HTML

Hypertext Markup Language is used to display content on a web page. Look for angle brackets **<>**!

Useful tutorials **here**.

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

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

HTML Examples (w3schools.com)
Meant to display content on a webpage, uses plain tags to display content(using angle brackets)

General Page Structure

Two major sections:

- **Head**
  - *Contains important metadata.*
- **Body**
  - *All content that is seen on a page.*

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

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Coding languages are converging a lot of the time

Tag Structure

- HTML is made up of **tags**.
- Each tag does something different.
- Most have an opening and closing tag.

Example:

`<h1>Content</h1>` → *largest text*

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

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```
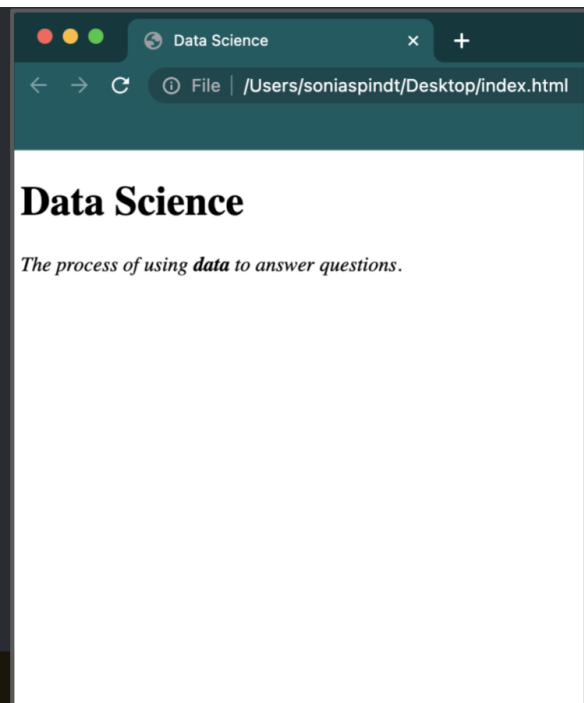
Q1: What HTML do you need to write in order to recreate the following web page?

Students, write your response!

Data Science | × | +

← → C ⓘ File | /Users/soniaspindt/Desktop/index.html

Data Science

*The process of using **data** to answer questions.*

<h1>Data science</h1>
<p><i>The process of using Datato answer the questions.</i></p>

Tag Attributes

Some tags need more information in order to work. In order to do this, you need to use **attributes**.

Example:

`<img src = "URL">`

Note: The image tag doesn't need a closing tag!

```
<!DOCTYPE html>
<html>
<head>
<title>Example</title>
</head>
<body>

<h1>The img element</h1>

<img src="img_girl.jpg"
alt="Girl in a jacket"
width="500" height="600">

</body>
</html>
```

Image needs at least one attribute to work, attributes have unique names
        alt attribute is alternative if image doesn't work, or for text readers so people can know what's on screen, or it shows up if the image cant load

Important Metadata Tags and Attributes

Tags:

- `<title>?</title>`
- `<meta name = "?" content = "?">`
- `<link rel = "?" href= "?">`

Attributes

- `alt = "description"`
- `lang = "?"`

Q3: What HTML do you need to write in order to recreate the following web page?

Students, write your response!

```
<h2>Ms. Spindt's Fave YouTube Video</h2>
<iframe width="420" height="315"
src="https://www.youtube.com/watch?v=dQw4w9WgXcQ">
</iframe>


Or
<html>
        <head>
        </head>
<body>
        <main>
        <h2>Ms. Spindt's Fave YouTube Video</h2>
        <iframe width="420" height="315"
        src="https://www.youtube.com/watch?v=dQw4w9WgXcQ">
        </iframe>
        </body>
</main>
</html>
```

Q4: What metadata is found on this web page?

```
index.html
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <title>Countries of the World</title>
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <meta name="description" content="A page that lists information about all the countries in the world.">
7      <link rel="stylesheet" type="text/css" href="/static/css/styles.css">
8    </head>
9
10   <body>
11     <nav>
12       <div>
13         <ul>
14           <li>
15             <a href="someURL.com">
16               <img src="img_China.jpg" alt="a map where china is highlighted in yellow.">
17             </a>
18           </li>
19           <li>
20             <a href="anotherURL.com">
21               <img src="img_USA.jpg" alt="A graph that shows how much the population has grown in the US.">
22             </a>
23           </li>
24         </ul>
25       </div>
26     </nav>
27   </body>
28 </html>
```

Students, write your response!

The title of the page, the description of the page, info that helps with formatting it for different devices, & a specific way for the website to look

Accessibility

We want to make sure our websites are **accessible** to as many people as possible! Consider using **these practices**.

Accessibility Considerations:

- Low-bandwidth users (people with little bandwidth or unstable internet connections).
- Visually impaired users (use screen readers to surf the web)
- Low English proficiency users (content displayed must be understandable).