

Task-4 Independent and Correlated Nested Queries

Aim: To implement and understand Nested Queries in SQL including independent and correlated subquery

Procedure:

- 1) Create required tables (e.g. mobile, phone, brand, realm)
- 2) Insert Sample data
- 3) Write and execute independent nested queries
- 4) Write and execute correlated nested queries
- 5) Observe and analyse its execution and result.

Syntax:

SELECT Column List

FROM table

WHERE column OPERATOR (SELECT, column
FROM table WHERE condition);

1) Independent Nested Query

Find Mobile phones who belong to the same Brand as

Realme

SELECT MobileName

FROM MobilePhone

WHERE BrandID =

SELECT BrandID FROM MobilePhone

WHERE MobilePhoneName = 'Realme'

);

Explanation:

* Inner Query: gets Realme's brand ID (say 101)

* Outer Query: finds all Mobiles with brand ID = 101

Output:

Realme

Realme

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 phone who have purchase in at least one brand

SELECT s : Mobile Name

FROM Mobiles

WHERE EXISTS (

SELECT ,

FROM purchases

WHERE Mobile.brand ID = s.Mobile.brand ID

);

Output :

Realme

Redmi

vivo

1900

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

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