Open in app Get started

Published in Level Up Coding

Nitesh Chaudhry Follow

Sep 5, 2021 · 3 min read · Listen

Save

Advanced SQL for Data Professionals

> *How do you move beyond SELECT , WHERE , GROUP BY Queries ? How to solve SQL questions asked in FAANG interviews ?*

We've all been there… As a data professional, you need to learn Advanced SQL. The Biggest Problem — there is no good source to find all the good questions.

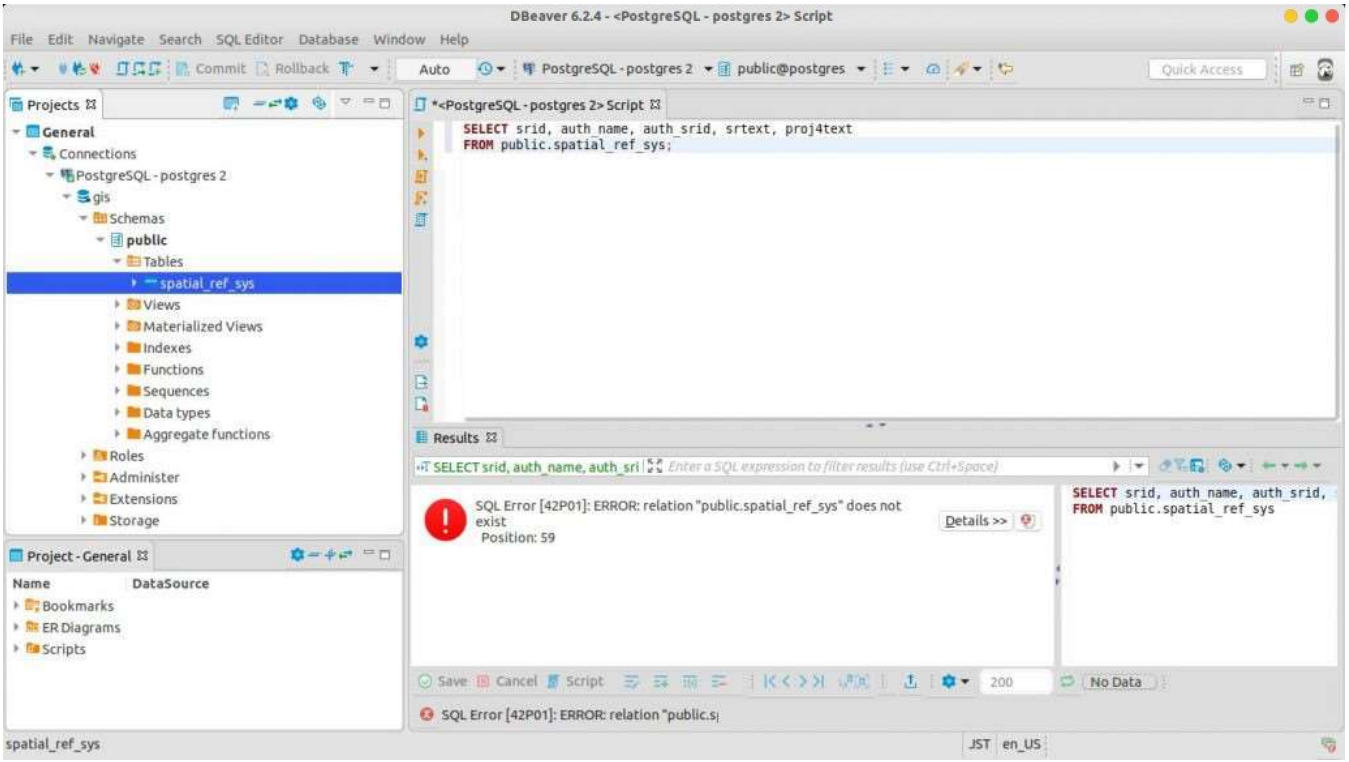
This blog is a collection of content that I would have like to see in a go-to guide for SQL.

After going through all these, You'll be able to solve around 95% of all SQL questions that may be asked.

Here is a stepwise process :

Step 1 : Install MySQL client on your system. I recommend using ubuntu(or linux) to

Open in app Get started



Some Concepts you should know :

- **CTEs** : Helps in creating temp tables in queries and using them later (Common Table expressions)
- **Subqueries**
- **Variables in SQL**
- using **CASE WHEN**, IF statements, substring and date functions.
- **Window functions**
- **Using joins** to solve non trivial problems.

Step 3 : Hackerrank (3–4 hrs)—

Solve Easy-medium questions that have a high success rate. Don't beat yourself up if you can't solve ***all*** at this point — you are still warming up. *Solve 30–40 % of all questions present.*

use discussions tab to learn and see alternate solution approaches — you are still a learner

Open in app Get started

Step 4 : Complete this list in a sequential order :

> *Learn the common approaches used to solve almost every SQL problem :*

1. Update Cumulative Sum
2. Monthly Active User
3. Pivot Numeric Data
4. Pivot Text data
5. Un-pivot tables
6. Group by bins
7. Recommended friends
8. Consecutive active users
9. Spotify similar friends
10. Text Confirmation

Open in app Get started

14. Instagram Common follower
15. FB Advertiser status.

> ***Special Tricks to know that come in Handy with SQL problems :***

1. Useful subqueries
2. Multiple column partition
3. Dynamic query(Python)

> ***Suggested questions for practice :***

1. Trips and users
2. Dept top 3 salaries
3. Cumulative salary employee
4. Human Traffic
5. Average salary
6. Students Report

> ***I also suggest you to read this doc on Query Optimization .***

Step 5 : Continue with the remaining SQL questions on HackerEarth. Make sure to revisit completed ones again.

> ***That's it !! you covered 90% of all Advanced SQL Content you need. Now go ahead with confidence and rock that interview.***

Follow me on ***LinkedIN*** to stay connected. I regularly share data professional related posts which you may find useful. *Also check out my other posts if you found this useful.*

Open in app Get started

569 2

Sign up for Top Stories

By Level Up Coding

A monthly summary of the best stories shared in Level Up Coding Take a look.

Get this newsletter

Open in app Get started