Q1>What is a CSS selector? Provide examples of element, class, and ID selectors.
ans=
A CSS selector is a pattern used to select and apply styles to specific HTML elements on a webpage. For example, an element selector targets HTML tags, like p { color: blue; }, which changes the color of all <p> (paragraph) elements to blue. A class selector targets elements with a specific class, such as .button { background-color: green; }, which applies a green background to all elements with the class button

Q2> Explain the concept of CSS specificity. How do conflicts between multiple styles get resolved?
ans=
Inline styles: Highest specificity e.g., style="..." directly in the HTML element.

ID selectors: Next in priority e.g., #header.

Q3> What is the difference between internal, external, and inline CSS? Discuss the advantages and disadvantages of each approach.
ans=
Internal CSS is placed within the <style> tag in the HTML file, ideal for single-page projects.
External CSS is in a separate file linked to the HTML, suitable for large websites and reusability.

Q4> Explain the CSS box model and its components (content, padding, border, margin). How does each affect the size of an element?
ans=
Content: This is the actual content of the element, such as text or images. It determines the base size of the element.
Padding: The space between the content and the border. Padding adds extra space inside the element, around the content.
Border: A line that surrounds the padding (if present). It can be styled with thickness, color, and style (e.g., solid, dashed).

Q5>What is the difference between border-box and content-box box-sizing in CSS? Which is the default?
ans=Description: The default value for box-sizing. The width and height you set for the element only apply to the content area. Padding and border are added outside the content area, so they increase the total size of the element.

Q6> What is CSS Flexbox, and how is it useful for layout design? Explain the terms flex-container and flex-item.
ans=
CSS Flexbox (Flexible Box Layout) is a layout model that allows for easy arrangement and alignment of elements within a container. It provides a more efficient way to distribute space and align items, even when their size is unknown or dynamic.

Q7> Describe the properties justify-content, align-items, and flex-direction used in Flexbox.
ans=

flex-start: Aligns items to the start (default).
flex-end: Aligns items to the end.
center: Centers items.

row-reverse: Items are arranged horizontally in reverse order.
column: Items are arranged vertically.
column-reverse: Items are arranged vertically in reverse order.

Q8>: Explain CSS Grid and how it differs from Flexbox. When would you use Grid over Flexbox?
ans=
Flexbox: A one-dimensional layout system (either row or column). It is ideal for simpler layouts where you need to align items in one direction (e.g., horizontal or vertical).

Grid: A two-dimensional layout system (both rows and columns). It is perfect for more complex layouts where you need to align items in both dimensions simultaneously.

Q9> Describe the grid-template-columns, grid-template-rows, and grid-gap properties. Provide examples of how to use them.
ans=
grid-template-columns: Defines the column sizes.
grid-template-rows: Defines the row sizes.
grid-gap: Sets the space between grid items.

Q10>What are media queries in CSS, and why are they important for responsive design?
ans=
Media queries in CSS are used to apply different styles to a webpage depending on the device characteristics, such as screen size, resolution, or orientation. They allow you to create responsive designs that adapt to various screen sizes and device types (e.g., mobile, tablet, desktop).

Q11>: Write a basic media query that adjusts the font size of a webpage for screens smaller than 600px.
ans=
@media (max-width: 600px): This applies the styles inside the block only for screens with a width of 600px or less (typically mobile devices).
font-size: 14px;: This reduces the font size to 14px on smaller screens.

Q12>Explain the difference between web-safe fonts and custom web fonts. Why might you use a web-safe font over a custom font?
ans=
Web-safe fonts are a set of standard fonts that are pre-installed on most operating systems and devices. These fonts are universally available, so they display consistently across different platforms and browsers without needing additional downloads.

Q13>What is the font-family property in CSS? How do you apply a custom Google Font to a webpage?

ans=
The font-family property specifies the font to be used for the text in an element. It can list multiple fonts in order of preference, ensuring that if the first font is unavailable, the next one in the list will be used.