* what is HTML and its purpose?

→ HTML → HyperText Markup Language.

This describes the layout of the webpage, represented using Tags

It is also a skeleton of browser, consist of Head, body tags as main used to create the static pages. with text, headings, tables, lists, images, links. these all these were work together to identify document parts and tell the browsers how to display them.

while creating a web page this is the building blocks where other stylings were depends on this only so this is called as skeleton of the webpage.

All the HTML documents must include <!DOCTYPE> declaration. this is not HTML tags, it is information to the browser about what document type.

* Difference between HTML and X-HTML.

HTML	XHTML
→ * HTML - HyperText Markup Language	* XHTML → Extensible HyperText Markup Language.
* Extended form of SGML (Standard Generalized M.L.)	* Extend form of XML and HTML.
* The format is document file format.	* format is markup language.
* Tags and attributes are not necessary to be in upper or lower case	* Tags and attributes must be in lower case.
* Doctype is not necessary to write at top	* Doctype is necessary to write at the top of file.
* Not necessary to close the tags in order they opened.	* It is necessary to close the tags in order they are opened.

* What are the new features in HTML 5?

=> The top features of HTML 5 :-

* Audio and vedio tags → These were used to embed the audio and vedio files into the documents

```
<audio>
    <source src="" type="" ></audio>
<vedio> <src="" type="vedio/mp4"> </vedio>
```

* Header and Footer → This eliminates addding of new tags where these tags used at top and bottom respectively.

* Section tag → This is used to split document into sections.

* figure & fig caption → used to introduce image into page together with discription.

* placeholder → This is used to writen inside input field. when earlier it was left blank.

* Regular Expression → This is used to add a certain pattern as an input includes upper, lower & Numerals.

Eg:- [A-Z, a-z] 5, 11 → both capital & lowercase with.

* Time, canvas, email as a property.

* How do you include Comments in HTML.

=> In Comments we have 2 types in JS.
- Single line Comment and Comments gives the additional
- multiline Comment. information about the given thing.

- Single line Comment → // → with forward slashes we represent Single line Comment.

- multiline Comment → /* */

But in HTML only supports multiline Comment. like →

<!-- This is HTML Comment -->

Q) What are Symatic Elents in HTML & what is the use of them?

=> Symatic Elements are elements whose function can be known by seeing the Elent,

The tag itself Explains the content what it has.

These are normal tags used to represent in the web browser.

Example:- image, header, footer, h1, Strong, radio tags.

Q) what is the function of <header>, <nav>, <Section>, <footer> tags in HTML5?

=> <header> This is the tag used in body section, it acts as banner i.e main headder, this is for introductory content or a set of navigational links.

<nav> This tag defines the set of navigation links. This support global attributes also the default setting of css is display: block;

<Section> This tag used to cut part the document into particular sections as per the need.

This also have default setting of CSS as display: block;

<footer> This defines the footer part of document, where it contains information about Copyright, Contact, authorship, sitemap and related documents.

Q) How do you create a hyperlink in HTML?

=> Hyperlink is a link when it will create take us to another web page or document.

By using <a> anchor tag we will create the hyper links.

where href inside achor tag define the path where the user should move after clicking on hyperlink.

 visiting link

* what is the difference between <ol> and <ul> elements?

=>

This tag represents Ordered list	This tag represents unOrdered list.
It has an order of items which is signified by number, Roman numeral or Alphabetical character.	• It has no order of items which has a bullet preceding.
Syntax: item name	Syntax item name

* How to embedded an image in HTML file?

=> There is a syntatic tag in HTML called image tag, <img> where it has 'src' as attribute to mention the 'url' of path of the image if it is present in local storage.

<img src="____" alt="..">

This is a void tag, means without any closing tag, like input, meta, img.

* what are the difference b/w 'strong' and 'em' tag

=>

'strong'	'em'
- strong is the tag where the visuality of it is similar to bold.	- em is the tag where it representation of content will be italics
- This will highlight the text syntatically and indicates this is important	- This is used to define emphalized text, when verbally going on it will stress the words.

** How do you create a table in HTML?

=> Here in HTML table helps developers to arrange data in rows and column.

The tags used were table, th, tr, td, thead, tbody, tfoot

th → table head
tr → table row
td → table data

The head content of row in table we write in <th>
The data of table is written in <td>

Syntax

```
<table>
    <thead>
        <th>
            <tr>
                <td> A </td>
                <td> B </td>
                <td> C </td>
            </tr>
        <th>
    </thead>
    <tbody>
        <tr> 1 </tr>
        <td> 1 </td>
        <td> 2 </td>
        <td> 3 </td>
        </tr>
    </tbody>
        <tr>
            <td> 4 </td>
            <td> 5 </td>
            <td> 6 </td>
        </tr>
    </tbody>
```

A	B	C
1	2	3
4	5	6

** What is the purpose of <form> tag in HTML and how do you create a forms?

=> Form tag in HTML is used to create an interactive form on a webpage. this form tag used to collect the data from the user and send it to the (server) backend for further process.

forms will be created by <form> tag and have elements in it like, input, table, select, textarea, buttons, options to create them.

It have methods get and post, where get shows the data in Url and post is the highly secured.

* what are the some input types introduced in HTML 5.

=> The new input types are:-

date → allows user to select a date from a drop-down calendar.

time → allows user to enter time.

month → Allows user to enter a month and year from dropdown

email → allows user to enter e-mail adress

tel → allows user to enter phone-number with specific pattern.

url → Allows user to enter a website URL

search → It's a text-field for entering a search string

range → It allows the user to range the value with slider.

number → It allows user to enter a numerica value with the increase & decreasing.

color → Allows user to select a color from color picker.

* How do you include audio and vedio content in HTML?

=> In HTML 5, the latest version of HTML they have included the new tags called <audio> and <vedio> to embed the respective things in HTML file.

where audio have formats like MP3, WAV, Ogg => controls, autoplay, muted

vedio have MP4, WebM, Ogg => width, height, loop, autoplay, muted.

Syntax

```
<audio>
  <source src="file_name" type="audio_file_type">
</audio>
<vedio>
  <source src="file_name" type="vedio_file_type>
</vedio>
```

* what is the purpose of <iframe> tag and how to use it?

=> iframe → inline frame used to embed another document within current HTML document.

They are commonly used for advertisements, embed vedios, pdfs, word documents.

```
<iframe src="url or relative path of file" title="respective title">
</iframe>.
```

This is used inside the body tag.

* How do you add CSS styles to HTML elements?

=> CSS is cascading Style Sheet which gives styling to HTML

In 3 types!-

*) Inline CSS
*) Internal CSS
*) External CSS

Inline means the CSS styling given in the opening tag of the HTML element in same line of element.

```
<h1 style = "color:red;"> This is red H1 </h1>
```

Internal CSS is the CSS where written in same page of HTML but in head part of file, by opening style tag in the head section.

```
<head>
 <style>
    h1{ color:red
      }
 </style>
</head>
<body>
 <h1> This is red H1 </h1>
</body>
```

External CSS means, the CSS sheet is created outside as another file by .css extension.

Hello.html

```
<body>
 <h1> This is red H1 </h1>
</body>
```

Hello.css

```
h1{
   color:red
  }
```

* What is the role of 'alt' attribute in <img> tags?

=> The 'alt' attribute specifies the alternate text for image, if img can't be displayed. bcoz of slow connection or wrong url, error in src attribute

```
<img src = "image.jpg" alt = "Image of nature">
```

* How do you create the numbered list with custom numbering styles in HTML?

=> This can be done in ordered list in HTML,
where type attribute in <ol> tag should be mentioned as "1"

```
<ol type="1">
    <li> Me </li>
    <li> you </li>
    <li> They </li>
</ol>
```

=> 1. Me
2. you
3. They

* what is the difference between <script async> and <script defer>?

=> <script async>

async → Asynchronous

- Asynchronous blocks the parsing of the page
- Async scripts don't wait for each other, so if small script is there at 2nd order, it will be loaded before previous longer one.
- The execution script is independent of other scripts.
- Executes randomly.

<script defer>

defer → Deferred.

- Deferred never blocks the page.
- Defer script maintain their relative order which means the first script will loaded first, while others below will wait.
- The execution script is depend on previous one so it waits till that finishes.
- Executes in particular manner.

* what

* what is responsive web design? why is it important?

→ Responsive design is a way to put together a website so that it automatically scales its content and elements to match the screen size on which it is viewed. its like laptop, desktop, mobile and ipad.

The goal of responsive design is to avoid unnecessary resizing, scrolling, zooming or panning that occurs with sites that have not been optimized for diff devices.

It is flexible to all devices, improves the user experience, Search Engine optimization and Ease of maintaince.

** How do you make a website responsive using CSS? about media queries?

→ Website willbe responsive with CSS is done by using :-

- Media Queries :-

This is extension from CSS2, instead of looking into type of device, they look at capability of device.

These will be used to check many things like :-

- width and height of viewport
- width and height of device
- orientation.

Syntax :- @media 'type' and (max-width : —)

media type — media feature.

{ adding the styles here

} → styles for particular things.

* type → all
print
screen
speech

@media media-type and (condition : breakpoint)

{ // CSS rules

}

* How do you make website responsive ?

=> - Media Queries : Use media queries to apply diffent style based on device characteristics like screen width.

```
@media only screen and (max-width:600px){
  // styles
}
```

- Flexible Grid Layout : Use percentage-based widths for layout structure. This allows elements to adapt to diff sizes.

```
.container {
  width: 100%;
  max-width: 1200px;
  margin: 0 auto;
}
```

- View port Meta Tag : Include the viewport meta tag in your HTML to control how page is displayed on diff devices.

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

* Explain difference between fluid layout and fixed layout in terms of responsive.

=> Fluid layout is defined in percentage of the viewport, like when the window size changes, the dimensions of layout changes accordingly. The pictures and Texts keep their size.

A layout whose dimensions are expressed in pixels and therefore incapable of adapting to different screen sizes or resolutions. If the screen is too small, a scroll bar will be shown.

In fixed the width of wrap will be in pixels.

In fluid the wrap will be in percentage.

* How do you make images responsive in CSS ?

=> Responsive image will automatically adjust to fit the size of screen. By giving the width and hight of the image as auto or the value in percentage or in vh and vw.

* what are breakpoints in responsive design, how are they determined?

=> Breakpoint is point which usually a specific width at which a webpage style is adapted in particular way in order to provide best possible user experience.

Breakpoints are generally the sizes of screen width of different devices like that based on size of mobile, desktop, tablet will be sized.

* How can you hide elements on specific screen sizes using CSS?

=> while writing media queries for particular size width screen we can mention display: none for that particular CSS property like this we can hide the elements on specific screen size.

* what is the purpose of max-width property in responsive CSS?

=> The max-width CSS property sets the maximum width of an element It prevents the used value of the width property from becoming larger than value specified by max-width.

If content is larger than max-width then it will automatically changes the height.

* How do you create responsive navigation menu using CSS?

=> - writing HTML segments and adding media query which are respective of particular sizes like for mobile, desktop and CSS stylings.

```
<div class="navi" id="myTopnav">
<a href="#home" class="active">Home</a>
<a href="#news">News</a>
<a href="#about">About</a>
</div>
```

```
.navi{
    background-color: #333;
    overflow: hidden;
}
.topnavi a{
    float: left;
    display: block;
    color: #f2f2f2;
    text-align: center;
    padding: 14px 16px;
    font-size: 17px;
}
@media screen and
.topnavi{
    display: none;
}
```

* Explain the concept of mobile-first design and how it relates to responsive CSS.

=> Mobile-first design means designing for desktop mobile before designing for desktop or any other device (This will make the page displays faster on small device)

Instead of changing styles when the width gets smaller than 768px, we should change the design when the width gets larger than 768px this will make our design mobile first.

When we design to mobile screen first, it will become easily to design for further screens because we have got the one end point like minimum width of one end so this will be better use.

* what is CSS flexbox? and what problem does it solve!.

=> This flexbox designed as one-dimensional layout model, where this method could offer space distribution between items and powerful alignment capabilities.

This is one-dimensile as it will deal with layout in one dimension at a time either row-or columns, it controls the alignment. Structure of the layout.

It has 2 main components i:-

Flex container: the parent div contains various divisions called flex container

Flex items: The items inside container div are flex items.

It has properties like flex, flex-direction, align-items, justify content.

* Difference between flex container and flex items!

=> Flex Container is the main division which holds all the flex items, elements in it.

Flex items are the elements which are present inside the Flex Container, where there may be some elements, images etc.

* How do you create a flex container in CSS?

=> Flex container is a main parent which it will holds the all flex items.

for flex container we will create a main and give the class name and styles for that class will be given in the CSS part where it has a properties like: flex-direction, flex-wrap, flex-flow, Justify content, align items, align content, firstly we have to give display: flex for main div then only these properties will work.

* What are the main properties used to control the layout in flexbox?

Properties are:-

=> flex-direction → Specifies the direction of flexible items inside a flex container

flex-flow → Short and property for flex-direction and flex-wrap.

flex-wrap → Specifies whether the flex items should wrap or not

justify-content → Aligns items along main axis (⟷)

align-content → Aligns items along cross axis (↕)

align-items → Aligns multiple lines of items on cross axis.

align-self → Aligns the items itself over Baseline.

* How do you specify the direction of flex-items within flex-container?

=> flex-direction is the property in the flex-container decides the direction. where it has values like row, row-reverse, column, column-reverse. where how the items are placed in flex container defining the main axis. and direction.

* what is the purpose of flex-grow, flex-shrink, flex-basis property?

=> flex-grow, shrink, basis are the property of flex-item of child component:-

flex-grow :- That is the property which specify how much faster the growth of flex-item relative to the rest of items.
default -> '0'

flex-shrink :- This property specify how much a flex item will shrink relative to the rest of flex items.
default -> '1'

flex-basis :- This property specifies the initial length of a flex item.

* How do you align items horizontally and vertically within flex container?

=> The property justify-content in flexbox where this property align the items wrt main axis (horizontally).

The property align items in flex box aligns the items wrt cross axis (Vertically).

These have prop values flex-start, flex-end, center.

* Explain the differences between justify content and align items in Flexbox.

=>

Justify-Content	Align-items
- This aligns the items wrt main axis.	- This aligns the items wrt cross axis.
- This has values like Space-between Space-around Space-evenly	- This has value like stretch.
- This arrays the contents in horizontal	- This arrays the content in Vertical.

* How can you control the order of flex items using CSS flexbox?

=> The property called "order" in flexbox manages the order of flex items which specifies which item should appear where.

- item with no order value will appear first in layout.
- default value is '0'.

* what are flexbox breakpoints? how can they used for responsive design?

-> Breakpoint is size where design adjusts for a specific screen widths. This enables design to be responsive as they scale up and down,

Our flex breakpoint are Desktop (1025px - 1399px)
wide Desktop (1400px and up), Tablet (768px - 1024px), Mobile (767px - below)
Mobile landscape (468px - 767px)

The specific breakpoints are used and designed as per the screen widths and adjusted as it goes which is known as responsive and adaptive to all the sizes.

* what are HTML attributes?

-> HTML attributes provides and additional information about HTML elements.

Where these will be mentioned in start tag.
These will be written in pair like name = "value".

* what are the difference between global attribute and Elemt-specific attribute

Global attributes

=> - The attributes that can be used with all HTML elements.

Eg: class, id, style, title

Elemt-specific attribute.

- These attributes are specific to particular elements.

Eg: href → <a>
src → <img>
src → <audio>

* How do you add attributes in HTML elements?

-> Attributes are the additional informs given about the tag.

So this will be written in the opening tag. in the format of name = "value".

```
<a href = "url_of_the_page"> page </a>
```

* what is the purpose of id attribute in HTML, how is it Unique?

=> Id attribute is used to point to specific style declaration in style sheet.

this will be used as (#) in CSS file to represent and one more unique is it will be storing the adress of particular element.

* what is the different between id and class attribute?

=>

	ID	class
Syntax:	Id selector starts with a '#' followed by the Unique Id name	A class selector starts with a (.) followed by class name.
Usage:	ID selectors used when you want to apply styles to a single, unique elent on web page.	This selector used to style to grouped elents, they can be targetted at multiple elents.
Unique:	Each ID will be unique in HTML elents as it is unique & specific.	This is applied to multiple elents within HTML documents.
	This can be used as adress the particular elent.	This will not be used for adress elent.

* what is the role of href in HTML particularly in links and anchors?

=> href means hyperlink, It creates the hyperlink to web pages, files, email adress, locations in same page or any URL may be in adress.

href gives the links destinations.

* What is the purpose of target attribute in HTML links, What are its possible values?

→ The target attribute inside anchor tags <a> tells the browser where the linked document should be loaded. The values are.

- _self : The default value, loads the document in same window.
- _blank : most commonly used value, Loads the document in a new window
- _parent : Loads the document in parent browsing context, if there one or same browsing context if there's no parent.
- _top : Loads the document in the topmost browsing context, at same browser if no parent.

* How do you use src attribute to embed an external resource, like image or video?

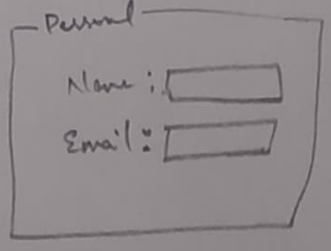
⇒ This src attribute will points to the URL which's image or video to be displayed on browser.

- It uses the Url of the source image or video
- This Url may be absolute path or relative path.

* What is the purpose of disabled attribute, and how it is used in HTML form element?

⇒ The disabled attribute is a boolean attribute, When it is present it specifies that the element should be disabled. Where disabled element is unusable.

This disabled can be used as attributes inside the element or to the parent tag.




```
<fieldset disabled>
<legend> Personal </legend>
Name: <input type = "text" ><br>
Email: <input type = "email" ><br>
</fieldset>
```

JS

* Is there any relation between java and javascript!

Java	JavaScript.
- Java is general purpose, compiled language used for server-side prgmg.	- JS is interpritted, scripting langu used for client side programing
- Java is an independent language executed by using a JVM.	- JS is must executed along with HTML in web browser.
- Executed in JVM	- Executed in browser.
- Allows more security	- Needs more effort to enforce security
- Static type checking	- Dynamic type checking.
- require JDK - Java Devlpmt Kit	- Can be written in any text editor.
- Various Apps	- Mainly for web pages.

* Is JavaScript is Compiled or Interpritted language.

=> JavaScript is purely Interpritted language, where it won't check for Syntax it will execute line by line.

* Is javaScript is case sensitive language.

=> Yes, It is where identifiers, keywords, variables, functions must be written with consistent capitalization of letters.

* What is Node JS?

=> It is a cross platform, open-source JS runtime environment that can run on windows, Linux, Unix, Mac OS.

Node JS runs on V8 JS engine, and executes JS code outside a web browser.

* What are the diffrn between let and var?

let	Var
⇒ let variables are block scoped, means they are only accesible within the block in which they are defined.	Variable with Var are function scoped means they are accesible only within which fun defined.
Variables with let are not hoisted to top of their scope.	Variable with Var are hoisted to top of their scope. means it can be accesd before they are declrd.
Variables of this can't be redeclrd within same scope	They can be redeclrd within same scope
~~The~~ These variables have a temporal dead zone, means variable is not accesible untill it is declrd.	Here there is no temporal dead zone.

Undefined	Undeclrd.
⇒ The variable which is declrd but not assigned a value is considrd as undefined.	when assigng a value to an identifier that is not previously created using var, const or let.
This will have some memory allocatn	This will not have memory allocatn
when we try to access these variables will get undefind as value.	If we try to accss them in code JS will throw reference error.

** what is hoisting?

⇒ The process where interpriter appen to move declrn of functns, variables to the top of the scope,

only Var in this feture of Hoisting, if let & const were hoisted it will throw Refrence Error.

* What is Scope in JS?

=> This determins the accessibility of variables, objects and functions from diff parts of the code.

3 types of scopes:- * Block Scope
* function Scope
* Global Scope.

- let & Const give Block Scope in JS, Variable declared inside { } can't be used outside the block; Var don't have block Scope
- Scope inside a particular function is having function Scope
  Variables inside func can be accessed outside.
- Variable declared outside a func becomes Global, where it can be accessed at any place.

* What are reserved keywords? Can we use them as identifiers?

=> The keywords which are kept for perticular functions in the JS code called as reserved keywords,
No we can't use them as identifiers, it will get confused.

Ex:- false, float, int, new, long, for.

* Why do we need Strict mode? How do you declare strict mode?

=> Strict mode in programs helps to write cleaner code, like preventing you from using undeclared variables. avoids 'bad Syntax'.
by using the words in code as "use strict", we can declare the Strict mode.

* What are global variables?

=> The variables which are not written mentioned variables outside the blocks and functions, which makes variable to access throughout the code called global variables.

* what are the problems with global variable?

⇒ Since the variables are global then, it becomes increasingly hard to figure out which functions actually read and write that variable.

The variable with local and global may be clashed and confused while using them.

* what is NaN property?

⇒ NaN in short form for Not-a-Number, i.e number that is not a legal Number. It is a global property.

NaN with any mathematical operator gives NaN.
Nan with any logical operator gives false.

* what is purpose of delete operator?

⇒ It is used to delete an object property that already exists it returns true and removes the property and returns false if it is not exist or not deleted.

* Difference between Null and Undefined.

Null	Undefined.
⇒ - type of this variable gives object.	- typeof this variable gives undefined.
- Here Null value is assigned to variable	- Here No value is assigned to variable.
- JSON is valid here	- JSON is Invalid here
- NaN is treated as '0' here	- NaN is treated as Error here.

* What are bitwise operator used in JS.

=> there the Bitwise operators are:-

& - AND - Sets each bit to 1 if both bits are 1

| - OR - Sets each bit to 1 if any one of the bits are 1

~ - NOT - Inverts all the bits

^ - XOR - Sets each bit to 1 if only one of two bits is 1

<< - zero fill left shift - Shift left by pushing zero in from the right and let the leftmost bits fall off.

* Can I redeclare let and const variables?

=> Being let and const are block scope, there can't be redeclared & also can't be hoisted.

* Does const makes the value immutable?

=> Yes, const means constant where it remains constant value till end of program it is immutable.

* what is ES6? mention some ES6 feature.

=> ES6 means ECMA Script of version 6 where it is the latest and stable version of JS.
This has introduced so many features like
Let, const, map, Set, Array function includes() are introduced recently.

* what are possible ways to create object in JS?

=> There are different ways to create new objects
- Creating single object, using an object literal.
- Creating single object with 'new' keyword.
- Creating with use of Object.create()
- Defining the constructor then creating.

* What are diff between Slice and Splice

Slice	Splice
=> This method will not mutate your original array	• This will mutate the original array
This is used only to delete items	• This is used to delete or add items in array.
This takes 2 parameters both are optional,	This takes 3 parameters atleast one parameter is regd to delete an item.
Returns the portion of an array based on parameter.	Returns the removed item in array.
This method can be used for both strings and arrays.	This will be used only for Arrays.

*) == vs ===

==	===
=> Loose Equality	Strict Equality
This checks only values	This checks the value with type.
This does the type conversion "2"==2 // true	This won't does type conversion "2" === 2 // false.

= vs ==

=	==
=> Assignment operator	Comparison operator
This is used to assign the value of right hand side to Left hand side variable.	This is used to compare the value of both side RHS and LHS.
This won't return anything	This will return the boolean type true or false.

*) '%'

- This is modulus operator
- This gives the output as a reminder

'/'

* This is dividing operator.
* This give output as Quotient.

*) What is Higher Order function?

=> These are the functions that either take one or more functions as arguments or return a function as their result.

This HOF's will provides additional functionality to existing React Component means them will take input values and give output according to input values, i.e it will rerun as we provide diffent input values.

*) What is Currying function?

=> Currying function is function takes multiple arguments is transformed into sequence of functions, each takes single argument, This allows you to partially apply the arguments one by one, by creating a chain of functions till all the argunts are provided and then final result is returned.

Eg:- function add(a,b,c){
return a+b+c;
}
log(add(1,2,3)); //6

function Curry(a){
return function(b){
return function(c){
return a+b+c;
};
};
}
log(Curry(1)(2)(3)); //6

*) What are Arrow functions?

--> This is the function type introduced in ES6 where the syntax has been simplified for writing & existing.

* No return statet is used.
* No constructor is used here.
* No parameters will be passed.

hello = function(){
return "Hello"
}

hello = () => "Hello";

* What is Spread Operator? (...)

=> This is the ES6 feature where this operator allows us to quickly copy all or part of existing array or object into another array or object.

* What is rest parameter?

=> This is the syntax of parameter accepts where this allows accept an indefinite number of arguments as an array for input.

* What happens if you don't use rest parameter as last argument.

=> The rest parameter should be used by keeping points in mind! →

- There can only one rest parameter in function.
- It has to be last argument in function.

If not used last, a SyntaxError is thrown stating that it has to be last formal argument and code is not executed.

* What are Regular Expression patterns?

=> The pattern a sequence of characters that forms a search pattern

* What is Regular Expression?

=> It is a ~~exp~~ pattern of characters used for search and replacing

There are following the pattern mainly

Composed of simple characters and combination of special characters and numericals. Used parenthesis for grouping purpose.

* How do you search a string for a pattern

=> By using String.match(expression) it takes 2 parameters.

String name and expression

or

String.search(expression) which matches the regular expression in between also.

* What is the purpose of Switch case?

=> This Switch case is the updated version of Conditional Statents where the case which is valid only executes there which saves the executing time.

* What are the conventions to be followed for using Switch case?

=> The Conventions like the the conditional value should be written inside Switch ("___") and we will write the cases below where the possibility checks is done and break; is used at end of each case such it should come out of the particular case.
At last default case will be there which will be executed if none of the cases are matched.

* What are primitive datatypes?

=> these are predefined data types :-

- Number
- boolean
- String
- undefined
- null
- Symbol.

* What are diffrent ways to access object properties.

=> Accessing of JS properties by -> . property => object.property
-> ["property"] => object['property']
-> [expression] => destructing:
const {property} = object.

* What are function parameter rules?

=> Function parameter are the names that are defined in function definition and real values passed to function in function definition are known as argument.

rules for parameter:-

- There is no need to specify the data type for parameter in javascript function definition.
- It does not perform type-checking based on the passed-in javascript function.
- It doesn't check the number of recived arguments.
- It doesn't check the number of and type of parameter.

** Diffrent ways which creates infinite loops!

=> • while (true)
{ ==
}

• for(;;)
{ ==
}

• for(var i=0; i<infinity; i++)
{ ==
}

* what are template literals?

=> Template Literals use back-ticks (``) rather that the quotes ("") to define a string. This is easy way to interpolate variables and expressions into strings. This is easy way to create multiline strings.

* what are default values in destructing assignment?

=> The property which is destructed forms the object which is not assigned any values will have default value as undefined. If null is assigned the it will be null.

* Is that possible to use expression in switch case?

=> No, expression can't allow as case value in switch, cases in switch are typically constant values.

* How do you swap variables in destructy assignt.

⇒ Destructy assignt lets us to extract items from array into variables.

let a = 1

let b = 2

[a, b] = [b, a] ⇒ Here the swapping of variables while destructing happened.

log(a) // 2

log(b) // 1

* Diffrnc between for... of and for... in

for... of	for... in
⇒ This can only loop through Arrays, Map, Set.	This can loop through Arrays and Object.
This will iterate through property values	This will iterate through property names
* Arguments object	Rest parameter
⇒ - There object contains all arguments passed to the functns.	* There will not be having any seperate name,
- This is not really array.	* There we can say its true when sort, map, forEach, pop can applied on it.
- Here we use argut name	* directly use ... helps here
* Spread Operator	Rest operator.
⇒ - This extracts the collected Elemt to a single elemt	- This is known for destructy of elemts, then it is collected left over elmts to make array.
- This can be used anywhere.	- This must be used at end.
profile = { ...userDetails, ...acctDetails }	Const [one, two ... others] = arr.

* Explain all array methods, what are the outputs and whether method modifies original array.

- Array length :→ This length property returns the length (size) of an array.

- Array toString() → This JS method converts an array to a string of array values seprated with comma.

- Array join → This also works similar to the toString() but here we can mention the seprator.

- Arry Pop() → This method removes the last elent from an array.

Arry push() → This method adds the new elent to an arry at the end.

Arry shift() → This removes the first elent from an array.

Arry UnShift() → This adds the elent to an arry at first place.

Arry delete() → This method used to delete the elements in an array. and leaves a memory block as undefined.

Arry Concat() → This gives the new arry by merging two arrays.

Arry Splice() → This used to add and remove the elents from arry
It has 3 parents. Splice(a, b, "c", "d");
a → where new elents may be spliced
b → Number of elents spliced
c,d → to be added to arry.

Arry Slice() → Creates new arry with the argents passed inside
This won't affect parent arry.

Arrays Sort() → Sorts the arry elents alphabetically

Arry Reverse() → Reverses the arry which is present.