

Practice(14th Oct '25)

1. Self-Join
2. Case when, window function, date functions

Question: → Find sellers who had **2 or more failed transactions** with the **same buyer within a 14-day window** - possibly indicating a risk flag or system issue

**Method 1** →

Select

t1.transaction\_id,

t2.transaction\_id,

T1.seller\_id,

T2.seller\_id,

T1.buyer\_id,

T2.buyer\_id,

TIMESTAMP\_DATEDIFF(T1.order\_date - t2.order\_date) as transaction\_diff

Case when t2.transaction\_date is not null then 'repeat failure' else 'single failure'

From

Transactions t1

Left Join transactions t2

On t1.buyer\_id = t2.buyer\_id

And t1.seller\_id = t2.seller\_id

And t1.transaction\_id <> t2.transaction\_id

And (t2.order\_date between t1.order\_date and t1.order\_date + INTERVAL '14 days') for  
**timestamp stick with this approach**

Where lower(t1.status) = 'failure' and lower(t2.status) = 'failure'

**Method 2** → ABS(DATEDIFF('day', t1.order\_date(timestamp), t2.order\_date(timestamp))) <= 14

Notes:

1. Different Self-Join →
  - a. Self-join: Same buyer (=)
  - b. Self-join: Different transactions (<>)
2. Does not track: Did this buyer fail again with a different seller?
3. This tracks only: Did this buyer fail again with the **same seller** within 14-days?