**Scenario based SQL Questions**

**Complexity: Medium**

**1. Call Records Analysis – Frequent Callers by Region**

**Scenario:**  
You have a table call\_logs with the columns:

* call\_id, caller\_number, receiver\_number, call\_duration, call\_timestamp, region

Your manager wants to identify the top 3 caller numbers (by total call duration) **in the 'South' region** during **June 2025**.

**Question:**  
Write a query to display the top 3 caller numbers who have spent the most total call duration in June 2025 in the South region. Include caller\_number and total\_duration.

**2. Recharge Behavior – Average Recharge Amount by Plan Type**

**Scenario:**  
Your telecom system logs user recharges in the table recharges with:

* recharge\_id, user\_id, amount, plan\_type, recharge\_date

Plan types include: 'Prepaid', 'Postpaid', 'DataOnly'.

**Question:**  
Write a query to find the average recharge amount for each plan\_type during the last quarter (Apr–Jun 2025), and **exclude plans with fewer than 5 recharges**.

**3. Network Usage Summary – Total Data Usage by Device Type**

**Scenario:**  
The data\_usage table logs network data consumption:

* usage\_id, user\_id, device\_type, data\_consumed\_mb, usage\_date, network\_type

Device types include: 'Smartphone', 'Tablet', 'Dongle'.

**Question:**  
Write a query to show the total data consumed (in GB) by device type for users on 4G network, **excluding usage less than 100 MB**, in the **month of July 2025**.