

Imagine you're working for a credit card company. You've got a database of transactions done by each user and data is being stored as:

Table : Transactions

User_id	timestamp	Transaction_amount
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Table : Credit\_limit

User\_id, credit\_limit, user\_status

You need to find out which customer exceeded his/her credit limit and the day on which they exceeded this limit

```
WITH daily_totals AS (
  SELECT
    user_id,
    date_trunc('day', timestamp) AS dt,
    SUM(transaction_amount) AS daily_total
  FROM transactions
  GROUP BY user_id, date_trunc('day', timestamp)
),
running_totals AS (
  SELECT
    user_id,
    dt,
    SUM(daily_total) OVER (PARTITION BY user_id ORDER BY dt) AS running_total
  FROM daily_totals
)
SELECT
  r.user_id,
  r.dt,
  r.running_total
FROM running_totals r
JOIN credit_limit c
  ON r.user_id = c.user_id
WHERE c.user_status = 'active'
  AND r.running_total > c.credit_limit
ORDER BY r.user_id, r.dt;
```