Diff between Array and Linked List?
Among LL and Array which one is best for
searching,deletion and insertion?
Diff between Tree and Graph?
Write code to Find missing number in sorted array
Find second higest salary
Db mey tables sy related queries poch rhy thy or agli id ksy aaye gi kya likhy gaye hm khud likh skty hain primary key sary concepts pochy
3rd highest salary likhwa ky run ki error ka pocha
15. Indexing in db
16. Normalization.
When denormalization is required?
When normalization is enough?
What are advantages of using Sql over NoSql.
Some queries, they gave a senario and asked to write a query against it.
outter joins
ER Diagram Database
SQL/NoSql difference
Write four types of keys and explain them
crud queries
normalization
What are the keys in DBMS?
What is a foreign key. Why do we need it.
Explain in detail the ACID properties of transaction!
Find avg salary of employees working in sales department. Give names of all the employees working in sales or marketing department.
Give names of all the employees working in sales or marketing department

Find all employee who are also manager
He asked me to design database for one of the projects on my resume
Types of keys
Explain the design
Relational vs non relational dbs
Advantage and disadvantages of both sql and nosql dbs
Second max salary
Joins
Store procedures
Transaction
Do nosql dbs like mongo hold acid properties
Acid properties
Do nosql dbs like mongo hold acid properties
Order of execution of mysql query
Where vs having
What is Subquery
Normalisation
-Student ,Course Table was given we need to show the students who bought the courses
Normalization and details
Indexing and what are its advantage and disadvantages
Triggers
Stored Procedure
3. After that he gave a scenario and asked to write a query (Join se related tha)
write a query to display max 5 salaries of a table
write a query to display parent data only ,which has no refernce key in child.
how we retrieve data in mongo db.

if we have a client and he want to design a system for internal use as well as to get feedback backa nd order from customer and view and modify it, how you design this.If you update data in mongo , and customer is using the system ,how he knows data is updated in db?(he could not refresh page, beause he has no knowlege that data is upadated)
locking in db
joins
primary, foreign, composite keys
Sql query for largest salaray without using min and max
He said jo abhi ap na Rolustech ka hiring process face kiya iska hi aik interface bna do ya samjha human interaction ko aik application ma convert kro.
Joins
Draw 1 to 1 relationship in table .
Today is 1st june , and Thursday, give me 2025 1st june day, and then 2024.
Data base Non sql and sql
Joins
Indexing
Stored procedures and triggers
Database querry to print avg salary of department
1*1,1*N, N*N relationship
Denormalization
NoSql
Sql Injection
Joins
Indexing and its types
SQL vs NoSQL
All Types of Joins
Basic Select / Where Query
DB normalisation and types and Acid properties
What is indexing in data base? (just definition use age detail nahi pouchi)

Dept= {id(PK), name} Emp = {id(PK), name ,salay, depid(FK)} You have to print 2nd highest salary where dept name == "HR"
database indexing. .
one-to-one, one-to-many, many-to-many
all types of joins explain krein with sql queries as an example
db joins - queries
- Transitive Dependency
indexing,where we apply it on row or column and on which bases.
normalization
ACID
Views
What is transaction
Find 3rd highest salary
Using given table, find the count of employees each manager is handling
Triggers vs Procedures
diff between drop, truncate, delete
how to implement manay to many relationship
indexs and its drawbacks
how to apply constraints
draw association(ERD) between entities of given scenario
bridge entity
4th max salary? why did you use distinct in query? any other way to find 4th max?
why indexing? make an index? which column do you prefer for indexing?
join vs subquery
Join query on 3 tables
Right outer join using left outer join.
define indexing? table has million of record with index? does indexing helpful in that
cluster or non cluster index

triggers
store procedures
ACID
transaction
Views
write query to return 2nd last record of table
4 maximum salary
Walmart
find maximum salary for each department
can we replace right join with left join
3rd me sql ki aik condition btai thi student courses relationship
Uski table diagram bnaye..
Or join wali aik query likhuwai thi just
ERD of department and teachers
And a query related to it
3rd max salary
3rd highest salary
count of employees in a department
Avg salary
Query to find distinct cities from table employee and department
database me 3 table dia user,orders and payment
query likhni thi jis ma btana tha wo user la ao jino na aik order kia >20000 or os order k lia sirf aik hi payment hui ha
- find query for nth max salary from employee table
Basic db mcq
Db ki query thi aik table employees wala tha aur aik salaray wala salaray main update krna tha using raise where
Normalization
Transitive dependency
Inner vs left inner join
HAVING clause
Group by clause

Like operator
Where clause
Nested queries
Drop vs delete table
transactions in mongoodb
You have two tables one is user and other is ads now a user have multiple ads you have to find that user who have the most ads
query 2nd largest salaray
https://www.examveda.com/sql/practice-mcq-question-on-sql-miscellaneous/
https://www.analyticsvidhya.com/blog/2017/01/46-questions-on-sql-to-test-a-data-science-professional-skilltest-solution/
DB SQL Query using joining table without using join keyword
2.What is a trigger in DB
3.What are functional and   non functional requirements, sdlc
A is abstract class inherited by B and B is inherited by C. B did not implement the function is this arise an error or not or is Class C going to implement it or not. How errors resolved?
Overloading vs Overridng
Compile vs Runtime
Sql joins question is find second highest salary
Views
Joins main say aik question must hay
Some basic questions about data science
Tools used to do data science
Basic question of sql
normalisation
crud queries
Schema of Instagram
What is dependency injection
Implementation of cyclic dependency

What is cyclic dependency and give its example
What is dependency injection why we use this
joins
- Normal forms
- ERD/schema
`what is indexing, it's types and why we use it?`
schema of an e-commerce website
query to find the customer having maximum order in march
Normalization
Why Normalization is necessary?
Can there exist a situation where denormalization is required instead of normalization
Can we store a binary tree in db
How many tables we require to store a binary tree in table
How we can regenerate a binary tree from that table
First, 2nd and 3rd Form of Normalization
Partial Dependency
Transitive Dependency
Indexing
Clustered and unclustered indexing
Erd(fixtures and teams) than write queries on that ERD
Schema of Instagram
Draw ERD of your FYP
Difference between SQL and no-SQL databases, when to use SQL, when to use no-SQL, advantages and disadvantages?
Schema of Instagram
Draw ERD of your FYP
Difference between SQL and no-SQL databases, when to use SQL, when to use no-SQL, advantages and disadvantages?
Q5: A customer paid a bill by checkingout on website. He is your website customer. And the status of payment become paid. There is no difficulty in the process. How to maintain data Integrity.

Q6 write a query to display product name and category name where product ID is 1. Tables name are Product, Category and Product Category
Q7: Design database of university its primary keys foreign keys of student, teachers and courses and also write usecases
How to Prevent SQL Injection
Joins
Er diagram
Queries
Normalization (advatages disadvantaged)
How to optimise a querry
Sql injection
What are triggers
Diff b/w primary and secondary key at least 2 to 3
Diff b/w 2nd NF and 3rd NF
Diff b/w inheritance and polymorphism and their benefits
Joins inner vs outer
What are DDL, DML, DQL with example
Be sure about the version of DBs etc you are using
Normalization usk benefit
Sq injection
Optimisation of query
Database design karni thi uni ki only tables foreign and primary ki or use cases thy usk teen
Db query ek
1. You have a scenario where you are managing an ecommerce checkout system. When a payment is made you have to deduct the required amount from the user's account (assume the users have a wallet on your website), update the order status to paid and add the amount to the account of the user who is selling the product. How would you manage all three of these queries to insure data integrity and make sure no inaccuracy is produced in data.

3. Write a SQL query to get the name of all customers with their orders count. The customers should have placed at least two orders for a total amount greater than $5000.

4. Draw the database tables for a gym management system. (not ER diagram, tables with primary keys, foreign keys, and name). Draw the Schema Diagram.

Some of the queries system should answer are:

1. Get all the members registered for a particular class. 2. Get all the classes for a particular trainer.

- Get all the memberships for a particular member.

And similar use cases. You can state your assumptions

1.Having and where ka different

2.Moat expensive function in sql

3.Aggregate functions

4.One sql query(FYP sa hi related ek simple table ki example di thi or us pa run karni thi)

Iske bad db ma se groupby ka sawal poocha aur iski query likhwi

Normalization in detail

indexing in detail(type) benifits etc

stored procedure with e.g

triggers with e.g

views

diff between view and stored procedure and when to use them

diff between user defined func and stored procedure

joins outter inner equi natural

dependency injection

partial dependency

transitive dependency

if you have large database and there are so many joins and sunbqueries there are indexing too in it and now you have to write a querry ...lkin query ase likhni h k hme fast retrieval ho ske...tu kase likhenge possible solutions btae...

-customer,orders, order details are the tables write a query to give ordersdate and customer names between 1st feb 2022 and 1st dec 2022
What are triggers and its types? Why they are used?
Difference between in and between operator
2. Stored Procedure?
3. Simple Join queries
Given Employee table with three columns Name, Id, Salary. Write sql query to set salary of Max as Salary of Lucifer
Delete middle of linked list
e.g.
11->5->4->3->9
ans: 11->5->3->9
Q2. Given two linked lists, add the second one in the middle node of first list. E.g 1-2-3; 4-5
Result:1-2-4-5-3
Joins Konsay hotay hain. Joins k nuqsanat.
ACID
Synchronization
Mutex Lock (OS). How used in db. And also give a real world example apart from coding.
1-Find 2nd highest salary(DB)
2-Find two indexes in an array such that their sum is equal to the target input provided by the user
Solid design patterns?
Sql Server
4) Procedures in SQL
5) 2 tables ma many to many relationship ko 3 tables ma convert krna tha, aik new table ma dono ki ids rkhni.
DB queries (outter join, sub query)

9) code kia kr raha
Ans) Bubble sort ka algo tha jo array ka sort kr raha tha ascending order ma.
Data base ki Mai SQL most important joins , stored procedures , View , SQL injections
2) there was a senerio give that there are two classes one student and one course. One student can enroll with courses and one course can ve enrolled by multiple student. Draw relationship between them and tell nature if relationship.
One was to find the 3rd max salary.
The other was find the order value. But total order value was not given.
No of products and quantity of products were given.
Q5: A customer paid a bill by checkingout on website. He is your website customer. And the status of payment become paid. There is no difficulty in the process. How to maintain data Integrity.
Q6 write a query to display product name and category name where product ID is 1. Tables name are Product, Category and Product Category
Q7: Design database of university its primary keys foreign keys of student, teachers and courses and also write usecases
Inner join, left outer join queries
normalization in database
run/space time complexity of merge, insertion
Sql query to find names of emplyees of a specific department
2nd highest salary in the database
query optimization
Database: one to may relationship
how to resolve many to many relationship
normalization 1st - 3rd form
writing queries, aggregate functions, having clause, group by
SDLC, waterfall model, prototyping model
object oriented design
UML, has a relationship, is a relationship, aggregation vs containership

primary, foreign, composite keys ma difference with example.
Joins and it's types as well
SQL: WHY INDEXING IS USED? benfit of indexing
SQL: at which column index should be applied?
Two table employee n salary
Write sql query having salary btw 9000 and 15000
Find empId which are common in both tables
Given an input parameter of a string, find characters that are not repeated more than
2 times, extract them in the same sequence and return if they are pelendrom. Return
"notfound" if not.
a. E.g
i. input : "abaacbfcb" here 'a' and 'b' are repeated more than 2 times. So
we will ignore them. However, 'c' 'f' 'c' are not repeated more than 2
times. We will extract them in the sequence and order of the string as
"cfc" because it is also a palindrome. So you should return "cfc" as a
string.
ii. input parameter string: "psxxxszzzpz". Here "pssp" is the correct answer.
b. Tests: Write a function named penTwoTimes(s);
Print it in console.log(penTowTimes(s)) for each of the bellow.
i. If s is "abaacbfcb" - the printed value should be "cfc"
ii. If s is "aaaaaaaa" - the printed value should be "notfound"
iii. If s is "psxxyyyyyxszzzpzyyyy" - the printed value should be "pssp"
I.e do this
console.log(penTowTimes("abaacbfc
console.log(penTowTimes("aaaaaaaa"))
console.log(penTowTimes("psxxyyyyyxszzzpzyyyy"))

c. Constraints:

i. There is only one palindrome in the string provided. You should not seek

for more than one. Get / use the first one you find.

ii. If a character repeats more than 2 times, it should be ignored (like it never

existed in the string).

Write a program that finds and returns missing numbers in an array. There can be any

amount of numbers in any sequence in the array.

a. EXAMPLES - [1,6,3,5,2]. Here [4] is missing. [2,5] here 3 and 4 are missing so

the expected returned array should be [3,4].

b. EXPECTED RESULT: return: array of missing numbers e.g [4] or [2,5]

c. NOTES AND PROVISIONS

i. You can change the input and match the expected output for only these

but your function should be able to handle any input array of any length,

any numbers, and any gaps between numbers in that array of numbers.

ii. It will not have negative numbers.

d. CONSTRAINTS.

i. The returned array should be in ascending order. E.g [3,4,7,9]. Not

[3,5,2,1].

ii. The function name should NOT be changed, else the question will go

wrong. : const myFunction = () => { return [1,2,3] }

e. Tests: test (input, expected output)

Make a function named missing(arr) and print these 5 lines below.

i. test([1,6,3,5,2] , [4])
console.log(missing([1,6,3,5,2])) should print [4]
ii. test([1,7,3,5,2] , [4, 6])
console.log(missing([1,7,3,5,2])) should print [4, 6]
iii. test([2,5] , [3,4])
console.log(missing([2,5])) should print [3,4]
iv. test([5,2] , [3,4])
console.log(missing([5,2])) should print [3,4]
v. test([99999997, 99999999] , [99999998])
console.log(missing([99999997, 99999999]) should print [99999998]
Given an array of undetermined length, find the largest sum possible for any 3
consecutive numbers.
a. E.g:
i. [2,0,1,100,200,10,7,2,300,2,10] here 100,200,10 = 310 is the correct
answer. Here only the combination of these 3 numbers produces the
largest sum.
ii. [2,1,0,20,7] = 0+20+7 = 27 is the answer that you should return.
b. Assumptions:
i. There will always be at least 3 numbers in an array.
c. Constraints:
i. Return a number. Not an array or string. Otherwise your answer may
result to be incorrect
d. Tests: Make a function named largestConsec(arr) and print the 2 lines below
i. [2,0,1,110,200,10,7,2,300,2,10] = 320
console.log(largestConsec([2,0,1,110,200,10,7,2,300,2,10])) should print
320

ii. [2,1,0,20,8] = 28
console.log(largestConsec([2,1,0,20,8])) should print 28
Self join ki query
2 3 queries thein
Join ki types. Normalization
Group by kb use krty hn
Having or where m diff
Unique vs primary key
Foreign key duplicate ho skti ya ni
How to retrieve second highest salary
Indexing
Normalization
Joins
Indexing ki hoti hai kyun use hoti hai
Aik scenario tha Student aur Courses kay table bananay thay to beech main bridge table banana tha
- Normalisation
- Indexes and types
- Given a DB table, Convert it into Normal form
- many to many relationship query
- Aggregate function Query - Count
• Foreign key, primary key, candidate key
• Can foreign key be null?
• Indexes in DB
• Stored procedures in DB
Array or linkedlist m searching ki time complexity, Agr koi random value search krni hai
Tree m srf aik root node h .. ye BST hai ya ni
Data structures ki definition
BST ki characteristics

definition of data structures
Types
Difference between linear and non linear data structures
Array vs linkedlist
Graph vs tree
Pre vs post order traversals
Can graph have cycles
How to make a queue without using stack
How to get value of third last element of Linkedlist
- Stack vs Heap mem
- What are data structures.
- Which data structure will be best suited in individual following cases… select from either Array or LinkList.
Cases: Insertion, Deletion, Search.
- MidPoint of Link List
- Missing number from integer array
• Difference between array and linked list
• Comparison in array and linked list for searching, insertion, deletion, which data structure is better for these
• Difference between tree and graph
A coding problem:
You receive a number N and an array of size N-1 which will contain all integers from 1 to N except one which will be missing. We need to find out which integer is missing and we have to do it in a single for loop.
Indexing query thee bht basic se
Indexing or uski types detail m
Self join ki query
2 3 queries thein
Join ki types. Normalization

Group by kb use krty hn
Having or where m diff
Unique vs primary key
Foreign key duplicate ho skti ya ni
sql queries, joins
Map many to many relations without a junction table?
What are stored procedures?
What are the benefits of stored procedures?
What are triggers?
Difference between stored procedures and triggers?
What is sequence?
What is 3rd Normal Form?
Disadvantages of Normalizaton?
What is indexing and why we use indexing?
Can we create an index on primary key?
Disadvantages of indexing?
What is referential integrity?
What is cascade?
BCNF
Indexing
When is indexing suitable, vs when not?
find no of employees having salary greater than 5000
find no of employees having: salary greater than 5000 and having same name
find most recent salary of employees (they have salaries updating..)
What is normalization? and state 3 rule of normalization?
SQL vs No SQL
There is employee table with following fields, id, name, designation, deptNo. There are some duplicates in table. You need to display the duplicate records if name, designation and deptNo repeat with any other record.

Indexing extreme concepts, all joins, normalization
Query: Running Sum problem
Design Database of Tajir App
Design All pages of Tajir App (not UI but backend)
How Data will be sent to Server through HTTP Requests
How Data will be recieved from Servers
Postgresql advantages
Create schema of tic tac toe game, insert data into the tables and then he asked me to write almost 10 queries to fetch data from tables (1.5 hrs long)
unique vs primary key - indexing
FYP schema
Query from fyp
Joins
Left outer join
Indexes
Stored Procedures
What is indexing in database
benefits of indexing
searching algorithm used in indexing
any disadvantage of indexing
Given a case study doctor and patient exists, An appointment a doctor can have many patients and a patients can have many doctors
Write a query to display all doctors with 5 or more appointments
Display name and id of doctor who has no appointment
why subquery? write using joins
difference between join and subquery, which is fast
Write an SQL query to return all duplicate rows of the table.
Write an SQL query to return a count of all rows of the table that are duplicates.

There are two tables Customer and Orders. Customers contains customer ID and Orders contains productid + CustomerID. write a query to find all customerIDs with no orders.
Schema of FYP + Few queries on that schema
Normalization and denormalization on the schema I built
A company have millions of employee when they are updating all the employee's incremental salary from the company's website the server respond with an error of connection timeout to the database, Now company hire you as a DB analyst and assign you the task of resolving the issue, how you will solve the issue, explain your solution?
There is a Customer table having the customer name and customer id and another table order having the customer id as a foreign key and order id. Write a query to find out if the customers have an order count of 5 or more.
Also, write a query to find out the customers who didn't place any orders yet. (Note: without using sub-query and joins)
What is indexing and what are the disadvantages of indexing?
3. SQL Query to get a row from table. (Exact yaad nhi he).
Difference between SQL and NO SQL
What is INDEXING
Why is it used
Advantage and disadvantages of INDEXING
difference between Stored procedures and TRIGGERS
say there is a social app and you have created a friendship function
How many tables will be created
What will be the columns
How will u fetch data using these colums
Say agar mene search karna hai ke kya A B ka friend hai ? Tu what query will i use.
Or same agar B ke end se search karna ke kya A uska friend hai tu tb kya query ho g
Or har friendship pe kitne record add hn g
4. DB: find 2nd highest salary in a table

Fyp se aik db ki query likhwai
What normalization?
Indexing?
BST?
Linkesdlist vs array?
Why trees?
why we use database instead of files, benefits of database, cost of database and vice versa.
linear vs non linear datastructures
how data stored in RAM, stack OR Queue??
bridge entity alternative
must read normalizations examples
- why use databases and not store data in files
- different types of databases
- can we run sql queries on noSql databases
- what are DML/DDL keywords, separrate them
- what are different types of keys
- what is normalization
- types of normalization
- why use foreigh keys
- where vs having clause
Joins
behavior of left outer join
Left outer join query on tables
ACID properties
Design Schema for Food panda
Design Schema for Car booking app
Patient, Doctor, Appointment schema + SQL queries on that
What is table?

How many keys?
What is Primary key?
Normaliztion
Draw ERD for a restaurant
Write a query on above designed database
How to insert data into table
Remove a row from table
What is CRUD
Diff between Dbms and rdbms
What is sql
Extension of nosql
What format data is stored in no sql
Write a sql query to find third maximum salary
Write a sql query to display frequency of values of a column having frequency greater than 1
how many type of joins give name
What is left and right outer join
What is transitive dependency
surrogate key
What is Indexing?
What should we use indexing and when we dont?
MongoDb vs Mysql Which one is better in your opinion and why?