

TOP 100

SQL QUESTIONS





Disclaimer

Before you begin, here's a quick note.

This sheet is here to help you learn SQL in a smart and structured way. But remember — don't just rush through the answers. Write the queries yourself. Run them, test them, even make mistakes and fix them. Only after that, check other solutions.

That's how you build real SQL confidence — the kind that helps in interviews and on the job.

Why This Sheet —

Here's why we feel this sheet is right for you

1. Clear Learning Path

Questions are arranged step by step — from simple filtering to advanced functions — so your skills grow naturally.

2. Real-World Relevance

The problems are based on practical scenarios like e-commerce, finance, and social media — exactly what companies deal with.

3. Hands-On Practice

This isn't about memorizing. It's about solving. You'll practice writing efficient, accurate queries under real conditions.

This sheet is designed to make SQL feel clear, practical, and useful — so when it's time for interviews, you're ready.

Introduction to SQL —

SQL (Structured Query Language) is a standard language used to communicate with and manage relational databases. It allows you to define, manipulate, retrieve, and control access to the data.

SQL is categorized into different sub-languages based on functionality:

1. **DDL (Data Definition Language)** : Used to define and modify the structure of database objects like tables, schemas, and indexes.
Example : CREATE, ALTER, DROP, TRUNCATE.
2. **DML (Data Manipulation Language)** : Used to insert, update, or delete data from database tables.
Example : INSERT, UPDATE, DELETE, MERGE.
3. **DQL (Data Query Language)** : Used to query and fetch data from a database. Example : SELECT, WHERE, ORDER BY, GROUP BY.
4. **DCL (Data Control Language)** : Used to control access to data and database objects.
Example : GRANT, REVOKE
 - **TCL (Transection Control Language)** : Used to manage changes made by DML statements and control the execution of transactions.
Example : COMMIT, ROLLBACK, SAVEPOINT

Key SQL Concept —

1. Tables : A table is a collection of rows (records) and columns (fields).
Each table represents a single entity, like Students or Orders.
2. Keys :
 - a. PRIMARY KEY - Uniquely identifies a row.
 - b. FOREIGN KEY - Linked tables together.
3. Joins : Joins are used to combine data from multiple tables
 - a. INNER JOIN - Only matching rows.
 - b. LEFT JOIN - All rows from left table + matches from the right.
 - c. RIGHT JOIN - All rows from right table + matches from the left.
 - d. FULL JOIN - All rows from both tables
4. Constraints : Rules applied to table columns
 - a. NOT NULL - Column must have a value.
 - b. UNIQUE - Values must be unique.
 - c. CHECK - Values must satisfy a condition.
 - d. DEFAULT - Sets a default value if none is provided.
5. Aggregate Functions : Used to perform calculations on multiple rows.
like - COUNT(), SUM(), AVG(), MIN(), MAX()

PROBLEMS:

EASY

#	Algorithm	Practice Link
01	Combine Two Tables	 Link
02	Employees Earning More Than Their Managers	 Link
03	Duplicate Emails	 Link
04	Customers Who Never Order	 Link
05	Delete Duplicate Emails	 Link
06	Rising Temperature	 Link
07	Game Play Analysis I	 Link

#	Algorithm	Practice Link
08	Employee Bonus	 Link
09	Find Customer Referee	 Link
10	Customer Placing The Largest Number Of Orders	 Link
11	Big Countries	 Link
12	Classes With At Least 5 Students	 Link
13	Sales Person	 Link
14	Triangle Judgement	 Link
15	Biggest Single Number	 Link

#	Algorithm	Practice Link
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16 Not Boring Movies  [Link](#)

17 Swap Salary  [Link](#)

18 Actors And Directors Who Cooperated At Least Three Times  [Link](#)

19 Product Sales Analysis I  [Link](#)

20 Project Employees I  [Link](#)

21 Sales Analysis III  [Link](#)

22 User Activity For The Past 30 Days I  [Link](#)

23 Article Views I  [Link](#)

#	Algorithm	Practice Link
24	Reformat Department Table	 Link
25	Queries Quality And Percentage	 Link
26	Average Selling Price	 Link
27	Students And Examinations	 Link
28	List The Products Ordered In A Period	 Link
29	Replace Employee ID With The Unique Identifier	 Link
30	Top Travellers	 Link
31	Japanese Cities' Attributes	 Link

#	Algorithm	Practice Link
32	Revising The Select Query I	 Link
33	Higher Than 75 Marks	 Link
34	Employee Names	 Link
35	Type Of Triangle	 Link
36	Population Density Difference	 Link
37	The Blunder	 Link
38	Top Earners	 Link
39	Population Census	 Link
40	African Cities	 Link

MEDIUM

#	Algorithm	Practice Link
41	Second Highest Salary	 Link
42	Nth Highest Salary	 Link
43	Rank Scores	 Link
44	Consecutive Numbers	 Link
45	Department Highest Salary	 Link
46	Managers With At Least 5 Direct Reports	 Link
47	Game Play Analysis IV	 Link
48	Investments In 2016	 Link

#	Algorithm	Practice Link
49	Friend Requests II: Who Has The Most Friends	 Link
50	Tree Node	 Link
51	Exchange Seats	 Link
52	Customers Who Bought All Products	 Link
53	Product Sales Analysis III	 Link
54	Market Analysis I	 Link
55	Product Price At A Given Date	 Link
56	Immediate Food Delivery II	 Link

#	Algorithm	Practice Link
57	Monthly Transactions I	 Link
58	Last Person To Fit In The Bus	 Link
59	Restaurant Growth	 Link
60	Movie Rating	 Link
61	Capital Gain/Loss	 Link
62	Count Salary Categories	 Link
63	Confirmation Rate	 Link
64	Odd And Even Transactions	 Link
65	Find Students Who Improved	 Link

#	Algorithm	Practice Link
66	DNA Pattern Recognition	 Link
67	Analyze Subscription Conversion	 Link
68	Find Product Recommendation Pairs	 Link
69	Seasonal Sales Analysis	 Link
70	Find Consistently Improving Employees	 Link
71	Find COVID Recovery Patients	 Link
72	Find Drivers With Improved Fuel Efficiency	 Link
73	Find Overbooked Employees	 Link
74	Find Stores With Inventory Imbalance	 Link

#	Algorithm	Practice Link
75	The PADS	 Link
76	Occupations	 Link
77	Binary Tree Nodes	 Link
78	New Companies	 Link
79	Weather Observation Station 18	 Link
80	Weather Observation Station 19	 Link
81	Weather Observation Station 20	 Link
82	The Report	 Link
83	Top Competitors	 Link

#	Algorithm	Practice Link
84	Ollivander's Inventory	 Link
85	Challenges	 Link
86	Contest Leaderboard	 Link
87	SQL Project Planning	 Link
88	Placements	 Link
89	Symmetric Pairs	 Link
90	Print Prime Numbers	 Link

HARD

#	Algorithm	Practice Link
91	Department Top Three Salaries	 Link
92	Trips And Users	 Link
93	Human Traffic Of Stadium	 Link
94	First Letter Capitalization II	 Link
95	Find Invalid IP Addresses	 Link
96	Analyze Organization Hierarchy	 Link
97	Find Category Recommendation Pairs	 Link
98	Investments In 2016	 Link

#	Algorithm	Practice Link
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99 15 Days Of Learning SQL  [Link](#)

100 Interviews  [Link](#)



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01

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02

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03

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04

24 LPA AVERAGE PACKAGE

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