

@Backend:Phase1

Task 4

/DBMS-MySQL



/Feedback

\$ Task_3_Feedback

/Resources

\$ Watch this video MySQL-Tutorial to the end.

\$ from Baraa Course, watch these videos also:

- ✓ > SQL Joins Basics
- ✓ > Advanced SQL Joins
- ✓ > Joining Multiple Tables
- ✓ > SQL Subquery

\$ Other Useful resources along this phase:

- > Baraa Course
- > Eng-Ramy ITI Course
- > DR-Amr Internal DBs Course

/TODO

\$ *Part A: LeetCode Problems*

Create a file named *Task_4_Solutions.sql* and paste your SQL code for each problem there.



- ✓ > Combine Two Tables
- ✓ > Replace Employee ID With The Unique Identifier
- ✓ > Customer Who Visited but Did Not Make Any Transactions
- ✓ > Project Employees I
- ✓ > Sales Person
- ✓ > Rising Temperature
- ✓ > Average Time of Process per Machine
- ✓ > Students and Examinations
- ✓ > Managers with at Least 5 Direct Reports
- ✓ > Confirmation Rate
- ✓ > Product Sales Analysis III
- > Market Analysis I

\$ Part B: Research Questions

Answer the following questions in the file named **research.md**.

1. UNION vs UNION ALL:

- We learned how to combine result sets. What is the difference between these two commands regarding **Performance** and **Duplicate Handling** (Search for it)?



2. Subquery vs JOIN:

- Most Subqueries can be rewritten as Joins. Why might you choose to use a Join instead of a Subquery in a real production environment?

/Submission Guidelines

> Inside your **IEEE-ZSB-Backend-26** repository, inside the **MySQL** folder, create a new folder named **Task_4** and put your files there:

MySQL\

Task_4\

Task_4_Solutions.sql

research.md

HTML\

. . .

/How-To-Submit

\$ After you finish all of that, push your files to the repo as explained.

\$ Submit the GitHub repository link on the task chat on **Discord**.



/Deadline

\$ Tuesday, February 24 at 11:59 PM

Wish you the best. ❤️

