Date - 2/9/25

Task :- 4

Independent and corelated Nested Queries

Aim :- To implement and understand Nested Queries in SQL, including independent and correlated sub queries.

Procedure :-

1. Create required tables (eg mobile phones, brands realme).
2. Insert sample data.
3. write and execute independent nested queries.
4. write and execute correlated nested queries.
5. Observe and analyze in execution and result.

Syntax :-

SELECT colcumn - list

FROM table

WHERE colcumn OPERATOR (SELECT column

FROM table WHERE condition);

1) Independent Nested Query.

Find mobile phones who belong to the

same Brand Realme SELECT Mobile

Name

```sql
FROM mobile phones
WHERE Brand ID = c
    SELECT Brand ID
    FROM mobile phones;
    WHERE mobile phone Name = 'Realme'
);
```

Explanation :-

- Inner Query: gets Realme brand ID (say 101)
- Outer Query : finds all mobiles with brand ID = 101

, output

Realme

Redmi

2) Correlated Nested Queries

Syntax:-

```sql
SELECT Column _ List
FROM table1:
WHERE Exists (
    SELECT *
    FROM table R2.
    WHERE Condition    t1 column = t2 column
);
```

Find mobile phones who have purchase
in at least one brand.

```
SELECTs Mobile Name
FROM  Mobile's
WHERE  Exsits C
SELECT 1
FROM   Purchuner
WHERE Mobile brand ID = s Mobile brand ID
);
```

Output:

mobile_name
Real me
Redmi
Vivo
i200

Result:- Thus, the implementation of SQ commands using independent and correlated Nested Query is excuted sucessfully