

Task-4 :- Independent and created Nested Queries

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

Procedure :-

- 1) Create required tables
- 2) Insert sample data
- 3) Write and execute independent nested queries.
- 4) Write and execute correlated nested queries.

Syntax :- select column list
from table

where column operator (select column from table
where condition).

~~Example :- 1 - Independent nested query
find students who belong to the same department~~

as slice.

select student_name
from students
where dept_id = C.

select dept_id
from students

where student_name = "Alice"

Explanation :-

* Running query: gets Alice dept ID



* outer query finds all students with $RD = \text{LWI}$

2. corrected Nested queries:

* The inner query is executed repeatedly.

once for each row of the outer query.

* Inner query depends on a value from the outer query.

Syntax :-

select column-list

from table []

where exists (

~~SELECT I~~

from fragmentments e
where e.student RD = s.student

);

Explanation :-

* for each student in the outer query, the inner query checks if that student exists in enrollment.

* If yes \rightarrow the student is returned.

Answer output :-

Alice

Bob

Charlie

David

Difference

feature

Independent Subquery

Correlated

Execution

inner query runs once

inner query
runs of each
row of outer
query

Dependency

Independent of outer query

Dependent on
outer queries

Performance

faster if inner query (small)

slower (due to
repeated)
execution.
checking ensem-
blments

Example

finding dept of Alice MAX

filtering rows by
row check

usage

salary, etc.

~~Q819~~ Hence, implementation and understand all nested

~~equations~~ in SQL including and correlated subqueries

successfully.

VEL TECH - CSE	
EX NO.	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	2
RECORD (5)	1
TOTAL (20)	12
WITH DATE	08/07/2023

