Assignment 2

Q1) Box model: it allows the developer to control the size, spacing and layout of the elements on the webpage. This box model contains a content around this we have border and the element between content and border is called padding. The area outside the border is called margin.

Margin separates the content with other elements. Border surrounds the content and act as a boundary. Padding is the space between the border and the content.

Q2) CSS selectors are used to specifically target a particular tag or a class for applying styles on the webpage.

* Type selectors: they target elements based on their HTML tag name. Ex: <p> tag, p{background-color:blue;} it changes the background color of all the elements with <p> tag.
* Class Selector: it targets the elements based on their class name. ex: .className{text-5px}
* ID selectors: it targets the elements based on their id attribute. This is used if we uniquely want to change an element.Ex: #id { }
* Pseudo classes: it targets elements based on various conditions, such as hovering. Ex: :hover: cursor-pointer;
* Pseudo elements: it targets the specific parts of an element, such as first letter or first line of an element.

Q3) vh refers to viewport height and 1vh refers to the 1% of the viewport height.

Vw refers to viewport width and 1vw refers to the 1% of the viewport width.

Q4) Inline : the inline elements are displayed with height and width of its content and they cannot have line breaks within them. Ex: <span>

Block: the block elements are displayed as an individual content that take up the full width no matter the content’s width. Ex: <p>

Inline-block: as the name suggest it has both the property of inline and block. The content do not start on the same line and they have respective dimensions based on the content and that can be changed as well. They can also have line breaks between them. Ex: <img>

Q5) Border box: the width and height of the element represents the total size of the element. It doesn’t include the border and padding.

Content-box: the width and height including with padding and border represents the total size of the element.

Q6) z-index: it represents the stacking order, the higher the number the precedence is greater and its stacking order doesn’t depend on the order of appearance in the HTML structure. It ensures that certain elements are displayed on top of the others.

Q7) Flexbox: it focuses on creating flexible and responsive one-dimensional layouts, either horizontally and vertically. Flexbox is like a set of shelves where you can place items one after another.

Grid: it focuses on creating two-dimensional layouts with rows and columns. Think of it as a grid of squares where you can place elements in any desired position.

Q8) Absolute: here the element is positioned relative to its nearest positioned ancestor. If there is no positioned ancestor, it is positioned relative to the document body.

Relative: here the element is positioned relative to its normal position within the document.

Fixed: here the element is positioned relative to the viewport and remains fixed in its position even when the webpage is scrolled.

Sticky: here the element is initially positioned relative to its normal position but once it reaches a specified scroll position, it becomes fixed to the viewport. Hence it is the combination of relative and fixed position.