Task - 4:- Independent and Grelated Nested Queries

Aim:- To Implement and understand Nested Queries in SQL Including independent and Correlated Subqueries

Procedure:-

1. Create required tables
2. Insert sample data
3. write and execute independent nested queries
4. write and executed Correlated nested queries
5 observe and analyse 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 1 :- Independent nested Query.

Pat id	Pat Name.	dept	billamount
101	Alice	Cardiology	5000
102	Bob	Oncology	7500
103	Carol	Cardiology	6000
104	David	Orthopedic	8500.

Query:-

SELECT "Pat Name"
FROM Patients
WHERE dept = (
        SELECT dept
        FROM Patients
        WHERE "Pat Name" = ('Alice'
);
Alice
Carol

2. Corelated Nested Queries

Syntax:-
    SELECT Column-list
FROM table 1+1
WHERE EXISTS (
        SELECT
        FROM tahb qt 2

);

Example 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
2	102	300
3	103	6000

Query :-

```
SELECT P" Pat name"
FROM Patients P
WHERE EXISTS (
    SELECT 1
    From bills b
    WHERE b 'Pat id'= P" pat id"
);
```

Alice
Carol

Result:- Thus, the implementation and Correlated nested Queries in SQL are executed Successfully