

INTRODUCTION TO HTML AND CSS

1.How are inline and block elements different from each other?

BLOCK ELEMENTS:-A block-level element always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).

For eg:<div></div> element.

```
question1.html X
home > shefali > Desktop > HTMLCSS > question1.html > html
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <style>
5              li{display:inline}
6          </style>
7      </head>
8      <body>
9          <ul>
10             <li>Maths</li>
11             <li>Science</li>
12             <li>English</li>
13         </ul>
14     </body>
15 </html>
```

OUTPUT:

Maths Science English

INLINE ELEMENTS:-An inline element does not start on a new line and only takes up as much width as necessary.

For eg: element

```
<> question1.html X
home > shefali > Desktop > HTMLCSS > <> question1.html > html > head > style > li
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <style>
5              li{display:block}
6          </style>
7      </head>
8      <body>
9          <ul>
10             <li>Maths</li>
11             <li>Science</li>
12             <li>English</li>
13          </ul>
14      </body>
15  </html>
```

OUTPUT:

Maths
Science
English

2.Explain the difference between visibility:hidden and display:none.

Display:none:- An element can be hidden by setting the display property to none.The element will be hidden, and the page will be displayed as if the element is not there.No space will be allocated to the display none element.

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <style>
5              .hidden{display:none;}
6          </style>
7      </head>
8      <body>
9          <h1> This is the main heading.</h1>
10         <h1 class="hidden"> Thisis the hidden heading.</h1>
11         <p> Another statement.</p>
12     </body>
13 </html>
```

OUTPUT:

This is the main heading.

Another statement.

Visibility:hidden:-An element can be hidden by setting the visibility property to hidden.The element will be hidden, and the page will be displayed as if the element is not there but space will be allocated to the hidden element.

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <style>
5        .hidden{visibility: hidden;}
6      </style>
7    </head>
8    <body>
9      <h1> This is the main heading.</h1>
10     <h1 class="hidden"> Thisis the hidden heading.</h1>
11     <p> Another statement.</p>
12  </body>
13 </html>
```

OUTPUT:

This is the main heading.

Another statement.

3.Explain the clear and float properties.

Float:The CSS float property specifies how an element should float.The float property is used for positioning and formatting content.Float property can be used to wrap text around images.

The float property can have one of the following values:

- left - The element floats to the left of its container
- right - The element floats to the right of its container
- none - The element does not float (will be displayed just where it occurs in the text). This is default.
- inherit - The element inherits the float value of its parent.

Clear:The clear property specifies what elements can float beside the cleared element and on which side.

The clear property can have one of the following values:

- none - Allows floating elements on both sides. This is default
- left - No floating elements are allowed on the left side
- right- No floating elements are allowed on the right side
- both - No floating elements are allowed on either the left or the right side
- inherit - The element inherits the clear value of its parent

Clear property is most commonly used with the float property.If an element is floated to the left, then you should clear to the left.

4.Explain the difference between absolute, relative,fixed and static.

Absolute, relative, fixed and static are the types of positioning methods used to position elements using position property.

Position:static-HTML elements are positioned static by default.Static positioned elements are not affected by the top, bottom, left, and right properties.An element with position:static is not positioned in any special way; it is always positioned according to the normal flow of the page.

Position:relative-An element with position:relative is positioned relative to its normal position.Setting the top, right, bottom, and left properties of a relatively-positioned element will cause it to be adjusted away from its normal position.An element is generally positioned relatively to the document body.

Position:absolute-An element with position:absolute is positioned relative to the nearest positioned ancestor.However; if an absolute positioned element has no positioned ancestors, it uses the document body, and moves along with page scrolling.

Position:fixed-An element with position:fixed is positioned relative to the viewport, which means it always stays in the same place even if the page is scrolled. The top, right, bottom, and left properties are used to position the element.

5. Write the HTML code to create a table in which there are 4 columns(ID , Employee Name, Designation, Department) and at least 6 rows. Also do some styling to it.

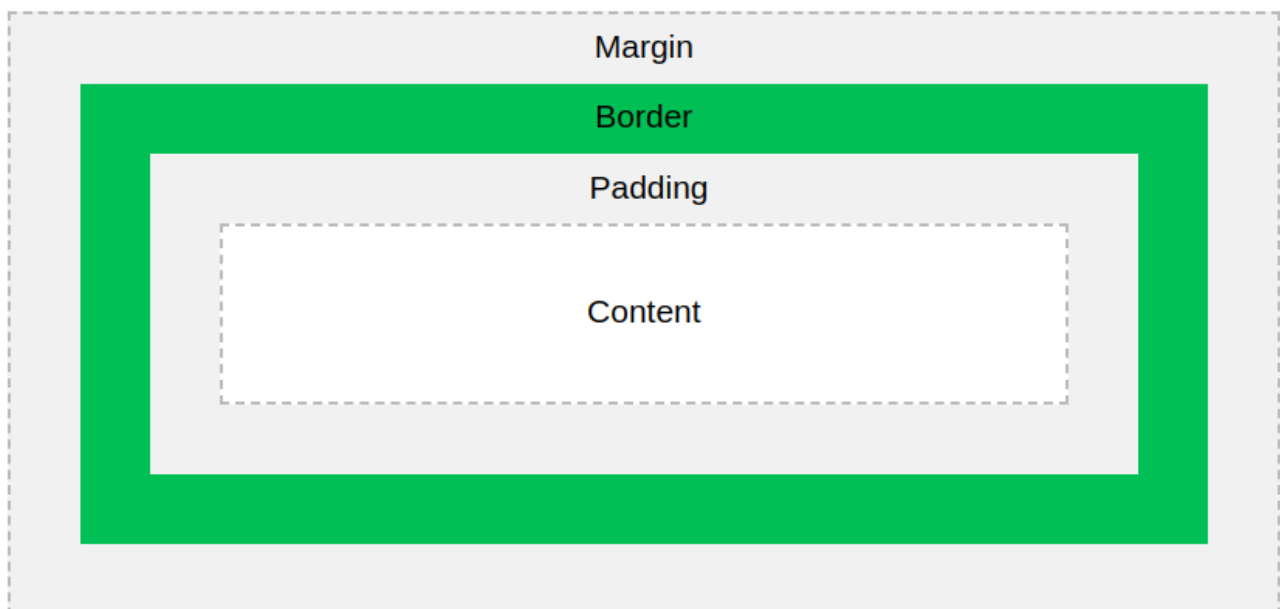
The answer file is attached as question5.html

6. Why do we use meta tags?

Metadata is data about data. The <meta> tag provides metadata about the HTML document. Metadata will not be displayed on the page, but will be machine parsable. Meta elements are typically used to specify page description, keywords, author of the document, last modified, viewport and other metadata. The metadata can be used by browsers (how to display content or reload page), search engines (keywords) for SEO(Search Engine Optimization) or other web services.

7. Explain box model.

All HTML elements can be considered as boxes. In CSS, the term "box model" is used when talking about design and layout. The CSS box model is essentially a box that wraps around every HTML element. It consists of: margins, borders, padding, and the actual content. The image below illustrates the box model:



Explanation of the different parts:

- Content: The content of the box, where text and images appear.
- Padding: It is the space between the content and its border. It clears the area around the element.
- Border: A border that goes around the element. It can be solid, dotted, dashed etc.
- Margin: It is the space outside the border. It clears up the area outside border.

8. What are the different types of CSS Selectors?

There are three types of CSS selectors namely element name, id or class.

Element name: We can apply CSS properties to particular elements by using element names. Through this selector, only the element whose name is selected will be styled. But if more than one element have the same name, they will all be affected.

```
1  <!DOCTYPE html>
2  <html>
3      <head>
4          <style>
5              h1{
6                  color: red;
7              }
8          </style>
9      </head>
10     <body>
11         <h1> This is the main heading.</h1>
12         <h2>This is the secondary heading.</h2>
13     </body>
14 </html>
```

This is the main heading.

This is the secondary heading.

Id: Through this selector also, we can apply CSS properties to individual elements. We can identify elements uniquely by assigning them different ids. This property uniquely identifies each element, therefore only one element's properties can be changed using one id. They are written in CSS using '#'.

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <style>
5        #id1{
6          color: red;
7        }
8        #id2{
9          color: blue;
10       }
11      </style>
12    </head>
13    <body>
14      <h1 id="id1"> This is the main heading.</h1>
15      <h2 id="id2">This is the secondary heading.</h2>
16    </body>
17  </html>
```

This is the main heading.

This is the secondary heading.

Class: We can using class selector to change CSS properties of multiple elements at once. We can wrap multiple elements inside a single class and then use the class name as a CSS selector to change their properties. Class names are always preceded by ‘.’ in CSS.


```

1  <!DOCTYPE html>
2  <html>
3      <head>
4          <style>
5
6              .mainDiv{
7                  color: rgb(143, 143, 160);
8              }
9          </style>
10     </head>
11     <body>
12         <div class="mainDiv">
13             <h1> This is the main heading.</h1>
14             <h2>This is the secondary heading.</h2>
15         </div>
16     </body>
17 </html>

```

This is the main heading.

This is the secondary heading.

9. Define Doctype.

The `<!DOCTYPE>` declaration must be the very first thing in your HTML document, before the `<html>` tag. The `<!DOCTYPE>` declaration is not an HTML tag, but it is an instruction to the web browser about what version of HTML the page is written in. HTML 5 is the latest version of HTML.

The syntax for writing Doctype in HTML 5 is:

```
<!DOCTYPE html>
```

10. Explain 5 HTML5 semantic tags.

With HTML4, developers used their own id/class names to style elements: header, top, bottom, footer, menu, navigation, main etc. This made it impossible for search engines to identify the correct web page content. With the new HTML5 elements, it becomes easier.

<section> element: The `<section>` element defines a section in a document. A home page could normally be split into sections for introduction, content, and contact information.

<article> element: The <article> element specifies independent, self-contained content. An article should make sense on its own, and it should be possible to read it independently from the rest of the web site.

<header> element: The <header> element specifies a header for a document or section. The <header> element should be used as a container for introductory content. We can have several <header> elements in one document.

<footer> element: The <footer> element specifies a footer for a document or section. A <footer> element should contain information about its containing element. A footer typically contains the author of the document, copyright information, links to terms of use, contact information, etc.

<nav> element: The <nav> element defines a set of navigation links.

11.Create HTML for web-page.jpg (check resources, highest weightage for answers)

The answer file is attached as question11.html and question11css.css

12.Create HTML for form.png (check resources, highest weightage for answers)

The answer file is attached as question12.html and question12css.css