

02/9/25 Task 4: Independent & correlated nested queries

Aim: To implement and understand nested queries in SQL, independent & correlated subqueries.

Procedure:

1. Create required tables
2. Insert sample data
3. Write & execute independent nested queries
4. Write and execute correlated nested queries
5. Observe & analyse 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:

Find Doctors who belong to the same department as Anil.

SELECT DoctorName

FROM Doctors

WHERE DepID = (SELECT DepID

FROM Doctors

WHERE DoctorName = 'Anil');

Output:

Vinod

Anil

2. Correlated Nested queries

Syntax:

SELECT column-list

FROM table1 t1

WHERE EXISTS (

SELECT 1

FROM Table 2 t2

WHERE Condition involving t1 column & t2 column;

Example:

Find Patients who have taking in at least one ^{some} medicine

SELECT Patient Name

FROM Patients

WHERE EXISTS (

SELECT doctor address

FROM ~~Medicine~~ doctor

WHERE ~~patient ID = s. Patient ID~~
 patient name = doctor name);

Output:

Vizag
Vijayamangla
Vizag

VEL TECH	
EX NO.	7
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	8
RECORD (5)	1
TOTAL (20)	15
SIGN WITH DATE	20/12

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