Part 1

Answers

1. The <span> tag is an inline container used to mark up a part of a text, or a part of a document. The <span> tag is easily styled by CSS or manipulated with JavaScript using the class or id attribute.

2. **Placeholder:** Specifies a short hint that describes the expected value of an input field. The short hint is displayed in the input field before the user enters a value.

   Key Attribute: It to specify the content type of the associated element when used with a, link, object, param, script, style elements. When used with the input element, the attribute specifies the type of the date is can accept.

3. **SCSS: is more expressive**- SCSS uses less amount of lines in its code than CSS, which make the code load faster.

   It encourages proper nesting of rules- Standard CSS doesn't support nesting. We can't write a class inside another class.

   Syntax- The syntax of SCSS contains indentations that are missing in CSS.

   SCSS allows the user to write better inline documentation- SASS is flexible with comments, but any good developer will prefer inline documentation which is available in SCSS.

   Better Functionality- with he help of SCSS, we can add more functionality to the code in the form of variable, selectors, and nesting which is not present in CSS.

   Customizing Bootstrap- Having knowledge of SCSS helps in customizing Bootstrap 4.

   Mathematical Operations- SCSS allows us to do math using operators. We can perform simple calculations inside our code for better output.

4. **px :** are relative to the viewing device

   em : Relative to the font-size of the element(2em means 2 times the size of the current font)

   rem : Relative to font-size of the root element.

   vh : Relative to 1% of the width of the viewport*

5. **Width property:** specifies the width of the element's content area.

   Margin property: are used to create space around elements, outside of any defined borders.

   Text-align property: is used for aligning the inner content of a block element either align them to (right, left or center)**.**

   Margin-top property: set the margin area on the top of an element. A positive value place it further from its neighbours, while negative values place it closer.

   Border-radius property: rounds the corners of an element's outer border edge.

6. **Width property:** specifies the width of the element's content area.
   Margin property: are used to create space around elements, outside of any defined borders.
   Background property: allows you to control the background of any element.

Color property: sets the foreground color value of an element's text and text decorations, and sets the <currentcolor> value.

Border property: allow you to specify the style, width, and color of an element's border.

Cursor property: indicates text that may be selected.

7. **Media Queries** are a feature in CSS3 which allows you to specify when certain CSS rules should be applied. Are useful when you want to modify your site or App depending on a device's general type or specific characteristics and parameters.
8. Media query for tablet , Font-size controls the text sizes, if the width of the screen is equal to or less than 480px,the font –Size of our headers should be 16px.
9. **Z-index** in CSS controls the vertical stacking order of elements that overlap.
10. **Loading time:** Always make sure that the loading time for your website is 3 seconds or less.

Unused CSS code: helps you clear up clutter in your CSS codes by removing unnecessary rules and keeping only the ones that are essential.

Browser Compatibility: using Bootstrap for responsive web design ensures that your website is compatible across the most popular browsers like Firefox, Chrome, Explore 8,etc.