

07/2025

TASK-4:

INDEPENDENT AND CORRELATED NESTED QUERIES

Aim:- To Implement and understand Nested Queries in SQL including Independent and correlated subqueries.

PROCEDURE:-

1. Create required tables (e.g. Mobile phones, brand, realme).
2. Insert sample data.
3. write and execute Independent nested queries.
4. write and execute correlated nested queries.
5. observe and analyze in execution and results.

Syntax:-

SELECT column-list

FROM table

WHERE column OPERATOR (SELECT column FROM table WHERE condition).

1) Independent Nested Query:-

Find Mobile phones belong to the Realme same Brand as Realme

SELECT Mobile Name.

FROM Mobile phones

WHERE Brand ID =

SELECT Brand ID

FROM Mobile Phones.

WHERE Mobile Phone Name = 'Realme'

);

EXPLANATION:-

- Inner Query: gets Realme's brand ID (say 101).
- Outer Query: finds all "Mobiles with brand ID=101"

OUTPUT

Realme

Redmi

2. Correlated Nested Queries:

Syntax:

SELECT column list

FROM table,

WHERE EXISTS (

SELECT

FROM table2

WHERE condition t1 column = t2 column,

);

Find Mobile phones who have purchase in at least one brand:

SELECT Mobile Name.

FROM Mobiles

WHERE EXISTS (

SELECT

FROM Purchases

WHERE Mobile brand ID = Purchases brand ID);

Output:-

Realme

Redmi

Vivo

Iqoo

| VEL TECH | |
|-------------------------|-----|
| EX NO. | 4 |
| PERFORMANCE (5) | 0 |
| RESULT AND ANALYSIS (5) | 0 |
| VIVA VOCE (5) | 5 |
| RECORD (5) | |
| TOTAL (20) | 15 |
| SIGN WITH DATE | 9/9 |

RESULT:- Thus the implementation of Independent and correlated nested query is executed successfully.