

02/09/2025

Task-4

Independent & correlated Nested Queries

Aim: To implement and understand Nested Queries in SQL, independent & correlated sub queries.

Procedure:

- 1) create required tables
 - 2) Insert sample data
 - 3) write & execute independent nested Queries.
 - 4) write & execute correlated nested Queries.
 - 5) Observe & analyze the difference in execution and results
- 1) Independent (simple) Nested Queries:

Syntax:

```
SELECT column-list  
FROM table  
WHERE column OPERATOR (SELECT column FROM table  
WHERE condition);
```

Example:

mobile phones
Find customers who belong to the same department as Alice 'Realme'.

```
Mobile  
SELECT customer Name  
FROM Customers Mobile phones  
where BRAND NAME = (select BRAND NAME  
FROM Customers Mobile phones  
WHERE customer name = 'Alice');  
Realme'
```

Output:

Alice Realme
Redmi

- 2) Correlated Nested Queries.

Syntax:

```
select column-list  
FROM table 1 t1  
WHERE EXISTS(  
SELECT 1  
FROM Table 2 t2  
WHERE condition involving t1.column = t2.column);
```


Example:

Find ~~customers~~ ^{Mobile name} who have taking at least one Mobile brand

SELECT ~~'S'~~ ^{customer Name}
~~customer~~ ^{mobile}

FROM customers Mobile's

WHERE exists (

SELECT 1

FROM ~~cust~~ ~~Mobiles~~ ~~e~~ purchases.

WHERE ~~e~~ ~~customer ID~~ = ~~o~~ ~~customer ID~~);
~~e~~ ~~mobile brand~~ ~~S~~ ~~Mobile brands~~

output:

~~Alice~~ Realme

~~Smith~~ Redmi

vivo

iqoo

VEL TECH	
EX NO.	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
GN WITH DATE	

Result: Thus the implementation of independent & correlated Nested Queries has completed successfully.