**Sub-queries**

1 câu queries viết bên trong 1 câu queries thì được gọi là sub-queries

Ex:

Select orderid, orderdate, customerid

From sales.orders -> Outer query

Where customerid IN (

SELECT customerid

FROM sales.orders

Where city = ‘New York’

) -> sub-query

ORDER by oderdate desc;

Select order\_id, order\_date, sales.customer.customer\_id

From sales.orders inner join sales.customer

ON sales.orders.customer\_id = sales.customer.customer\_id

WHERE

City = ‘New York’

Order by order\_date desc;

**Chạy sub-queries trước sau đó mới chạy outer queries**

VD1:

SELECT product\_name,list\_price

FROM production.products

Where list\_price > (

SELECT AVG(list\_price)

FROM production.products

WHERE brand\_id in (

SELECT brand\_id

FROM production.brands

WHERE brand\_name = ‘Strider’ OR brand\_name = ‘Trek’

)

);

VD2:

SELECT order\_id, order\_date,(

SELECT MAX(list\_price)

FROM sales.order\_items i

WHERE i.order\_id = o.order\_id

) AS max\_list\_price

FROM orders o;

VD3:

SELECT AVG(CAST(order\_count as float)) average\_order\_count //CAST ép kiểu dữ liệu

FROM (

SELECT staff\_id, COUNT(order\_id) order\_count

FROM sales.orders

GROUP BY staff\_id

) T; //T là bảng tạm thời đc tạo ra (do sau FROM là 1 bảng)

VD4:

SELECT customer\_id, first\_name, last\_name, city

FROM sales.customers c

WHERE (

EXISTS ( //EXISTS: nếu có tồn tại

SELECT customer\_id

FROM sales.orders o

WHERE o.customer\_id = c.customer\_id AND YEAR(order\_date) = 2017

)

);

SELECT customer\_id, first\_name, last\_name, city

FROM sales.customers c INNER JOIN sales.orders o

ON o.customer\_id = c.customer\_id

WHERE EXIST order\_date = 2017;

//column >= ALL(1,2,3,4) -> column >= 1 AND column >= 2 AND column >= 3, column >= 4;

// column >= ANY(1,2,3) -> column >= 1 OR column >= 2 OR column >= 3,

// column IN (‘A’,’B’,’C’)

// column BETWEEN 10 AND 20 -> 10 <= column <= 20

VD5:

SELECT staff\_id, COUNT(order\_id) order\_count

FROM sales.orders

GROUP BY staff\_id

HAVING COUNT(order\_id) >= ALL (

SELECT COUNT(order\_id) order\_count

FROM sales.orders

GROUP BY staff\_id

)