Second: Write queries that directly answer predetermined questions from a business stakeholder

SQL Query 1: Which brand has the most transactions among users who were created within the past 6 months?

SELECT b.Brand_name, COUNT(DISTINCT r.Receipt_id) AS Transaction_count FROM Brands b

JOIN Items i ON b.Brand_id = i.Brand_id

JOIN Item_in_Receipt iir ON i.Item_id = iir.Item_id_barcode

JOIN Receipts r ON iir.Receipt_id = r.Receipt_id

JOIN Users u ON r.User_id = u.User_id

WHERE u.Create_date > NOW() - INTERVAL '6 months'

GROUP BY b.Brand_name

ORDER BY Transaction_count DESC

LIMIT 1;

SQL Query 2: Brand with the Most Spend Among Users Created Within the Past 6 Months

SELECT b.Brand_name, SUM(i.Final_price * iir.Quantity_purchased) AS Total_spend FROM Brands b

JOIN Items i ON b.Brand_id = i.Brand_id

JOIN Item_in_Receipt iir ON i.Item_id = iir.Item_id_barcode

JOIN Receipts r ON iir.Receipt_id = r.Receipt_id

JOIN Users u ON r.User_id = u.User_id

WHERE u.Create_date > NOW() - INTERVAL '6 months'

GROUP BY b.Brand_name

ORDER BY Total_spend DESC

LIMIT 1;