CHAPTER-4

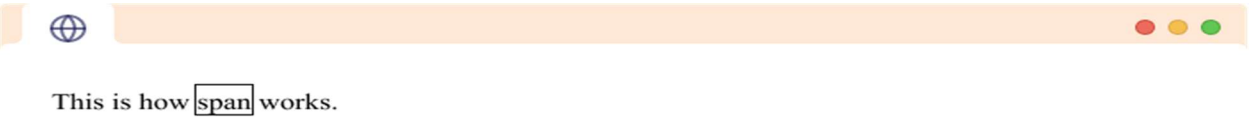
HTML Inline and Block Elements:

HTML elements can be broadly categorized into one of two categories:

- Inline Elements: , <a>, , <img> etc.
- Block Elements: <p>, , <h1>, <figure> etc.

HTML Inline Elements: Inline elements are displayed on the same line. They do not start on a new line and take up only as much width as their contents require. An example of an inline element is the tag.

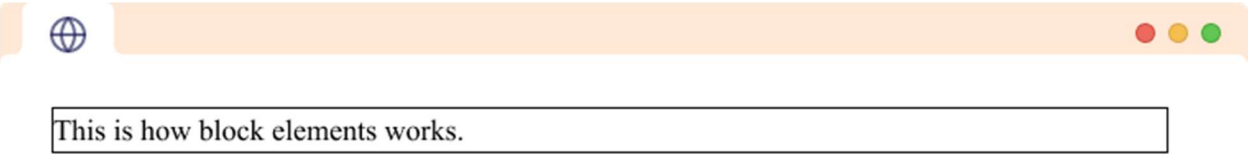
```
<p>This is how <span style="border: 1px solid black">span</span> works. </p>
```



HTML Block Elements: Block elements take up the whole horizontal space available in its container. They start on a new line and take up as much height as their contents require.

An example of a block element is the HTML Paragraph Tag.

```
<p style="border: 1px solid black">This is how block elements works. </p>
```



HTML tag:

The HTML tag is used to group the large section of HTML elements together. We know that every tag has a specific purpose e.g. p tag is used to specify paragraph, <h1> to <h6> tag are used to specify headings but the tag is just like a container unit which is used to encapsulate other page elements and divides the HTML documents into sections.

The div tag is generally used by web developers to group HTML elements together and apply CSS styles to many elements at once. For example: If you wrap a set of paragraph elements into a div element so you can take the advantage of CSS styles and apply font style to all paragraphs at once instead of coding the same style for each paragraph element.

Example:	Output:
<!DOCTYPE> <html> <body> Welcome to Javatpoint.com, Here you get tutorials on latest technologies. This is second paragraph </body> </html>	Welcome to Javatpoint.com, Here you get tutorials on latest technologies. This is second paragraph

HTML tag:

The tag is an inline container used to mark up a part of a text, or a part of a document. The tag is easily styled by CSS or manipulated with JavaScript using the class or id attribute. The tag is much like the element, but is a block-level element and is an inline element.

Example:	Output:
<!DOCTYPE html> <html> <body> The span element My mother has blue eyes and my father has dark green eyes. </body> </html>	**The span element** My mother has **blue** eyes and my father has **dark green** eyes.

HTML class id and name attributes:

An HTML page consists of many elements or tags. We often need to target a specific element or a group of specific elements for achieving different functionality like styling. That is exactly when id and classes come in handy. The id is unique to each element in an HTML page, whereas several elements can have the same class.

HTML ID Attribute: As the name suggests, ID is an identifier for the element in the whole document. So no two elements in a document can have the same id. Using id, we can easily target the elements using CSS and manipulate their style. We use "#" before the class name for targeting a particular class.

Syntax:

```
<style>
#para {
   background-color: red;
}
</style>
<p id="para"> Hello World </p>
```

HTML Class Attribute: HTML class is a global attribute that contains classes of an element. As the name suggests, a class can be used to represent a set of elements having similar properties.

Unlike ID, multiple elements in a document can have the same classes. It is case-sensitive.

Similar to ids, we can select an element from the document using its class name. We use "." before the class name for targeting a particular class.

Syntax:

```
<style>
.heading {
   background-color: red;
}
</style>
<body>
   <h1 class="heading"> Aryan </h1>
   <h1 class="heading"> Kaush </h1>
   <h1 class="Heading"> Kuldeep </h1>
</body>
```

HTML Name Attribute:

A name is an HTML attribute that gives a name to an element. This name can be further used depending on the tag it is used on. A very common use case of a name is in a Form tag.

```
<form>
  <button name="javascript" type="submit" value="Yes">Yes</button>
  <button name="javascript" type="submit" value="No">No</button>
</form>
```

HTML Iframes:

The HTML <iframe> tag is used to embed a webpage within a webpage. It is also called an inline frame.

<iframe src=" https://gph.edu.in/" title="Govt. Polytechnic Hamirpur" height="500" width="500" > </iframe>

Here,

src: It is used to specify the URL of the website to be loaded.

title: It is good practice to include a title attribute so that screen readers can read the title to users.

Other Attributes for <iframe>

There are some importat attributes for <iframe>. They are:

- height and width
- name
- srcdoc

srcdoc

Instead of a website URL, we can send HTML directly to the iframe, which will be displayed instead of another website. For example,

<iframe srcdoc="<h1>Learn to code</h1>"></iframe>

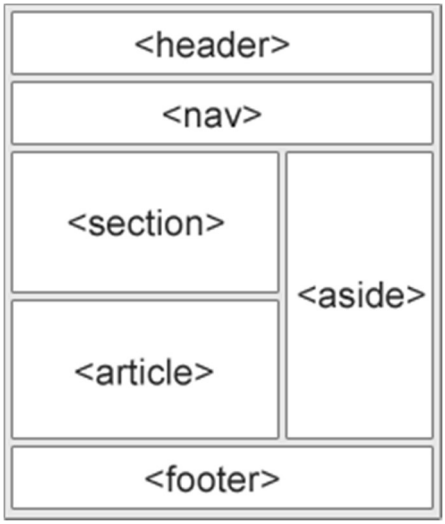
Semantic Elements in HTML: A semantic element clearly describes its meaning to both the browser and the developer.

Examples of non-semantic elements: and - Tells nothing about its content.

Examples of semantic elements: <form>, <table>, and <article> - Clearly defines its content.

Semantic Elements in HTML:

Many web sites contain HTML code like: to indicate navigation, header, and footer.



In HTML there are some semantic elements that can be used to define different parts of a web page:

Tag	Description
<article>	Defines independent, self-contained content
<aside>	Defines content aside from the page content
<details>	Defines additional details that the user can view or hide
<figcaption>	Defines a caption for a <figure> element
<figure>	Specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.
<footer>	Defines a footer for a document or section
<header>	Specifies a header for a document or section
<main>	Specifies the main content of a document
<mark>	Defines marked/highlighted text
<nav>	Defines navigation links
<section>	Defines a section in a document

<summary> Defines a visible heading for a <details> element

<time> Defines a date/time

Example:

```
<!DOCTYPE html>
<html>
<body>
  <header>
    <h1>Heading</h1>
  </header>
  <section>
    <main>
      <article>
        This is the main content of the website.
      </article>
    </main>
    <aside>Extra information.</aside>
  </section>
  <footer>Copyright 2022</footer>
</body>
</html>
```