

# Can You Solve This TRICKY Flipkart interview Question? - SQL

Find customers who bought *both Laptop and Mouse*, *but never bought Phone Case*, and return how many distinct products they purchased?

## INPUT

order_id	customer_id	product_name
1	1	Laptop
2	1	Mouse
3	1	Keyboard
4	2	Laptop
5	2	Monitor
6	3	Laptop
7	3	Mouse
8	3	Charger

## OUTPUT

customer_id	total_distinct_products
1	3
3	3

Learn this SQL  
Pattern in **29 sec**

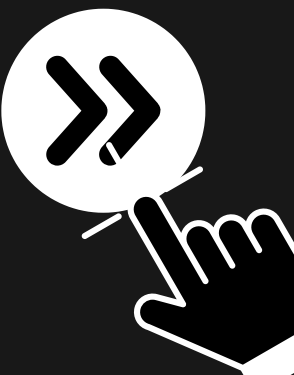


# Query:

## Selective Buyers Analysis

```
SELECT
    customer_id,
    COUNT(DISTINCT product_name) AS total_distinct_products
FROM orders
GROUP BY customer_id
HAVING
    -- Must have BOTH Laptop and Mouse
    COUNT(DISTINCT CASE
        WHEN product_name IN ('Laptop', 'Mouse')
        THEN product_name
    END) = 2

    -- Must NOT have Phone Case
    AND MAX(CASE
        WHEN product_name = 'Phone Case' THEN 1
        ELSE 0
    END) = 0;
```



# Pattern Query:

## Selective Buyers Analysis

GROUP BY customer\_id

HAVING

-- Must have BOTH A and B

COUNT(DISTINCT CASE

    WHEN product\_name IN ('A','B') THEN product\_name  
END) = 2

-- Must NOT have C

AND MAX(CASE

    WHEN product\_name = 'C' THEN 1 ELSE 0 END) = 0;

-- This means: The customer did ALL required actions

COUNT(DISTINCT CASE

    WHEN item IN (list) THEN item  
END) = number\_of\_items\_in\_list

-- This means: The customer did NONE of the forbidden actions

MAX(CASE

    WHEN item IN (forbidden\_list) THEN 1  
    ELSE 0  
END) = 0



Anandnarayanan S

Follow for more