

Business Data Analyst

Practical Assessment 1

Objective:

To evaluate your level of competence using SQL

Task:

In this Deck are 2 SQL challenges.

For each challenge write a SQL query that would produce the correct result based on the task description



Task 1: Identify Top Repeat Customers

You're analysing customer behaviour for a subscription-based product business. The team wants to identify which customers have recently demonstrated strong buying behaviour in both consistency and spending.

You can use two different tables - *Customer_profiles* and *Transactions* (see next slide).

Based on the information on slide 4, please generate a SQL query that identifies the top 10 customers by total revenue spent in the last 90 days. The query should:

- Exclude refunded transactions.
- Include only customers with at least 2 non-refunded purchases within the 90-day period.
- Display the account age, total number of transactions (lifetime and last 90 days), and total spending (lifetime and last 90 days) for these top customers.

Customer_profiles

Column Name	Type	Description
customer_id	INT	Unique customer identifier
Full Name	TEXT	Full Customer Name
signup_channel	TEXT	Source of signup
account_created	DATE	Account creation date

Transactions

Column Name	Type	Description
txn_id	INT	Unique transaction identifier
customer_id	INT	Unique customer identifier
txn_date	DATE	Transaction date
order_grand_total	DECIMAL	Value of the transactions
is_refunded	BOOLEAN	TRUE if the transaction was refunded

Task 2: Customer Purchase Rank by Month

Your company aims to analyze the evolution of customer purchasing behavior, with a specific focus on identifying the top monthly spenders.

Please write a SQL query that, for each month present in the *Orders* table with available order data (excluding test payments), identifies the top 3 customers based on their total spending within that specific month. The query should output the month and their total spending for that month.

Orders

Column Name	Type	Description
payment_id	INT	Payment unique identifier
customer_id	INT	Customer unique identifier
payment_date	DATE	Date of the payment
amount	DECIMAL	Amount paid
is_test_payment	BOOLEAN	TRUE if it was a test payment

Next steps

Once you have completed the task please email the results to Interviewtasks@Ometria.com