Exercise 5: Introduction to HTML/CSS

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

- Block-level elements always start at new line and takes up the full width available.
  e.g. , <p>, <pre>, <form> etc.
- Inline element does not start on a new line and only takes up as much width as necessary.
  e.g. , <button>, <i>, <input>, etc.

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

- display:none means that the tag in question will not appear on the page at all (although you can still interact with it through the dom). There will be no space allocated for it between the other tags.
- visibility:hidden means that unlike display:none, the tag is not visible, but space is allocated for it on the page. The tag is rendered, it just isn't seen on the page.

3. **Explain the clear and float properties.**

- The float property is used for positioning and formatting content e.g. let an image float left to the text in a container. The float property can have one of the following values:
    1. left - The element floats to the left of its container
    2. right- The element floats to the right of its container
    3. none - The element does not float (will be displayed just where it occurs in the text). This is default
    4. inherit - The element inherits the float value of its parent
- 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:
    1. none - Allows floating elements on both sides. This is default
    2. left - No floating elements allowed on the left side
    3. right- No floating elements allowed on the right side

4. both - No floating elements allowed on either the left or the right side
5. inherit - The element inherits the clear value of its parent

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

- Static : This is the default value. All elements are in order as they appear in the document.
- Relative : the element is positioned relative to its normal position
- Absolute : The element is positioned absolutely to it's first positioned parent. It allows us to place our element precisely where we want it. If, there is no positioned parent element, it will be positioned related directly to the HTML element.
- Fixed : The element is positioned related to the browser

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.

6. Why do we use meta tags?

- The <meta> tag provides metadata about the HTML document. Metadata will not be displayed on the page, but will be machine parsable.
- <meta> tag is typically used to specify page description, keywords, author of the document, last modified and other meta data.
- The metadata can be used by the browsers, like how to display content or reload page.
- E.g.
  <head>
  <meta charset="'UTF-8"'>
  <meta name="'keywords" content="'HTML, CSS, XML, JavaScript"'>
  </head>

7. Explain box model.

- All HTML elements can be considered as boxes. In CSS, this term is used when talking about design and layout.

- It is essentially a box that wraps around every HTML element.
- It consists of : margins, borders, padding and the content.

8. What are the different types of CSS Selectors?

- CSS selectors are used to select the content you want to style. They are part of CSS rule set.
- There are several types of selectors in CSS :
    - CSS Element Selector:

      <head>
      <style>
      p{
      color : red;
      }
      </style>
      </head>
      <body>
      Hello
      </body>
    - CSS id Selector

      <head>
      <style>
      #key {
      color : red;
      }
      </syle>
      </head>
      <body>
      Hello
      </body>

    - CSS class Selector

      <head>
      <style>

.key {
color : red;
}
</syle>
</head>
<body>
Hello
</body>

- CSS Universal Selector

<head>
<style>
* {
color : red;
}
</syle>
</head>
<body>
<h1>Big Hello</h1>
Hello
</body>

8.5 CSS group selector

<head>
<style>
h1, p {
color : red;
}
</syle>
</head>
<body>
<h1>Big Hello</h1>
Hello
<h2>Bye</h2>

</body>

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; it is an instruction to the web browser about what version of HTML the page is written in.
- In HTML 4.01, the <!DOCTYPE> declaration refers to a DTD, because HTML 4.01 was based on SGML. The DTD specifies the rules for the markup language, so that the browsers render the content correctly.
- HTML5 is not based on SGML, and therefore does not require a reference to a DTD.

10. **Explain 5 HTML5 semantic tags.**

- **<section> (Section)**
  A section is thematic grouping of content, typically with a heading.
- **<article> (Article)**
  This 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> (Article)**
  It should be used as a container for introductory content at the top generally.
- **<footer> (Footer)**
  It should contain information about it's containing element. A footer typically contains the author of the document, copyright information, links to terms of use, etc.
- **<nav> (Navigation)**
  This tag defines a set of navigation links.

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