1. Fundamentals:

a. What is HTML?

HTML stands for HyperText Markup Language. It is the standard markup language for creating and designing web pages. HTML provides a structure for content on the web, allowing developers to define and organize various elements such as headings, paragraphs, links, images, and more. It is the backbone of web development and is used in conjunction with other technologies such as Cascading Style Sheets (CSS) and JavaScript to create visually appealing and interactive web pages.

b. Structure of HTML:

HTML documents are structured using a set of elements, each represented by tags. Tags are enclosed in angle brackets (< >) and typically come in pairs, with an opening tag and a closing tag. The content to be affected by the tag is placed between these tags. HTML elements can also have attributes, which provide additional information about the element.

c. HTML Document Structure:

An HTML document follows a basic structure that includes the following main components:

- `<!DOCTYPE html>`: Declares the HTML version being used (HTML5 in this case).
- `<html>`: The root element that wraps all content on the page.
- `<head>`: Contains meta-information about the HTML document, such as the title and links to external resources.
- `<title>`: Sets the title of the HTML document, which appears in the browser's title bar or tab.
- `<body>`: Contains the content of the HTML document, such as text, images, links, and other elements.

d. HTML Elements:

HTML elements are the building blocks of a web page. They define the structure and content of the page. Here are a few examples:

- Paragraph:

```
<p>This is a paragraph.</p>
```

- Heading:

```
<h1>This is a Heading 1</h1>
```

- Link:

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

- Image:

```
<img src="image.jpg" alt="Description of the image">
```

- List:

```
<ul>
<li>Item 1</li>
<li>Item 2</li>
</ul>
```

These elements, when combined and arranged, create the structure and content of a web page.