**CSS Concepts**

**1.Basics**

* **Syntax**: Selectors, properties, values
* **Selectors**: Element, class, ID, attribute, pseudo-classes, pseudo-elements
* **Box Model**: Margin, border, padding, content
* **Units**: Pixels (px), em, rem, percentages, viewport units (vw, vh), etc.

**2. Layout**

* **Display**: block, inline, inline-block, none
* **Positioning**: static, relative, absolute, fixed, sticky
* **Flexbox**: flex container, flex items, properties like flex-direction, justify-content, align-items
* **Grid**: grid container, grid items, properties like grid-template-columns, grid-template-rows, grid-area
* **Float and Clear**
* **Z-index**: stacking context

**3. Typography**

* **Fonts**: font-family, font-size, font-weight, font-style
* **Text properties**: color, line-height, text-align, text-decoration, text-transform, letter-spacing, word-spacing
* **Web Fonts**: @font-face, Google Fonts

**4. Colors and Backgrounds**

* **Color**: color names, hex codes, RGB, RGBA, HSL, HSLA
* **Background**: background-color, background-image, background-position, background-size, background-repeat, background-attachment

**5. Borders and Effects**

* **Borders**: border-style, border-width, border-color, border-radius
* **Shadows**: box-shadow, text-shadow
* **Filters**: filter (blur, brightness, contrast, etc.)

**6. Transitions and Animations**

* **Transitions**: transition-property, transition-duration, transition-timing-function, transition-delay
* **Animations**: @keyframes, animation-name, animation-duration, animation-timing-function, animation-delay, animation-iteration-count, animation-direction

**7. Responsive Design**

* **Media Queries**: @media, min-width, max-width, orientation, resolution
* **Responsive Units**: %, em, rem, vw, vh
* **Flexbox and Grid for responsive layouts**

**8. Advanced Techniques**

* **Pseudo-classes**: :hover, :focus, :active, :nth-child, :first-child, :last-child
* **Pseudo-elements**: ::before, ::after, ::first-line, ::first-letter
* **Custom Properties (Variables)**: --custom-property, var()
* **Functions**: calc(), min(), max(), clamp()
* **Clipping and Masking**: clip-path, mask

**9. Accessibility and Best Practices**

* **Accessibility**: focus management, visibility, color contrast, ARIA roles
* **Best Practices**: CSS reset, naming conventions (BEM, OOCSS), modular CSS, performance optimization

**10. Frameworks and Preprocessors**

* **Frameworks**: Bootstrap, Foundation, Bulma, Tailwind CSS
* **Preprocessors**: SASS, LESS, Stylus (variables, nesting, mixins, inheritance)

**11. Tools and Techniques**

* **Development Tools**: CSS linting, CSS minification, PostCSS
* **Vendor Prefixes**: -webkit-, -moz-, -ms-, -o-

**12. CSS for Web Components and Modern JS Frameworks**

* **Shadow DOM**: :host, ::slotted
* **CSS-in-JS**: Styled-components, Emotion, JSS