**1.What is the difference between em and rem units in CSS?**

**em- \* font-size value of the parent element**

**\* Used to change the scale relative to its parent's size.**

**\*Can compound**

**rem- \*font-size value of the root element (the <html> element)**

**\*** **Used to maintain a consistent size throughout the document**

**\*Cannot compound**

**2)** **Explain**  **the concept of closures in JavaScript. Provide an example where a closure might be useful.**

**It allows a function to access variables from its outer function .**

**A closure is formed when a function is defined inside another function, and the inner function knows the environment in which it was created.**

**function createCounter() {**

**let count = 0;**

**return function () {**

**count++;**

**console.log(count);**

**};**

**}**

**const counter = createCounter();**

**counter();**

**3.** **What are semantic HTML tags?**

**A semantic tag describes their meaning and content to both the browser and the developer.**

**<header>: Represents the header section of a page.**

**<nav>: Represents links to other parts of the website or page.**

**<main>: Represents the main content of the document.**

**<aside>: Represents content that is tangentially related to the content around it.**

**<footer>: Represents the footer of a page.**

**<mark>: Represents text that is highlighted**

**4.** **What is the purpose of the srcset attribute in the <img> tag?**

**It provides a set of different images for different screen sizes, resolutions, and conditions.**

**Two types:**  **Width descriptors (w): width of the image in pixels.**

**Pixel density descriptors (x): Indicate the pixel density of the image**