open it in Google Chrome:



Let's break this down and explain what each line of code does.

## Elements

An HTML file is made up of building blocks called **elements**. Each element is usually marked by a pair of tags: an opening tag and a closing tag. The opening tag looks like a pair of angle brackets with the tagname inside, like this: `<body>` and the closing tag looks almost the same except with a forward slash, like this: `</body>`.

Here are some of the more commonly used elements of HTML:

**<!DOCTYPE html>**: This declaration defines the document type and tells the browser how to render the page. If you don't include this at the beginning of your document you might run into some bugs and inconsistencies.

**<html>**: This is the root element that contains all the content of your HTML document. It contains the `<head>` and `<body>` elements.

**<head>**: This contains information about the document, such as its title (which will appear in the tab of a web browser,) links to stylesheets or scripts, and keywords for search engines.

**<title>**: This is a child element of `<head>` and sets the title of the web page.

**<body>**: This holds all the meat & potatoes of an HTML document, such as text, images, links, etc. Almost everything goes inside the `<body>` element.

**Headings (<h1> to <h6>)**: These are used to create headings, with `<h1>` being the highest level heading and `<h6>` the lowest. Don't confuse this with the `<head>` tag, they're very different.

**Paragraphs (<p>):** This defines a paragraph of text. You can insert a line break element with the <br> tag. This will start a new line of text.

**Lists (<ol> and <ul>):** This lets you define a list of items. Insert list items with the <li> tag. **Ordered lists** are automatically numbered, while **unordered lists** use bullet points.

**<em>:** Used to emphasize text, typically by *italicizing* it. This tag isn't just for styling purposes; it has semantic meaning, indicating that the text should be stressed.

**<strong>:** Used to indicate strong importance or urgency of the text inside it, usually by making the text **bold**. Like <em>, this tag also conveys semantic meaning beyond just styling.

**Anchor (<a>):** Creates a hyperlink that connects one web page to another, or links to a specific section within the same page. For hyperlinks, the <a> tag needs an 'href' attribute pointing to the destination URL. For example,

```
<a href="https://www.example.com">Visit our site</a>
```

creates a link that looks like this: [Visit our site](https://www.example.com)

**Image (<img>):** Used to embed images. It's an empty tag, meaning it does not have a closing tag. The src attribute specifies the path to the image, and the alt attribute provides alternative text for the image if it can't be displayed for whatever reason. For example,

```

```

inserts the linked image or the text "My Image" if it fails to load.

**<div>**: short for "division", a very important tool used to group together other elements. It's a block-level element, which means it starts on a new line and takes up the full width available. Styling and layout of the contained elements are often controlled through CSS. You might use <div> to create a navigation bar, a footer, or to group content in a specific section of your webpage.