

29/09/25  
Task: 10

## 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, brands, realme)

2. Insert Sample data

3. Write and execute Independent nested queries

4. Write and execute Correlated nested queries

5. Observe and analyse in execution and results.

Syntax:

SELECT Column-list

FROM Table

WHERE Column OPERATOR (SELECT column,  
FROM Table WHERE condition);

i) Independent Nested Query:

Find mobile phones who belongs to  
the same a Brand as Realme

SELECT mobile Name

FROM Mobile phones

WHERE Phone ID = C

SELECT Phone ID

FROM mobile phones;

WHERE mobile phone name = 'Realme'  
);

Explanation:

- inner query : gets Realme phone ID(say 10)
- outer query : finds all "mobiles with brand output"  
 $ID = 10$

Realme

Redmi

## 2. correlated nested queries

Syntax:

~~SELECT column-list~~

~~FROM table t1~~

~~WHERE EXISTS (~~

~~SELECT~~

~~FROM table t2~~

~~WHERE condition t1.column = t2.column~~

~~);~~

Find mobile phones who have purchase  
in at least one brand.

~~SELECTS~~ mobile Name

~~FROM mobile's~~

~~WHERE EXISTS (~~

~~SELECT~~ 1

~~FROM purchases.~~

~~WHERE mobile phone ID = s. mobile~~

~~brand phone ID~~

~~);~~

Output:

Realme

Redmi

vivo

IQOO

VELTECH	
EX No.	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	✓
TOTAL (20)	✓
SIGN WITH DATE	✓

✓  
✓  
✓

VELTECH	
EX No.	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	5
VIVA VOCE (3)	5
RECORD (4)	✓
TOTAL (15)	✓
SIGN WITH DATE	✓

Result: Thus, the Implementation of SQL commands using Independent and Correlated Nested Queries is executed successfully.