

CampusX Live

SQL Interview Questions for Data Science

- *Common Questions*

1. Write a query to add multiple cols in a table
2. Write a query to add/delete multiple cols in a table
3. Write a query to find out the 2nd highest value in a table
4. Find max value without using ORDER BY
5. Find managers of all employees
6. Use of wild cards
7. If else based questions
8. Find category-wise top value
9. Find/delete all the duplicate values
10. Joining tables

● *Theory Questions*

1. SQL Vs NoSQL Databases
2. Tables required for many to many relationship
3. Draw schema design for swiggy.
4. Types of Joins -> Union Vs Union All
5. OLAP Vs OLTP [Normalized Vs Denormalized Data]
6. Database keys
7. Types of normalization
8. What are indexes in Databases and what are it's types
9. What are transactions in databases? Explain ACID properties.
10. Define
 - a. Views
 - b. Stored Procedures

- *Case Study*

1. You are building an application like tinder, consider the following scenarios:

- There will be multiple users
- Users can right swipe each other to send dating request
- Users can send any number of requests to other users
- ☐ *Convert the above business scenario to database tables*
- ☐ *Write a query to print the name and details of all the users to whom a particular user has sent request.*
- ☐ *Write a query to find the name of the user who has sent 2nd most number of requests, also print the count.*
- ☐ **Homework** – *Find the name of the user who has received min number of requests*
- ☐ *Find all the matches for a particular user*
- ☐ **Homework** – *Find all the unique couples*

2. Swiggy Case Study

- a. Find customers who have never ordered
- b. Average Price/dish
- c. Find top restaurant in terms of number of orders for a given month
- d. restaurants with monthly sales $> x$ for a particular month
- e. Show all orders with order details for a particular customer in a particular date range
- f. Customer \rightarrow favorite food
- g. Find the restaurant with max repeat customers
- h. Find most loyal customers for all restaurant[**Homework**]
- i. Month over month revenue growth of a restaurant/swiggy
- j. Most Paired Products