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## Containers

The term *"containers"* typically refers to elements or components that are used to group and contain other elements or content within a web page. *Containers* are often used to create layout structures and provide visual organization to the content on a webpage.

## Types of Containers :

*1. Block-level Containers :* These are container elements that create block-level elements on a web page. Block-level elements take up the full width of their parent element and create a new line after the element, creating a vertical stack of elements. Examples of block-level containers include ** **, **<section>**, **<header>**, **<footer>**, **<nav>**, **<article>**, and **<aside>**. These elements are often used for creating layout structures and grouping content.

*2. Inline Containers :* These are container elements that create inline-level elements on a web page. Inline-level elements do not create a new line after the element, and they only take up the space needed by the content within them. Examples of inline containers include ****, ****, ****, **<a>**, **<label>**, and **<button>**. These elements are often used for grouping and styling inline content, such as text or inline-level elements.

*3. Generic Containers :* They generally refer to generic HTML elements that can be used as containers to group and organize content, without any specific semantic meaning or styling associated with them. These generic containers are typically used for layout purposes, creating structure, and applying styles as needed.Examples of generic containers include ** and .**

*Example :*

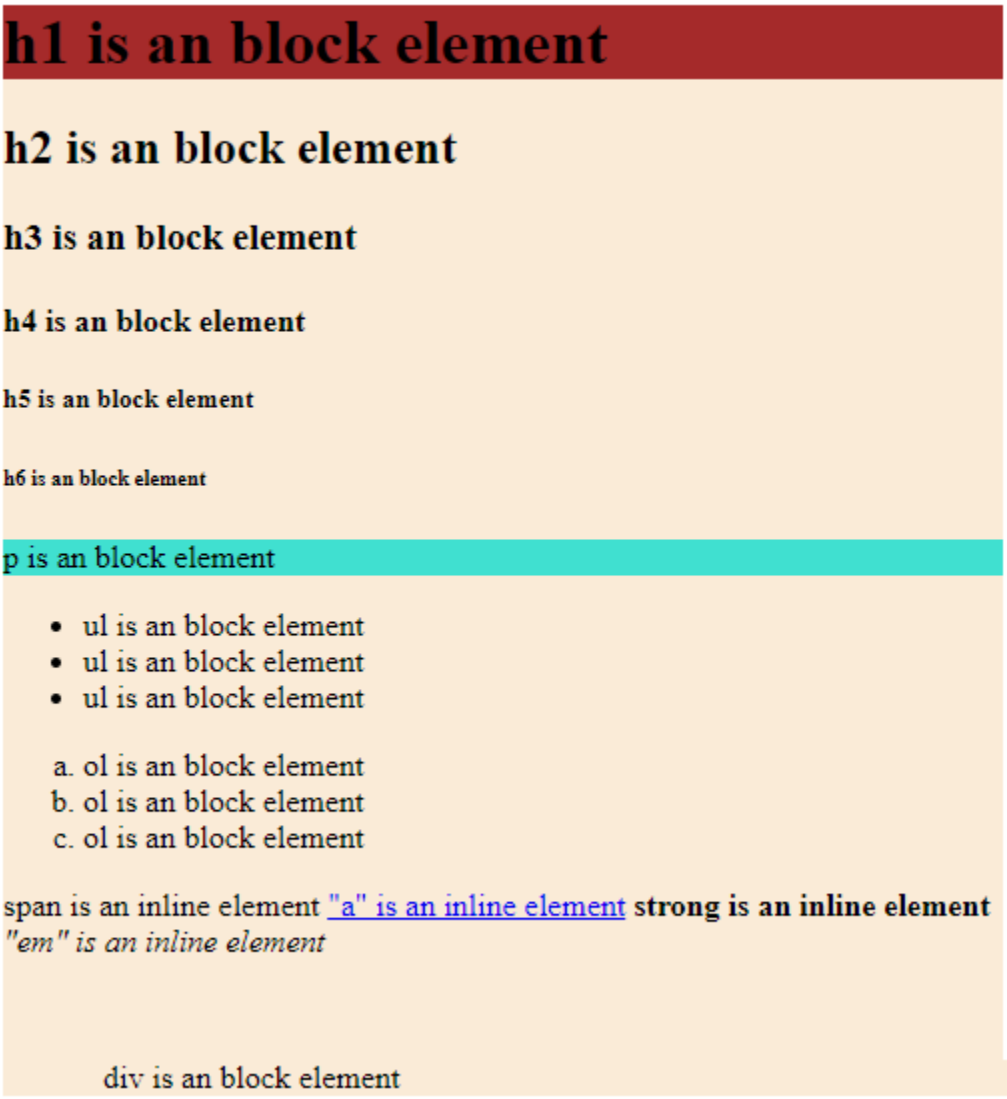
HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
    <title>Container and list</title>
</head>
<style>
    h1{background-color: brown;}
    div{width: 500px;background-color: antiquewhite;margin: 50px;}
</style>
<body>
    <div>
    <h1>h1 is an block element</h1>

    <h2>h2 is an block element</h2>

    <h3>h3 is an block element</h3>

    <h4>h4 is an block element</h4>

    <h5>h5 is an block element</h5>

    <h6>h6 is an block element</h6>

    <p style="background-color: turquoise;">p is an block element</p>

    <ul>
        <li> ul is an block element</li>
        <li> ul is an block element</li>
        <li> ul is an block element</li>
    </ul>

    <ol type="a">
        <li> ol is an block element</li>
        <li> ol is an block element</li>
        <li> ol is an block element</li>
```

```
    </ol>
    <span>span is an inline element</span>

    <a href="#">"a" is an inline element</a>

    <strong>strong is an inline element</strong>

    <em>"em" is an inline element</em>

    <div>div is an block element</div>
</div>
  </body>
</html>
```

*Output :*




Output

*Explanation :*

The code contains various HTML elements organized within a container div element.The head section contains the necessary meta tags and the title of the page.The body section has a single *div* element with a width of 500px, a background color of antiquewhite, and a margin of 50px. Within this *div* element, there are various HTML elements organized into *block* and *inline* elements.The *block* elements include six levels of *heading elements (h1 to h6)*, a *paragraph element (p)*, an *unordered list element (ul)* and an *ordered list element (ol)*. All these block elements occupy the full width of their parent element and are stacked vertically.The *inline* elements within the div element include a *span* element, an *hyperlink element (a)*, a *strong element*, and an *emphasis element (em)*. These elements do not create a

new line and only occupy the required space.Overall, the container *div* element helps to group and organize the various HTML elements on the page into a visually pleasing layout.

## List Element

There are three types of lists that can be used to display information in a structured way. These are:

*(I) Ordered List (<ol>) :* An ordered list is a list of items where each item is numbered. It is created using the *<ol>* tag.

Syntax:

```
<ol>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 3</li>
</ol>
```

*(II) Unordered List (<ul>) :* An unordered list is a list of items where each item is bulleted. It is created using the *<ul>* tag.

Syntax:

```
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 3</li>
</ul>
```

*(III) Definition List (<dl>) :* A definition list is a list of terms and their corresponding definitions. It is created using the *<dl>* tag.

Syntax:

```
<dl>
  <dt>Term 1</dt>
  <dd>Definition 1</dd>
  <dt>Term 2</dt>
  <dd>Definition 2</dd>
```

```
  <dt>Term 3</dt>
  <dd>Definition 3</dd>
</dl>
```

**Note: In the definition list, <dt> tag is used for the term and <dd> tag is used for its definition.**

The *type* attribute in the list tag *(<ul> and <ol>)* is used to define the type of list marker that should be used for each list item. There are several values that can be used for the *type* attribute:

- For *ordered lists* (*<ol>*), the *type* attribute can be used to specify the numbering style of the list. The default value is "1", which is for decimal numbering. Other possible values are "A" for uppercase alphabetical numbering, "a" for lowercase alphabetical numbering, "I" for uppercase Roman numerals, and "i" for lowercase Roman numerals.
- For *unordered lists* (*<ul>*), the *type* attribute can be used to specify the type of bullet or marker that should be used for each list item. The default value is "disc", which is a solid bullet. Other possible values are "circle" for a hollow circle, "square" for a solid square, and "none" for no bullet or marker.
- *Nested Lists :* It refers to the practice of nesting one or more lists inside another list in HTML. This is achieved by placing one list element (such as *<ul>, <ol>, or <dl>*) inside another list item element (*<li>*) of a parent list.

*Example :*

HTML

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<h2>List</h2>

<h3>Unordered list</h3>
<h4>Fruits</h4>
<ul>
    <li> appple</li>
```

```
    <li> mango</li>
    <li> banana</li>
</ul>

<h3>Ordered list</h3>
<h4>Vegetables</h4>
<ol type="a">
    <li> onion</li>
    <li> beans</li>
    <li> spring onion</li>
</ol>

<h3>Nested list</h3>
<h4>Flower</h4>
<ul>
    <li>Rose
      <ul>
        <li>Red</li>
        <li>White</li>
        <li>Pink</li>
      </ul>
    </li>
    <li>Tulip
      <ul>
        <li>Yellow</li>
        <li>Red</li>
        <li>Orange</li>
      </ul>
    </li>
    <li>Sunflower</li>
    <li>Lily
      <ul>
```

```
            <li>White</li>
            <li>Pink</li>
            <li>Yellow</li>
        </ul>
    </li>
  </ul>
</body>
</html>
```

*Output :*

# List

### Unordered list

#### Fruits

- appple
- mango
- banana

### Ordered list

#### Vegetables

a. onion
b. beans
c. spring onion

### Nested list

#### Flower

- Rose
  - Red
  - White
  - Pink
- Tulip
  - Yellow
  - Red
  - Orange
- Sunflower
- Lily
  - White
  - Pink
  - Yellow

---

Output

*Explanation :*

The code demonstrates the use of different types of lists , including *unordered lists (ul)*, *ordered lists (ol)*, and *nested lists (ul within ul)*.

*Unordered List (ul):* The code starts with an unordered list that represents a list of fruits. It is created using the *ul* element and contains three list items *(li)* with the names of different fruits (apple, mango, banana). The list items are displayed as bulleted items due to the default styling of *ul*.

*Ordered List (ol):* The code also includes an ordered list that represents a list of vegetables. It is created using the ol element with the type attribute set to "a", which displays the list items as lowercase alphabetical letters (a, b, c). The ordered list contains three list items *(li)* with the names of different vegetables (onion, beans, spring onion). The list items are displayed with the alphabetical letters as labels due to the default styling of *ol* with type "a".

Nested List: The code further demonstrates a nested list, where a *ul* element is used inside another *ul* element to create a hierarchy. The outer *ul* represents a list of flowers and contains four list items *(li)* with the names of different flowers (Rose, Tulip, Sunflower, Lily). The list item "Rose" contains an inner *ul* element, which represents different colors of roses, and it contains three list items *(li)* with the names of different colors (Red, White, Pink). Similarly, the list item "Tulip" also contains an inner *ul* element representing different colors of tulips (Yellow, Red, Orange), and the list item "Lily" contains an inner *ul* element representing different colors of lilies (White, Pink, Yellow). The nested lists are indented to visually represent the hierarchy of the list items.