What is CSS?

Full form is cascading style sheets.
styling language for HTML elements.

----

limitations of CSS:

Ascending by selectors is not possible.
limitations of vertical control.
no expressions.
no column declaration.
pseudo-class not controlled by dynamic behaviour
styles for targeting specific text not possible.

----

difference between CSS and CSS3

CSS:

It's a basic version so it does not support responsive design
Cannot handle media queries
CSS slower than CSS3
Cannot create 3D transformations and animations
It has old and standard colors.
Does not have box-sizing tool.

CSS3

It can handle media queries.
CSS3 can split into modules
faster than CSS
can create 3D transformations
new colors have been added in CSS3.
alignment problems are fixed by box-sizing tool

List out CSS3 modules?

Below is list of most important CSS3 modules are

Selectors
Box Model
Backgrounds and Borders
Text Effects
2D/3D Transformations
Animations
Multiple Column Layout
User Interface

What is the CSS3 animation?

When the animation is created in the @keyframe, bind it to a selector, otherwise, the animation will have no effect.

Bind the animation to a selector by specifying at least these two CSS3 animation properties:

Specify the name of the animation
Specify the duration of the animation

What is the word wrap/word wrapping in CSS3?

word wrap/word wrapping is used to allow long words to be able to break and wrap onto the next line in css3 we used word-wrap property like below class

.wrapWord{word-wrap:break-word;}

What are CSS3 Transitions?

CSS3 transitions allow you to change property values smoothly (from one value to another), over a given duration.

```
div {
    -webkit-transition: width 2s, height 4s; /* Safari */
     transition: width 2s, height 4s;
}
```

What is the syntax of opacity in CSS3?

style="opacity:0.4;filter:alpha(opacity=40)"

Advantages of CSS

bandwidth
site-wide consistency
page re-formatting
accessibility
content separated from presentation.

What are the components of a CSS Style?

Selector - A selector is an HTML tag at which a style will be applied.
This could be any tag like <h1> or <table> etc.

Property - A property is a type of attribute of HTML tag. Put simply, all the HTML attributes are converted into CSS properties. They could be color, border etc.

Value - Values are assigned to properties. For example, color property can have value either red or #F1F1F1 etc.

What is universal selector?

Rather than selecting elements of a specific type, the universal selector quite simply matches the name of any element type -

```
* {
   color: #000000;
}
```

What is Descendant Selector?

Suppose you want to apply a style rule to a particular element only when it lies inside a particular element. As given in the following example, style rule will apply to <em> element only when it lies inside <ul> tag.

```
ul em {
   color: #000000;
}
```

What is class selector?

You can define style rules based on the class attribute of the elements. All the elements having that class will be formatted according to the defined rule.

```
.black {
   color: #000000;
}
```

Can you make a class selector particular to an element type?

You can make it a bit more particular. For example -

```
h1.black {
   color: #000000;
}
```

What is a child selector?

```
body > p {
   color: #000000;
```

}

This rule will render all the paragraphs in black if they are direct child of <body> element. Other paragraphs put inside other elements like <div> or <td> would not have any effect of this rule.

----

what is an attribute selector?

You can also apply styles to HTML elements with particular attributes.
The style rule below will match all the input elements having a type attribute with a value of text -

```
input[type = "text"] {
   color: #000000;
}
```

How to select all paragraph elements with a lang attribute?

p[lang] : Selects all paragraph elements with a lang attribute.

How to select all paragraph elements whose lang attribute has a value
of exactly "fr"?

p[lang="fr"] - Selects all paragraph elements whose lang attribute has a value of exactly "fr".

How to select all paragraph elements whose lang attribute contains the word "fr"?

p[lang~="fr"] - Selects all paragraph elements whose lang attribute contains the word "fr".

How to select all paragraph elements whose lang attribute contains values that are exactly "en", or begin with "en-"?

p[lang|="en"] - Selects all paragraph elements whose lang attribute contains values that are exactly "en", or begin with "en-".

CSS frameworks?

Its a pre-planned libraries, which allows easier and more standard-complaint webpage styling using CSS

Who maintains the CSS specifications?

World Wide Web Consortium maintains the CSS specifications.

 In how many ways can a CSS be integrated as a web page?

CSS can be integrated in three ways:

Inline: Style attribute can be used to have CSS applied HTML elements.

Embedded: The Head element can have a Style element within which the code can be placed.

Linked/ Imported: CSS can be placed in an external file and linked via link element.

Imported: @import Rule: @import is used to import an external stylesheet

in a manner similar to the <link> element.

What benefits and demerits do External Style Sheets have?

Benefits:

One file can be used to control multiple documents having different styles.

Multiple HTML elements can have many documents, which can have classes.

To group styles in composite situations, methods as selector and grouping

are used.

Demerits:

Extra download is needed to import documents having style information.

To render the document, the external style sheet should be loaded.

Not practical for small style definitions.

Discuss the merits and demerits of Embedded Style Sheets?

Merits of Embedded Style Sheets:

Multiple tag types can be created in a single document.

Styles, in complex situations, can be applied by using Selector and Grouping methods.

Extra download is unnecessary.

Demerits of Embedded Style Sheets:

Multiple documents cannot be controlled.

What is the purpose of % measurement unit?

% - Defines a measurement as a percentage relative to another value, typically an enclosing element.

p {font-size: 16pt; line-height: 125%;}

What is the purpose of cm measurement unit?

cm - Defines a measurement in centimeters.

div {margin-bottom: 2cm;}

What is the purpose of em measurement unit?

em - A relative measurement for the height of a font in em spaces. Because an em unit is equivalent to the size of a given font, if you assign a font to 12pt, each "em" unit would be 12pt; thus, 2em would be 24pt.

p {letter-spacing: 7em;}

What is the purpose of ex measurement unit?

ex - This value defines a measurement relative to a font's x-height. The x-height is determined by the height of the font's lowercase letter.

p {font-size: 24pt; line-height: 3ex;}

What is the purpose of in measurement unit?
in - Defines a measurement in inches.

p {word-spacing: .15in;}

What is the purpose of mm measurement unit?
mm - Defines a measurement in millimeters.

p {word-spacing: 15mm;}

What is the purpose of pc measurement unit?
pc - Defines a measurement in picas. A pica is equivalent to 12 points; thus, there are 6 picas per inch.

p {font-size: 20pc;}

What is the purpose of pt measurement unit?

pt - Defines a measurement in points. A point is defined as 1/72nd of an inch.

body {font-size: 18pt;}

What is the purpose of px measurement unit?
px - Defines a measurement in screen pixels.

p {padding: 25px;}

What is the purpose of vh measurement unit?
vh - 1% of viewport height.

h2 { font-size: 3.0vh; }

What is the purpose of vw measurement unit?

vw - 1% of viewport width.

h1 { font-size: 5.9vw; }

What is the purpose of vmin measurement unit?
vmin 1vw or 1vh, whichever is smaller.

p { font-size: 2vmin;}

In how many formats can you specify a CSS color?
You can specify your color values in various formats. Following table lists all the possible formats -

Format	Syntax	Example
Hex Code	#RRGGBB	p{color:#FF0000;}
Short Hex Code	#RGB	p{color:#6A7;}
RGB %	rgb(rrr%,ggg%,bbb%)	p{color:rgb(50%,50%,50%);}
RGB Absolute	rgb(rrr,ggg,bbb)	p{color:rgb(0,0,255);}
keyword	aqua, black, etc.	p{color:teal;}

What are browser safe colors?

There is the list of 216 colors which are supposed to be most safe and computer independent colors. These colors vary from hexa code 000000 to FFFFFF.
These colors are safe to use because they ensure that all computers would display the colors correctly when running a 256 color palette.

Which property is used to set the background color of an element?

The background-color property is used to set the background color of an element.

Which property is used to set the background image of an element?

The background-image property is used to set the background image of an element.

Which property is used to control the repetition of an image in the background?

The background-repeat property is used to control the repetition of an image in the background.

Which property is used to create a small-caps effect?

The font-variant property is used to create a small-caps effect.

Which property is used to increase or decrease how bold or light a font appears?

The font-weight property is used to increase or decrease how bold or light a font appears.

Which property is used to increase or decrease the size of a font?

The font-size property is used to increase or decrease the size of a font.

Which property is used to set the color of a text?

The color property is used to set the color of a text.

Which property is used to set the text direction?

The direction property is used to set the text direction.

Which property is used to add or subtract space between the letters that make up a word?

The letter-spacing property is used to add or subtract space between the letters that make up a word.

Which property is used to control the position of an image in the background?

The background-position property is used to control the position of an image in the background.

Which property is used to control the scrolling of an image in the background?

The background-attachment property is used to control the scrolling of an image in the

----

Which property is used as a shorthand to specify a number of other background properties?

The background property is used as a shorthand to specify a number of other background properties.

Which property is used to change the face of a font?

The font-family property is used to change the face of a font.

Which property is used to make a font italic or oblique?

The font-style property is used to make a font italic or oblique.

Which property is used to add or subtract space between the words of a sentence?

The word-spacing property is used to add or subtract space between the words of a sentence.

Which property is used to indent the text of a paragraph?

The text-indent property is used to indent the text of a paragraph.

Which property is used to align the text of a document?

The text-align property is used to align the text of a document.

Which property is used to underline, overline, and strikethrough text?

The text-decoration property is used to underline, overline, and strikethrough text.

Which property is used to capitalize text or convert text to uppercase or lowercase letters?

The text-transform property is used to capitalize text or convert text to uppercase or lowercase letters.

Which property is used to control the flow and formatting of text?

The white-space property is used to control the flow and formatting of text.

Which property is used to set the text shadow around a text?

The text-shadow property is used to set the text shadow around a text.

Which property is used to set the width of an image border?

The border property is used to set the width of an image border.

Which property is used to set the height of an image?

The height property is used to set the height of an image.

Which property is used to set the width of an image?

The width property is used to set the width of an image.

Which property is used to set the opacity of an image?

The -moz-opacity property is used to set the opacity of an image.

Which property of a hyperlink signifies unvisited hyperlinks?

The :link signifies unvisited hyperlinks.

Which property of a hyperlink signifies visited hyperlinks?

The :visited signifies visited hyperlinks.

Which property of a hyperlink signifies an element that currently has the user's mouse pointer hovering over it?

The :hover signifies an element that currently has the user's mouse pointer hovering over it.

Which property of a hyperlink signifies an element on which the user is currently clicking?

The :active signifies an element on which the user is currently clicking.

Which property of a table specifies whether the browser should control the appearance of the adjacent borders?

The border-collapse specifies whether the browser should control the appearance of the adjacent borders that touch each other or whether each cell should maintain its style.

Which property of a table specifies the width that should appear between table cells?

The border-spacing specifies the width that should appear between table cells.

Which property of a table controls the placement of the table caption?

The caption-side captions are presented in the <caption> element. By default, these are rendered above the table in the document. You use the caption-side property to control the placement of the table caption.

Which property of a table specifies whether the border should be shown if a cell is empty?

The empty-cells specifies whether the border should be shown if a cell is empty.

Which property of a table allows browsers to speed up layout of a table by using the first width properties?

The table-layout allows browsers to speed up layout of a table by using the first width properties it comes across for the rest of a column rather than having to load the whole table before rendering it.

Which property specifies the color of a border?

The border-color specifies the color of a border.

Which property specifies whether a border should be solid, dashed line, double line, or one of the other possible values?

The border-style specifies whether a border should be solid, dashed line, double line, or one of the other possible values.

Which property specifies the width of a border?

The border-width specifies the width of a border.

Which property specifies a shorthand property for setting the margin properties in one declaration?

The margin specifies a shorthand property for setting the margin properties in one declaration.

Which property specifies the bottom margin of an element?
The margin-bottom specifies the bottom margin of an element.

Which property specifies the top margin of an element?
The margin-top specifies the top margin of an element.

Which property specifies the left margin of an element?
The margin-left specifies the left margin of an element.

Which property specifies the right margin of an element?
The margin-right specifies the left margin of an element.

Which property allows you to control the shape or appearance of the marker of a list?

The list-style-type allows you to control the shape or appearance of the marker.

Which property specifies whether a long point that wraps to a second line should align with the first line or start underneath the start of the marker of a list?

The list-style-position specifies whether a long point that wraps to a second line should align with the first line or start underneath the start of the marker.

Which property specifies an image rather than a bullet point or number for the marker of a list?

The list-style-image specifies an image for the marker rather than a bullet point or number.

Which property serves as shorthand for the styling properties of a list?

The list-style serves as shorthand for the styling properties.

Which property specifies the distance between a marker and the text in the list?

The marker-offset specifies the distance between a marker and the text in the list.

Which property serves as shorthand for the all the padding properties of an element?

The padding serves as shorthand for the all the padding properties.

Which property allows you to specify the type of cursor that should be displayed to the user?

The cursor property of CSS allows you to specify the type of cursor that should be displayed to the user.

Which value of cursor property changes the cursor based on context area it is over?

auto - Shape of the cursor depends on the context area it is over. For example, an 'I' over text, a 'hand' over a link, and so on.

Which value of cursor property changes the cursor to a crosshair or plus sign?

crosshair - A crosshair or plus sign.

Which property is used to set the width of the outline?

The outline-width property is used to set the width of the outline.

Which property is used to set the line style for the outline?

The outline-style property is used to set the line style for the outline.

Which property is used to set the color of the outline?

The outline-color property is used to set the color of the outline.

1.Difference between visibility: hidden and display: none?

Visibility: hidden ---> simply hides the element,
 but it will take space and affect the layout of the document.

Display:none ----> hides the element, but it will not take the
space and the page will appear as if the element is not present.

2.What are some of the new features and properties in CSS3?

Box-sizing property

Rounded corners(border-radius)
Border images(border-image)
Box shadow(box-shadow)
Text shadow(text-shadow)
media queries
transform property
transition property
animation property
New gradients

---

3. why and how are shorthand properties used? example?

Shorthand properties can improve page load times and reduce file size can be done with
background,border,margin, padding, animation,transition

EX: padding: 10px 20px 30px 40px;
padding-top,padding-right,padding-bottom,padding-left.

---

4. what is responsive web design?

Responsive web design is which makes the web page look good on all devices
(desktops,tablets, phones)

It can be achieved by using media queries or framework like bootstrap

---

5. what is media queries?

Media queries is a CSS3 module allowing content rendering
to adapt to conditions such as screen resolution
ex(smartphone screen vs computer screen)

@media screen and (min-width: 480px){
body{
background-color: green;
}
}

---

6. Explain box-sizing:border-box

By default, elements have box-sizing: content-box applied,
and only the content size is being accounted for.

box-sizing: border-box changes how the width and height of elements
are being calculated, border and padding are also being included in the calculation.

The height of an element is now calculated by the content's height + vertical padding + vertical border width.

The width of an element is now calculated by the content's width + horizontal padding + horizontal borderwidth.

----

7. what is z-index?

The z-index helps specify the stack order of positioned elements that may overlap one another.
the z-index default value is 0, and can take on either a positive or negativenumber.

Cascading style sheets

A list of statements that can assign various rendering properties to HTML element.

----

8. What is stylesheet?

A style sheet is used to build consistent, transportable and well designed style template.
we can add these templates on several different web pages.

Box-model

Box model is a box that wraps around every html elements.

----

what is specificity?

Ex1: HTML

```
<div>Name
</div>
```

CSS   rule 1

```
div{
background-color: green;
}
div{
background-color: red;                  //it will choose the last one
}
```

Ex2:
```
<div class="name">Name
</div>
```

CSS   rule 2

```
div.name{
background-color: green;     //it will choose this
}
div{
background-color: red;
}
```

Ex:3
```
<div class="name" id="myId">Name
</div>
```

CSS   rule 3

```
div.name{
background-color: green;
}
div#myId{
background-color: red;          //it will choose this id takes priority than class
}
```

Ex:4
```
<div class="name" id="myId">Name
</div>
```

CSS   rule 4

```
div.name{
background-color: green !important;     //it will choose this because its important
}
div#myId{
background-color: red;
}
```

How to align a block element inside another element

we can use tables, flex box, Css grids, or positioning, we can also use div
----
static, relative, absolute. fixed

position: static

It will be a normal flow.

position: relative

relative positioning moves an element from the normal position.
To move up or down we can use top or bottom properties
To move horizontally we can use left or right properties

```
p.ex{
position: relative;
top: 10px;
left: 100px;
}
```

position: absolute

the box is taken out of normal flow and
it will not affect the position of other elements.

position: fixed

it will stay on the page when user scrolls.

----

what is shadow dom?

How to build triangle?

```
<div class="tri"></div>
```

```
.tri{
height: 0;
width: 0;
border-top: 100px solid transparent;
border-bottom: 100px solid transparent;
border-right: 100px solid yellow;
}
```

----

pseudo elements?

pseudo elements are used to style particular parts of an element, rather than the whole thing.

```
<p>hi</p>
```

```
p::after{
content: "I am injected"
}
```

hi i am injected

----

what is the importance of Doctype in html?

Doctype tells the browser which version of html standard is used and how to render the page.

----

consider the code; what font-size will have the text inside the <p> element?

html:

```
<div>
loren ipsum
<p> lorem ipsum</p>
</div>
```

css:

```
div{
font-size: 16px;
}
p{
font-size: 0.5em;        //font-size will be 8px beacuse 0.5em is half percentage
}                                           of pixel
```

----

sessionstorage:

sessionStorage is available only when a browser tab is opened.

localStorage:

localStorage survives on closing and reopening a browser.

----

what are data attributes?

data attributes are used inside the html tags.They are easily accessible from css and javascript.

Normalize css and reset css

reset css: It removes all the native styles provided by browsers
Normalize css: It's just a correction of some common bugs.

sup and sub elements will work as usual after normalizing,
resetting would make them look like plain text though

----

what are sprites what is their purpose?

CSS sprite is merging multiple images into a single image.

It reduces the amount of WEB-requests and increases page speed.

----

what is SVG?

Its scalable vector graphics.
Used to show vector graphic on the page.
biggest benefit is that SVG images don't lose quality when zoomed or resized.
can easily change the size.

CSS preprocessor.

Its s tool which allows us to create CSS
much faster in a more structured manner.
preprocessors extend the CSS functional by adding variable, mixinx,
partials also allow to use operators inside the code.

----

what is microdata?

Microdata is a set of additional HTML tags for specifying the additional semantic information
to help the search engines read your site properly.

----

what are tags are used to make a table?

<table>
<th>
<tr>
<td>

----

what is the reason for wrapping the entire content of a javascript source file in a function?

Its best practice to avoid confusion between the javascript functions and external libraries.

What is Tweening?

Also Known as in-betweening, it is the process of creating intermediary frames among two
images to provide the appearance that the first image develops efficiently into the second
image. It is a key process which is used in all types of animations. Refined animation
software permits you to find particular objects in an image and describe how they will be able
to move and change throughout the tweening process.

 What is Responsive Web design?

Responsive Web design is the method that recommends that design and development
should reply to the user's activities and situation based on various components such
as size of the screen, the platform and the orientation.

What is the use of CSS Image sprites?

It is a group of images placed into one image. A web page with multiple images can take a lot of time to load and uses multiple server requests to project the same. With the help of image sprites, we can decrease the number of requests to the server and save time and bandwidth as well.

Why imported is an easy way to insert the file?

<Link Rel=Stylesheet Href="Main.Css" Type="Text/Css">
<styletype="text=css">
<!–
@import url(http://www.xyz.css);
…. your code
–>
</style>

Z-Index can take the following values:

Auto: Sets the stack order equal to its parents.
Number: Orders the stack order.
Initial: Sets this property to its default value (0).
Inherit: Inherits this property from its parent element.

Enlist the various Media types used?

Different media has different properties as they are case insensitive.
They are:
Aural – for sound synthesizers and speech
Print – gives a preview of the content when printed
Projection- projects the CSS on projectors.
Handheld- uses handheld devices.
Screen- computers and laptop screens.

How to check if the web page is responsive?

Emulator method:

1.click right most 3 dots
2.more tools
3.developer tools
4. click mobile logo

or
1.ctrl + shift + j
2. click mobile logo

Testing on real device method:

1.we need mobile and data cable and laptop
2.mobile -->setting-->about device
3.build number -->press 7 times-->developer mode has enabled
4.connect mobile to laptop
5. developer options--> usb debugging
6. in laptop open chrome://inspect
7.open chrome beta app on mobile and connect to laptop
8. check the url in chrome://inspect

----

why media queries?

Media queries provides different styles for different device.
Ex
@media screen (min-width: 500px) and (max-width: 700px)
{
background-color: blue;
}
it will change the background colour to blue when the device width
is between 500px and 700px.

Positions in CSS?

static: when we create element, by default the position will be static.

relative: we can change the position from its original position

absolute: it will be floating...this position disturbs its environment, might overlap other
elements. we can move the element where ever we want.

fixed: it will be in the same position even if we scroll

sticky - Sticky positioning is a hybrid of relative and fixed positioning. The element is treated
as relative positioned until it crosses a specified threshold, at which point it is treated as fixed
positioned.

Resetting in css?

Resetting?—?Resetting is meant to strip all default browser styling on elements.
For e.g. margins, paddings, font-sizes of all elements are reset to be the same.
You will have to redeclare styling for common typographic elements.

Normalizing?—?Normalizing preserves useful default styles rather than "unstyling"
everything. It also corrects bugs for common browser dependencies.

What are the various clearing techniques and which is appropriate for what context?

Empty div method - <div style="clear:both;"></div>.

Clearfix method?—?Refer to the .clearfix class above.

overflow: auto or overflow: hidden method - Parent will establish a new block formatting context and expand to contains its floated children.

In large projects, I would write a utility .clearfix class and use them in places where I need it. overflow: hidden might clip children if the children is taller than the parent and is not very ideal.

How would you approach fixing browser-specific styling issues?

After identifying the issue and the offending browser, use a separate style sheet that only loads when that specific browser is being used. This technique requires server-side rendering though.

Use libraries like Bootstrap that already handles these styling issues for you.

Use autoprefixer to automatically add vendor prefixes to your code.

Use Reset CSS or Normalize.css.

How do you serve your pages for feature-constrained browsers?
What techniques/processes do you use?

Graceful degradation?—?The practice of building an application for modern browsers while ensuring it remains functional in older browsers.

Progressive enhancement?—?The practice of building an application for a base level of user experience, but adding functional enhancements when a browser supports it.

Use caniuse.com to check for feature support.

Autoprefixer for automatic vendor prefix insertion.

Feature detection using Modernizr.

What are the different ways to visually hide content (and make it available only for screen readers)?

visibility: hidden. However the element is still in the flow of the page, and still takes up space.

width: 0; height: 0. Make the element not take up any space on the screen at all, resulting in not showing it.

position; absolute; left: -99999px. Position it outside of the screen.

text-indent: -9999px. This only works on text within the block elements.

I would go with the `absolute` positioning approach, as it has the least caveats and works for most elements.

Have you ever used a grid system, and if so, what do you prefer?

I like the float-based grid system because it still has the most browser support among the alternative existing systems (flex, grid). It has been used in for Bootstrap for years and has been proven to work.

List as many values for the display property that you can remember.

none, block, inline, inline-block, table, table-row, table-cell, list-item.

What's the difference between inline and inline-block?

I shall throw in a comparison with block for good measure.

Block

Size?—?Fills up the width of its parent container.
Positioning?—?Start on a new line and tolerates no HTML
elements next to it (except when you add float).
Can specify width and height?—?Yes.
Can be aligned with vertical-align?—?Yes.
Margins and paddings?—?All sides respected.
Inline-Block

Size?—?Depends on content.
Positioning?—?Flows along with other content and allows other elements beside.
Can specify width and height?—?Yes.
Can be aligned with vertical-align?—?Yes.
Margins and paddings?—?All sides respected.

Inline

Size?—?Depends on content.
Positioning?—?Flows along with other content and allows other elements beside.
Can specify width and height?—?No. Will ignore if being set.
Can be aligned with vertical-align?—?Only horizontal sides respected.

Vertical sides, if specified, do not affect layout. Vertical space it takes up depends on line-height, even though the border and padding appear visually around the content.
Margins and paddings?—?Becomes like a block element where you can set vertical margins and paddings.

Are you familiar with styling SVG?

Styling SVG with CSS can be done a few different ways:
using the style attribute to attach style rules to an individual element,
adding a class attribute and then defining styles in an external or in-page stylesheet, and
using inline stylesheets, which are nested right in the svg element

----

Can you give an example of an @media property other than screen?

all   Default. Used for all media type devices
print   Used for printers
screen Used for computer screens, tablets, smart-phones etc.
speechUsed for screen readers that "reads" the page out loud

When would you use positioning?

SS helps you to position your HTML element. You can put any HTML element at whatever location you like. You can specify whether you want the element positioned relative to its natural position in the page or absolute based on its parent element.

Relative Positioning
Relative positioning changes the position of the HTML element relative to where it normally appears. So "left:20" adds 20 pixels to the element's LEFT position.

Absolute Positioning
An element with position: absolute is positioned at the specified coordinates relative to your screen top-left corner.

Fixed Positioning
Fixed positioning allows you to fix the position of an element to a particular spot on the page, regardless of scrolling. Specified coordinates will be relative to the browser window.

What is the difference between rems and ems?

Both are scalable units While em is relative to the font-size of its direct or nearest parent, rem is only relative to the html (root) font-size.

Can you give an example of a pseudo element?

A CSS pseudo-element is used to style specified parts of an element.

For example, it can be used to:

Style the first letter, or line, of an element Insert content before, or after, the content of an element

Ex:
p::first-line {
  color: #ff0000;
  font-variant: small-caps;
}

What are vendor prefixes?

CSS vendor prefixes are are a string of characters relating to specific browser engines that we place before a CSS property name. They can have either of the following formats -

'-' + vendor identifier + '-' + meaningful name
'_' + vendor identifier + '-' + meaningful name

Here are some popular browsers and their corresponding identifiers -

-webkit-   Google Chrome, Safari, Android Browser
-moz-   Firefox
-o-   Opera
-ms-   Internet Explorer, Edge
-khtml- Konqueror

So, for example, a Firefox prefix for the transform property will be written as -

.example {
  -moz-transform: value;
}

Why do we use them?

Before new properties are formally added to CSS, browsers have the ability to test them out using their own methods of implementation.

For example, when gradient backgrounds were first introduced, different browsers required different syntax to implement the same effect. To create a simple black to white gradient effect, we had to write -

.example {
  /* Safari 4-5, Chrome 1-9 */
  background: -webkit-gradient(linear, left top, left bottom, color-stop(0%, #000),

```
color-stop(100%, #fff));

  /* Safari 5.1, Chrome 10+ */
  background: -webkit-linear-gradient(top, #000 0%, #fff 100%);

  /* Firefox 3.6+ */
  background: -moz-linear-gradient(top, #000 0%, #fff 100%);

  /* IE 6 - 9 */
  filter: progid:DXImageTransform.Microsoft.gradient( startColorstr='#000000',
endColorstr='#ffffff',GradientType=0 );

  /* IE 10+ */
  background: -ms-linear-gradient(top, #000 0%, #fff 100%);

  /* Opera 11.10+ */
  background: -o-linear-gradient(top, #000 0%, #fff 100%);
}
```

In order to allow this differing implementation between browsers during the testing phase, the vendor-prefixing policy was introduced in CSS2.1. Each browser engine has it's own prefix, which, combined with the property name, essentially acts as its own property. Each browser only recognises properties with its own prefix and ignores the others.

This avoids any clashes if and when the property becomes official. At this stage, when we write the unprefixed property name alone, it should be implemented in the same way across browsers.

```
.example {
  background: linear-gradient(top, #000 0%, #fff 100%);
}
```

Although it may be a bit of a hassle to deal with them, vendor prefixes allow us to test out new features earlier than we would be able to if we had to wait for standardisation.

How do we use them?
The proper way to use vendor-prefixed properties is to place them before the unprefixed property.

```
.example {
  -webkit-animation-name: slidein;
  -o-animation-name: slidein;
  -ms-animation-name: slidein;
  -moz-animation-name: slidein;
  animation-name: slidein;
}
```

We do this to take advantage of the cascading nature of CSS. Browsers will use the last declared version of a property they can understand. By putting the unprefixed version last,

we ensure that, when browsers eventually support the official property, that is what they will use.

What are some of the "gotchas" for writing efficient CSS?

Firstly, understand that browsers match selectors from rightmost (key selector) to left. Browsers filter out elements in the DOM according to the key selector, and traverse up its parent elements to determine matches. The shorter the length of the selector chain, the faster the browser can determine if that element matches the selector. Hence avoid key selectors that are tag and universal selectors. They match a large numbers of elements and browsers will have to do more work in determining if the parents do match.

What are the advantages/disadvantages of using CSS preprocessors?

Advantages:

- CSS is made more maintainable.

- Easy to write nested selectors.

- Variables for consistent theming. Can share theme files across different projects.

- Mixins to generate repeated CSS.

- Splitting your code into multiple files. CSS files can be split up too but doing so will require a HTTP request to download each CSS file.

Disadvantages:

- Requires tools for preprocessing. Re-compilation time can be slow.

How would you implement a web design comp that uses non-standard fonts?

Use @font-face and define font-family for different font-weights.

Explain how a browser determines what elements match a CSS selector.

 Browsers match selectors from rightmost (key selector) to left. Browsers filter out elements in the DOM according to the key selector, and traverse up its parent elements to determine matches. The shorter the length of the selector chain, the faster the browser can determine if that element matches the selector.
For example with this selector p span, browsers firstly find all the <span>elements, and traverse up its parent all the way up to the root to find the <p>element. For a particular <span>, as soon as it finds a <p>, it knows that the <span> matches and can stop its matching.

Have you played around with the new CSS Flexbox or Grid specs?

Yes. Flexbox is mainly meant for 1-dimensional layouts while Grid is meant for 2-dimensional layouts.

Flexbox solves many common problems in CSS, such as vertical centering of elements within a container, sticky footer, etc. Bootstrap and Bulma are based on Flexbox, and it is probably the recommended way to create layouts these days. Have tried Flexbox before but ran into some browser incompatibility issues (Safari) in using `flex-grow`, and I had to rewrite my code using `inline-blocks` and math to calculate the widths in percentages, it wasn't a nice experience.

Grid is by far the most intuitive approach for creating grid-based layouts (it better be!) but browser support is not wide at the moment.

How is responsive design different from adaptive design?

Responsive sites and adaptive sites are the same in that they both change appearance based on the browser environment they are being viewed on

Responsive websites respond to the size of the browser at any given point. No matter what the browser width may be, the site adjusts its layout (and perhaps functionality) in a way that is optimized to the screen. Is the browser 300px wide or 30000px wide? It doesn't matter because the layout will respond accordingly. Well, at least if it's done correctly!

Adaptive websites adapt to the width of the browser at a specific points. In other words, the website is only concerned about the browser being a specific width, at which point it adapts the layout.

Another way to think about it is the difference between smooth and snap design. Responsive design is smooth because the layout fluidly adjusts regardless of what device it is viewed on. Adaptive design, on the other hand, snaps into place because the page is serving something different because of the browser or device it is viewed on. This animation illustrates the difference in behavior:

Are CSS rule names case sensitive?

CSS selectors are generally case-insensitive

Why css selectors mixed up with cases don't apply the styles?

because, html ID and classes are case sensitive.

Does margin-top or margin-bottom has effect on inline element?

No

Does padding-top or padding-bottom has effect on inline element?

No

Does padding-left or padding-right or margin-left or margin-right has effect on inline element?

Yes

If you have a <p> element with font-size: 10rem, will the text be responsive when the user resizes / drags the browser window?

No

The pseudo class :checked will select inputs with type radio or checkbox, but not <option> elements.

False

In a HTML document, the pseudo class :root always refers to the <html> element.

True

The translate() function can move the position of an element on the z-axis.

False

Which one would you prefer among px, em % or pt and why?

it depends on what you are trying to do.
px gives fine grained control
em maintains relative size.
% sets font-size relative to the font size of the body.
pt(points) are traditionally used in print.

What are the properties related to box model?

Technically, height, width, padding and border are part of box model and margin is related to it.

Does overflow: hidden create a new block formatting context?

Yes. overflow property deals with the content if content size exceeds the allocated size for the content. You can make extra content visible, hidden, scroll or auto (viewport default behavior).

How could you apply css rules specific to a media?

: @media (max-width: 700px){...} means you want to apply rules to those media whose max-width is 700 px. this means every smaller device will have this rule.

@media (max-width: 700px) and (orientation: landscape){...} will apply rules for media smaller than 700px and in landscape orientation.

What is the use of only?

to hide style sheets from older user agents.

Does the screen keyword apply to the device's physical screen or the browser's viewport?

Browser's Viewport

What are the some pseudo classed u have used?

pseudo class tells you specific state of an element. allow to style element dynamically. The most popular one is :hover. Besides i have used :visited, :focus, :nth-child, nth-of-type, :link, etc.
pseudo classes is better if you don't want to mess up with javaScript however, pseudo-classes is slow to process and apply rules.

How do you align a p center-center inside a div?

text-align: center;

How do you optimize css selectors?

This is very open and depend on what you are trying to achieve. If i order selectors in terms of render speed it would be like id, class, tag, siblings, child, descendant, universal, attribute, pseudo. Speed of ID and class is very close. However your code should be readable, maintainable and DRY along with highly performant.

How can you load css resources conditionally?

@import allows you to load/ import stylesheet by using a path (uri) representing the location of the file. You can define one or more media by comma separation for which you want to load the stylesheet. If browser don't support the media stylesheet will not be loaded.

Why would you use sprites?

When you have multiple images/ icons, browser makes separate call to the server for each one of them. sprite is a technique to combine all/ some of them (usually similar one in terms of type of image. For example, you will put jpg in one sprite) in one image. To display the icon you set height, width and background position.

What is shadow DOM?

encapsulate part of a DOM. hide subtree. you can have same ID in different shadow DOM. Polymers uses it. This way your DOM becomes reusable. if interviewer is not happy with your answer give him the links and tell him to spend a weekend on reading.

What do you know about transition?

transition allows to add an effect while changing from one style to another. You can set the which property you want to transition, duration, how you want to transit (linear, ease, ease-in, ease-out, cubic-bezier) and delay when transition will start. you can transition more than one property by comma separation
----
What are the different css filter you can use?

 css filter allows u to render DOM element, image, or video. u can choose from: grayscale, blur, opacity, brightness, contrast.

What are the reasons to use preprocessor?

you write css in high level with some special syntax (declaring variable, nested syntax, mathematical operations, etc.) and that is compiled to css. Preprocessor helps you to speed up develop, maintain, ensure best practices and also confirms concatenation, compression, etc.

What is the difference between 'mobile first' and 'desktop first' - @answer--codemyviews.com?

The biggest difference between the two is sizing. Do website features automatically resize and adjust based on screen? If not, the site was likely made for desktops. However, when a page auto-tunes to your device (also known as responsive), it means the site will be adequately displayed on any type of device.

What are CSS Animations?

An animation lets an element gradually change from one style to another.
To use CSS animation, you must first specify some keyframes for the animation.
Keyframes hold what styles the element will have at certain times.

@keyframes example {
  from {background-color: red;}
  to {background-color: yellow;}
}

How would you make something responsive?
Have you ever done responsive emails? Do you know what it entails?
What preprocessor do you use? (Sass or Less)
What existing CSS frameworks have you used locally, or in production? How would you change/improve them?

Can you explain the difference between coding a website to be responsive versus using a mobile-first strategy?

Have you ever worked with retina graphics? If so, when and what techniques did you use?

Is there any reason you'd want to use translate() instead of absolute positioning, or vice-versa? And why?

Show you couple of style example and you have to tell what does it do.