

## Task 5: SQL Joins (Inner, Left, Right, Full)

- **Objective:** Learn to combine data from multiple tables
- **Tools :** DB Browser for SQLite / MySQL Workbench
- **Deliverables:** SQL queries using all join types

### Hints/Mini Guide:

1. Create two related tables (e.g., Customers, Orders)
2. Use INNER, LEFT, RIGHT, FULL JOIN

- **Outcome:** Mastery of merging data

### Interview Questions:

1. Difference between INNER and LEFT JOIN?
2. What is a FULL OUTER JOIN?
3. Can joins be nested?
4. How to join more than 2 tables?
5. What is a cross join?
6. What is a natural join?
7. Can you join tables without foreign key?
8. What is a self-join?
9. What causes Cartesian product?
10. How to optimize joins?

### Key Concepts: Joins, Relationships

#### Submit Here:

After completing the task, paste your GitHub repo link and submit it using the link below:

-  [\[Submission Link\]](#).

## 📌 Task Submission Guidelines

- 🕒 **Time Window:**

You can complete the task anytime between 10:00 AM to 10:00 PM on the given day. Submission link closes at 10 :00 PM

- 🔍 **Self-Research Allowed:**

You are free to explore, Google, or refer to tutorials to understand concepts and complete the task effectively.

- 🛠️ **Debug Yourself:**

Try to resolve all errors by yourself. This helps you learn problem-solving and ensures you don't face the same issues in future tasks.

- 💰 **No Paid Tools:**

If the task involves any paid software/tools, do not purchase anything. Just learn the process or find free alternatives.

- 📁 **GitHub Submission:**

Create a new GitHub repository for each task.

Add everything you used for the task — code, datasets, screenshots (if any), and a **short README.md** explaining what you did.

- 📌 **Submit Here:**

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- 🖱️ [[Submission Link](#)].

Best  
of  
Luck

