Basic Questions (Bunyadi Sawalat)

1. **CSS kya hai aur iska istemal kyun kiya jata hai?**
   * **Jawaab**: CSS (Cascading Style Sheets) aik styling zuban hai jo HTML elements ko design aur layout dene ke liye istemal hoti hai. Yeh content aur uske design ko alag kar ke code ko saf aur asaan banati hai. CSS rang (colors), font, layout, spacing, aur responsiveness jese features ko manage karne mein madad deti hai.
2. **Inline, Internal aur External CSS mein farq bayan karein.**
   * **Jawaab**:
     + **Inline CSS** seedha HTML element mein style attribute ka istemal karta hai aur sirf usi element par asar andaz hota hai.
     + **Internal CSS** HTML page ke <head> section mein <style> tag mein likha jata hai aur poore page ke liye kaam karta hai.
     + **External CSS** aik alag .css file mein hota hai jo <link> tag ke zariye HTML mein link kiya jata hai aur yeh ek se zyada pages ko style dene mein madadgar hai.
3. **CSS box model kya hai aur iske components kya hain?**
   * **Jawaab**: Box model har HTML element ke gird aik dhacha hai jo 4 hissoon par mushtamil hai:
     + **Content**: Element ke andar ka asal text ya media.
     + **Padding**: Content ke gird ka faasla, jo border ke andar hota hai.
     + **Border**: Padding aur content ko surround karta hai.
     + **Margin**: Border ke bahar ka faasla jo element ko doosre elements se alag karta hai.
4. **Classes aur IDs kya hain aur inmein kya farq hai? Kaun kis waqt istemal hota hai?**
   * **Jawaab**:
     + **Classes** ko kai elements par istemal kiya ja sakta hai aur yeh . (dot) syntax se define ki jati hain (e.g., .button).
     + **IDs** aik unique identifier hai jo sirf ek element ke liye hota hai aur # (hash) syntax se likha jata hai (e.g., #header).
     + **Usage**: Classes ko tab istemal karte hain jab kai elements ek hi style use kar rahe hon, jabke IDs ko sirf ek unique element ke liye use kiya jata hai.
5. **float property kaise kaam karti hai aur iska istemal kab hota hai?**
   * **Jawaab**: float property elements ko left ya right side par le jati hai aur doosre elements ko unke gird wrap hone ka moqa deti hai. Yeh aksar layouts (jaise sidebars aur images align karne) ke liye istemal hoti hai, lekin Flexbox aur Grid ke baad iska istemal kam ho gaya hai.

**Intermediate Questions (Darmiyani Sawalat)**

1. **position property aur static, relative, absolute, fixed, aur sticky ke darmiyan farq kya hai?**
   * **Jawaab**:
     + **Static**: Yeh default position hai jo document flow mein element ko uski normal jagah par rakhta hai.
     + **Relative**: Element ko uski asal position ke mutabiq adjust karta hai.
     + **Absolute**: Yeh position apne qareebi positioned ancestor ke mutabiq set hoti hai.
     + **Fixed**: Yeh viewport (screen) ke mutabiq hoti hai aur scrolling ke bawajood apni jagah par rehti hai.
     + **Sticky**: Yeh relative aur fixed ka mix hai, jo ek offset tak scroll hone ke baad stick ho jati hai.
2. **Flexbox kya hai aur yeh kyun faydemand hai?**
   * **Jawaab**: Flexbox aik CSS layout module hai jo responsive layouts banane ko asaan banata hai. Yeh container ke andar space ko distribute aur items ko horizontally aur vertically align karne mein madad karta hai jese justify-content aur align-items.
3. **CSS Grid kya hai aur yeh Flexbox se kaise mukhtalif hai?**
   * **Jawaab**: CSS Grid aik two-dimensional layout system hai jo rows aur columns ko handle kar sakta hai aur complex grid-based designs ke liye behtar hai. Flexbox sirf one-dimensional layout hai, jo rows ya columns mein items ko align karta hai.
4. **Responsive aur Adaptive Design mein kya farq hai?**
   * **Jawaab**:
     + **Responsive Design** flexible grids, images, aur media queries ka istemal karta hai taake layout har screen size par adjust ho jaye.
     + **Adaptive Design** fixed layouts banata hai jo har specific breakpoint par adjust ho jati hain.
5. **Media queries kya hain aur CSS mein inka istemal kaise hota hai?**
   * **Jawaab**: Media queries CSS mein conditionally styles apply karti hain jo ke screen width, height, ya orientation ke mutabiq kaam karti hain. Yeh responsive design mein istemal hoti hain, jese:

css

Copy code

@media (max-width: 768px) {

/\* Styles for screens smaller than 768px \*/

}

**Advanced Questions (Advanced Sawalat)**

1. **Aap CSS ko kaise optimize kar sakte hain taake better performance mile?**
   * **Jawaab**: CSS files ko minify karein, unused CSS ko remove karein, HTTP requests ki tadaad kam karein, multiple files ko combine karein aur shorthand likhne ki koshish karein. Critical CSS ko inline karna load time improve karta hai.
2. **Critical CSS kya hai aur yeh performance improve kaise karta hai?**
   * **Jawaab**: Critical CSS woh CSS hai jo sirf page ke visible portion ko style karne ke liye zaroori hai. Yeh render-blocking styles ko kam karta hai aur page load times ko better banata hai.
3. **CSS preprocessors jaise Sass ya LESS kya hain aur inka istemal kyun hota hai?**
   * **Jawaab**: Preprocessors jese Sass aur LESS CSS mein variables, nesting aur functions jese features add karte hain jo ke maintainable aur organize karne mein asaani dete hain, khaaskar bade projects ke liye.
4. **BEM (Block Element Modifier) kya hai aur yeh CSS mein kyun helpful hai?**
   * **Jawaab**: BEM aik naming convention hai jo classes ko Blocks, Elements aur Modifiers mein organize karta hai, jisse readability aur reusability improve hoti hai. Misal ke tor par, aik class naam ho sakta hai .button--primary jahan .button block hai aur --primary modifier.
5. **Sirf CSS ke zariye aik responsive image gallery layout kaise banayeinge?**
   * **Jawaab**: CSS Grid ya Flexbox ka istemal karke aap layout bana sakte hain jo screen width ke mutabiq automatically adjust ho:

css

Copy code

.gallery {

display: grid;

grid-template-columns: repeat(auto-fill, minmax(150px, 1fr));

gap: 10px;

}

.gallery img {

width: 100%;

height: auto;

}

**Practical/Scenario-Based Questions (Amali Sawalat)**

1. **Aap aik div ko page par vertically aur horizontally center kaise kareinge?**
   * **Jawaab**: Flexbox ka istemal karke:

css

Copy code

.centered {

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

}

1. **Aap aik responsive navbar kaise banayeinge?**
   * **Jawaab**: Flexbox ka istemal karke navbar items ko arrange karein aur media queries ka istemal karke small screens par ise hamburger menu mein collapse kar dein. CSS aur JavaScript se toggle effect add kar sakte hain.
2. **Kaise yaqeen dilaenge ke aik webpage mobile devices par acha lage?**
   * **Jawaab**: Responsive design techniques ka istemal kar ke, flexible layouts (Flexbox ya Grid), relative units (% ya rem), aur media queries ka istemal karein.
3. **Kisi CSS challenge ka zikar karein jo project mein samna karna para ho aur kaise hal kiya?**
   * **Jawaab**: Jab layout ke elements overlap ho rahe thay, maine DevTools mein inspect kiya aur CSS z-index property ka istemal karke stacking adjust kiya, aur Flexbox ko istamal kar ke layout ko sahi tarah se align kiya. Multiple devices par test kar ke check kiya ke har jagah consistency bani rahe.