

Date: 14/12/25 Independent and correlated nested queries

Task: 4

Aim:- To implement and understand nested queries in SQL including independent and correlated subqueries.

Procedure:-

1. create schema: tables
2. Insert sample
3. Write and execute independent nested queries.
4. Write and execute correlated nested queries
5. observe and analysis the differences in execution and results.

Types of Nested queries:-

1. Independent (simple) nested queries.

Syntax:-  
SELECT column - list

FROM table.

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

Example :- Independent nested query

Pat Id	Pat Name	dept	bill amount
101	Alice	cardiology	5000
102	Bob	oncology	1500
103	Carol	cardiology	6000
104	David	orthopedic	8200

Query:-

```
SELECT "pat name"  
FROM Patients  
WHERE dept = c  
      SELECT dept  
      FROM Patients  
      WHERE "pat name" = 'ALICE'  
);
```

Alice

Carol

2. correlated nested queries

Syntax:-

```
SELECT column list  
FROM table 1 t1  
WHERE exists (  
  SELECT 1
```

```
FROM table 2 t2
```

WHERE condition involving f1-column = f2-column  
n);

Example 1:-2: correlated nested query

pat id	pat name	dept
101	Alice	cardiology
102	Bob	oncology
103	Carol	cardiology



bill id	pat id	bill amount
1	101	5000
		300
2	102	
3	103	6000

Query:-

SELECT P."pat name"

FROM patients P

WHERE EXISTS (

SELECT

FROM bills, b

WHERE b."pat id" = P."pat id"

);

Alice  
Carol

VEL TECH	
EX No	
PERFORMANCE (5)	4
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	4
RECORD (5)	4
TOTAL (20)	14
SIGN WITH DATE	<i>[Signature]</i>

8/09/23

Result:- Thus, the implementation and correlated nested queries on SQL are executed successfully.