SQL Practice - Day-28 - 20250304

Problem Statement:

A ride-hailing company wants to identify drivers with a high cancellation rate in the last 60 days.
A cancellation is defined as a trip where STATUS = 'CANCELLED'.
Write a query to find the top 3 drivers with the highest cancellation rate, where the cancellation rate is calculated as:

Cancellation Rate = {Cancelled Trips / Total Trips}

Table: TRIPS
DRIVER_ID – Unique identifier for the driver
TRIP_DATE – Date of the trip
STATUS – Trip status (e.g., 'COMPLETED', 'CANCELLED', etc.)

Return the rank, DRIVER_ID, and their cancellation rate in descending order of cancellation rate. If two drivers have the same cancellation rate, rank them by DRIVER_ID in ascending order.

** QUERY:

```
WITH COUNTS_LAST60 AS(
SELECT DRIVER_ID,
COUNT(*) AS TOTAL_CNT,
SUM(CASE WHEN STATUS = 'CANCELLED' THEN 1 ELSE 0 END) AS CANCEL_CNT
FROM TRIPS
WHERE TRIP_DATE > CURRENT_DATE - INTERVAL 60 DAY
GROUP BY DRIVER_ID
)
, CALCULATIONS AS(
SELECT *,
(CAST(CANCEL_CNT AS FLOAT)/TOTAL_CNT) AS CANCELLATION_RATE,
ROW_NUMBER() OVER (ORDER BY (CAST(CANCEL_CNT AS FLOAT)/TOTAL_CNT) DESC,
DRIVER_ID) AS RN
FROM COUNTS_LAST60
)
SELECT RN AS RANK, DRIVER_ID, CANCELLATION_RATE
FROM CALCULATIONS
WHERE RN < 4
;
```