TASK 6: **Sales Trend Analysis Using Aggregations**

- **Objective:** **Analyze monthly revenue and order volume.**
- **Tools:** **PostgreSQL / MySQL / SQLite**
- **Deliverables:** **SQL script + results table**
- **Hints/Mini Guide:**
  a. **Use EXTRACT(MONTH FROM order_date) for month.**
  b. **GROUP BY year/month.**
  c. **Use SUM() for revenue.**
  d. **COUNT(DISTINCT order_id) for volume.**
  e. **Use ORDER BY for sorting.**
  f. **Limit results for specific time periods.**
- **Dataset:** **online_sales (orders table with order_date, amount, product_id)**

Outcome: **Learn how to group data and analyze time trends.**

Interview Questions:

1. How do you group data by month and year?
2. What's the difference between COUNT(*) and COUNT(DISTINCT col)?
3. How do you calculate monthly revenue?
4. What are aggregate functions in SQL?
5. How to handle NULLs in aggregates?
6. What's the role of ORDER BY and GROUP BY?
7. How do you get the top 3 months by sales?

📌 **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:**

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

SUBMISSION LINK