* Explain "hoisting".  
  ans- hoisting is a javascript mechanisim where variables and functions are moved to top of their scope before the code execution.
* What are the differences between variables created using let, var or const?  
  var - global scope can redeclared  
  let & const - blocked scope can not redeclared . let can be updated and const can not updated
* Can you give an example for destructuring an object or an array?

Unpack values form an array

[a, b, ...rest] = [10, 20, 30, 40, 50];

console.log(rest);

// expected output: Array [30,40,50]

* Can you give an example of generating a string with ES6 Template Literals?
* How do you compare Object and Map?  
  ans- the map is an instance of an object.
* What is scope in javascript?   
  ans- scope determines the accessbility of these variables.  
  two types of scope-  
   local scope  - can access within the function  
  & global scope- all scripts and function can access it.
* What are global variables? - var
* What are the differences between undeclared and undefined variables?  
  undecleared variable - the variable is not initialized.  
  undefined variables - a variable has been declared but value has not assigned to it.
* How do you assign default values to variables?  
    
  the OR (||) operator
* What are the benefits of keeping declarations at the top?
* What are the benefits of initializing variables?  
  ans- initialiizing variables means assign value to it,it can not be used until assigned a value.
* What is a spread operator?  
  ans- it takes in an iterable and expands it into individual elements. (...any)
* What's the difference between a variable that is: null, undefined or undeclared?  
  ans-undefined declared a variable but not assigned value.  
         null is a assigned value ,it can be assigned to a variable as a represention of no value.
* difference between (== % ===)  
  ans- == check only the values. and === check the values and data types as well.
* \* What is a closure, and how/why would you use one?  
  ans-a closure is the combition of a function bundled together with references to its surronding state.
* \* What's a typical use case for anonymous functions?  
  ans - One common use for anonymous functions is as arguments to other functions.
* \* Explain the difference between:   
  function Person(){}, var person = Person(), and var  
  person = new Person()?
* \* Explain the difference between synchronous and asynchronous functions.  
  ans-synchronous operations block instructions until the task is completed, while asynchronous operations can execute without blocking other operations.
* What are the differences between ES6 class and ES5 function constructors?
* \* Can you offer a use case for the new arrow => function syntax? How does this new  
  syntax differ from other functions?
* \* What advantage is there for using the arrow syntax for a method in a constructor?
* \* What is the definition of a higher-order function?  
  ans-function which takes another function as an argument is called HOF.
* What happens if you write constructor more than once in a class?
* \* How do you get the prototype of an object?
* \* Is all objects have prototypes?
* What is prototype chain?
* What language constructions do you use for iterating over object properties and array items?
* Can you describe the main difference between the Array.forEach() loop and Array.map() methods and why you would pick one versus the other?
* Can you explain what Function.call and Function.apply do? What's the notable difference between the two?
* Explain Function.prototype.bind.
* What is the definition of a higher-order function?
* Can you give an example of a curry function and why this syntax offers an advantage?  
  ans-sum(5)(3)(9)
* What is a unary function?
* What is a pure function?

Ans- Given the same input, always returns the same output

* What is memoization?
* Explain event delegation.
* What's the difference between host objects and native objects?
* Describe event bubbling.  
  ans- with the event bubbling,the event is first captured and handled  by innermost element and then propagate to outer elements.
* Describe event capturing.  
  ans-with the event capturing,the event is first captured and handled by outermost element and then propagate to inner elements.
* What is an event flow?
* What is BOM?
* What is the use of stopPropagation method?  
  ans-to use for event bubling and capturing
* What are the properties used to get size of window?
* What are the DOM methods available for constraint validation?
* How do you perform form validation using javascript?
* How do you perform form validation without javascript?
* What are the different methods to find HTML elements in DOM?
* Explain the same-origin policy with regards to JavaScript.
* What is the difference between document load and DOMContentLoaded events?
* What is same-origin policy?
* How do you make synchronous HTTP request?
* How do you make asynchronous HTTP request?
* What are the ways to execute javascript after page load?
* What is an HTTP Header?
* How can you prevent CORS issue?
* When to use async and defer when loading JS files?
* Describe how Fetch API makes use of Promises.
* What are "web workers"?
* What is HTML5 Web Storage?
* Explain localStorage and sessionStorage and cookie.
* Ans- localStorage is a way to store data on the client’s computer. It allows the saving of key/value pairs in a web browser and it stores data with no expiration date  
  session storage-stores data only for a session, meaning that the data is stored until the browser (or tab) is closed.Cookies have some expiry time.
* What's the difference between the <svg> and <canvas> elements?
* What are custom attributes in HTML5?  
  ans-cutsom attributes are intended to store custom data private to the page or application,for which there are no more appropriate attributes or elements.
* What are the drawbacks of cookies?
* What is purpose of watchPosition() method of geolocation object of HTML5?
* How do you manipulate DOM using service worker?
* What is a cookie?
* How do you delete a cookie?
* What is the main difference between localStorage and sessionStorage?
* How do you check web storage browser support?
* What is the difference between JavaScript and jQuery?
* What is $() in jQuery library?
* What are the effects methods used in jQuery?
* What is the use of toggle() method in JQuery?
* What is the use of html() method in JQuery?
* What is the use of css() method in JQuery?
* What is the starting point of code execution in jQuery?
* What is the difference between find and children methods?
* What are the selectors in jQuery? How many types of selectors are there in jQuery?
* What is the use of serialize() method in JQuery?
* What is the difference between jQuery.get() and jQuery.ajax()?
* Explain the difference between the .detach() and .remove() methods in jQuery.
* What's the difference between document.ready() and window.onload()?
* What's the difference between prop() and attr()?  
    
  =====================NoSQL related questions==================
* What are the features of NoSQL?

NoSQL is not suitable for storing structured data.

NoSQL databases allow storing non-structured data.

NoSQL is a new data format to store large datasets.

NoSQL provides an alternative to SQL databases to store textual data.

* Explain the difference between NoSQL v/s Relational database?

SQL databases are table based databases.

* NoSQL databases are document based, key-value pairs, graph databases.

have **predefined schema**.

* Have **dynamic schema**.
* When should I use a NoSQL database instead of a relational database?
* How to do transactions/locking in MongoDB?
* Compare MongoDB with Couchbase and CouchbaseDB.
* Why is MongoDB not chosen for a 32-bit system?
* What are the key features of MongoDB?

Indexing. ...

Replication. ...

Duplication of data. ...

Load balancing. ...

Supports map reduce and aggregation tools.

* What is CRUD?
* What is Aggregation in MongoDB?

Aggregation operations process data records and return computed results.

* What is the use of an Index in MongoDB?
* Which command is used to create a database in MongoDB?

[db.collection.insert HYPERLINK "https://docs.mongodb.com/manual/reference/method/db.collection.insert/" HYPERLINK "https://docs.mongodb.com/manual/reference/method/db.collection.insert/" HYPERLINK "https://docs.mongodb.com/manual/reference/method/db.collection.insert/"( HYPERLINK "https://docs.mongodb.com/manual/reference/method/db.collection.insert/" HYPERLINK "https://docs.mongodb.com/manual/reference/method/db.collection.insert/" HYPERLINK "https://docs.mongodb.com/manual/reference/method/db.collection.insert/")](https://docs.mongodb.com/manual/reference/method/db.collection.insert/)

* Which command is used to drop a database in MongoDB?

db.dropDatabase()

* Which command is used to create a backup of the database?
* What is a Collection in MongoDB?

A collection is **a grouping of MongoDB documents**

* Which method is used to update documents into a collection?

 db.collection.update()

* What is the role of profile in MongoDB?

**RDBMS related questions**

* Why a database is called as relational database model?
* What are constraints in database?
* What is the difference between primary and foreign key?

A primary key is used to ensure data in the specific column is unique.

A foreign key is a column or group of columns in a relational database table that provides a link between data in two tables.

Only one primary key is allowed in a table

Whereas more than one foreign key are allowed in a table.

* What is an index represent in relational database model?
* What do you understand by database Normalization?
* What is the difference between primary key and unique constraints?
* What are the differences between DDL, DML and DCL in SQL?
* What is the difference between having and where clause?
* What is Join?
* What is a transaction? What are ACID properties?
* List and explain the different types of JOIN clauses supported in ANSI-standar77/\*9\*\*\*\*\*\*\*\*\*\*\*\*\*d Write a SQL query to find the 10th highest employee salary from an Employee table.
* How can you select all the even number records from a table? Similarly, all the odd number records?
* What is the difference between IN and EXISTS?
* How do you copy data from one table to another table ?
* How to start a Postgresql server in a Linux system?
* Explain the use of aggregate functions in Postgresql?
* What is a JOIN? What are the different JOIN operations supported by ANSI SQL?  
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
    
  python-Big O Based
* Why is O(n!) considered as one of the worst run time complexities for algorithms?
* Which runtime does Bubble sort run?
* Which runtime does Binary search run? Why?
* Array Based
* How to find the missing number in given integer array of 1 to 100?
* How to find the largest and smallest number in an unsorted integer array?
* How to find all pairs of integer array whose sum is equal to a given number?
* How to find the duplicate number on a given integer array?
* How to sort an integer array in place using QuickSort algorithm?
* How to remove duplicates from an array in place?
* How to reverse an array in place in Java?
* How to find multiple missing numbers in given integer array with duplicates?
* String Based
* How to Print duplicate characters from String?
* How to check if two Strings are anagrams of each other?
* How to print first non repeated character from String?
* How to reverse a given String using recursion?
* How to check if a String contains only digits? Also, can you convert a string with only numbers to its equivalent number data type?
* How to count a number of vowels and consonants in a given String?
* How to find all permutations of String?
* How to check if two String is a rotation of each other?
* How to check if given String is Palindrome?
* Linked List Based
* How to find the middle element of a singly linked list in one pass?
* How to reverse a linked list?
* How to reverse a singly linked list without recursion?
* How to remove duplicate nodes in an unsorted linked list?
* How to find the length of a singly linked list?
* How to find the 3rd node from the end in a singly linked list?
* How do you find the sum of two linked list using Stack?
* Tree Based
* Can you write a program to implement a binary search tree?
* How do you perform Pre-order traversal in a given binary tree?
* Write a Program to traverse a given binary tree in Pre-order without recursion.
* How to print all nodes of given binary tree using inorder traversal without recursion?
* How to implement Post-order traversal algorithm?
* How to traverse a binary tree in Post order traversal without recursion?
* How to Print all leaves of a binary search tree?
* How to count a number of leaf nodes in a given binary tree?
* How to perform a binary search in a given array?
* How can you find the depth of a graph?