

# 42\_User Shopping Sprees

## Medium - Solution

Source - <https://datalemur.com/questions/amazon-shopping-spree>

### Running Notes

- obtain data about users who go on shopping sprees
- A shopping spree occurs when a user makes purchases on 3 or more consecutive days
- List the user IDs who have gone on at least 1 shopping spree in ascending order.

```
WITH main_CTE AS (SELECT *,
LEAD(transaction_date) OVER(
PARTITION BY user_id
ORDER BY transaction_date
) as sec_nd_day,
LEAD(transaction_date,2) OVER(
PARTITION BY user_id
ORDER BY transaction_date
) as thi_rd_day
FROM transactions
ORDER BY user_id,transaction_date)

SELECT distinct(user_id) FROM main_CTE
WHERE thi_rd_day IS NOT NULL
```

I basically had to find those users who had a shopping spree and those who did shopping on 3 days back to back using the LEAD window function

```
LEAD(transaction_date) OVER(PARTITION BY user_id ORDER BY transaction_date)
```

- This returns the `transaction_date` of the next row (2nd day) for the same `user_id` when ordered by `transaction_date`.

```
LEAD(transaction_date, 2) OVER(PARTITION BY user_id ORDER BY transaction_date)
```

- This returns the `transaction_date` of the row two rows ahead (3rd day) for the same `user_id` when ordered by `transaction_date` .

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