## Average Purchase Rate or Average Purchased Items per Active User

```
With user_item_count AS(
Select

User_id,
count(item_id) AS total_items_purchased

From orders

Where order_date >= CURRENT_DATE - INTERVAL '10 days'
Group By user_id
)
Select

AVG(total_items_purchased) AS avg_purchase_rate_per_user

From user_item_count;
```

## Explanation:

- 1. User item count: Count total items purchased per active user in the period
- 2. AVG(total\_items\_purchased): Calculates the average per active user → this is the average purchase rate

## Notes/Variations

1. Segment by category, platform or other dimensions

```
Select
Category,
AVG(total_items_purchased) AS avg_purchase_rate
FROM
(
Select user_id, category, COUNT(item_id) AS total_items_purchased
FROM orders
GROUP BY user_id, category
) t
GROUP BY category
```

Key Takeaway: → This metric tells you **how many items an active user purchases on average,** which is a **user-centric metric** for evaluating engagement, search/recommendation effectiveness, and revenue potential.