Subquery –

A Query inside another query

When to use?

When we needs to transform and prepare the data we need subquery

Categories –

Result types

Dependency

Location

Result type subquery –

Scalar subquery – returns single value

SELECT AVG(total\_price)

FROM pizza\_sales

Row subquery –

SELECT total\_price

FROM pizza\_sales

Table subquery –

SELECT \* FROM pizza\_sales

Location type subquery –

FROM clause –

Syntax – SELECT col1, col2 FROM (SELECT column FROM table WHERE condition) AS alias

Example –

SELECT \*

FROM (

SELECT order\_id, total\_price,

AVG(total\_price) OVER() AvgPrice

FROM pizza\_sales

)t

WHERE total\_price > AvgPrice

SELECT \*,

RANK() OVER(ORDER BY Total DESC) RankC

FROM (

SELECT order\_id, SUM(total\_price) Total

FROM pizza\_sales

GROUP BY order\_id

)t

SELECT Clause –

Example –

SELECT pizza\_id, pizza\_name\_id, total\_price,

(SELECT COUNT(\*) TotalOrders

FROM pizza\_sales)t

FROM pizza\_sales

JOIN Clause –

SELECT c.\*, t.TotalTerritory FROM Data2 c

LEFT JOIN (

SELECT State, COUNT(\*) TotalTerritory

FROM Data1

GROUP BY State)t

ON c.State = t.State

WHERE Clause –

SELECT pizza\_id, total\_price

FROM pizza\_sales

WHERE total\_price > (SELECT AVG(total\_price) FROM pizza\_sales)

IN Operator –

SELECT userid, signup\_date FROM users

WHERE userid IN (SELECT userid FROM sales

WHERE product\_id = 3)

ANY/ALL –

SELECT State, Sex\_Ratio, Literacy

FROM Data1

WHERE Sex\_Ratio > 600

AND Sex\_Ratio > ANY (SELECT Literacy

FROM Data1

WHERE Sex\_Ratio < 600);

EXISTS –

SELECT userid, signup\_date FROM users u

WHERE EXISTS (SELECT userid FROM sales s

WHERE product\_id = 3

AND u.userid = s.userid)