

02/09/25

Task-4

Independent and correlated nested queries

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

procedure:-

1. create required table (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 results.

Syntax:-

SELECT column..list

FROM table.

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

1) Independent Nested query.

Find mobile phones who belong to the same brand as

Realme

SELECT mobile name

FROM mobile phones

WHERE Brand ID =

SELECT Brand ID

FROM mobile phones

WHERE mobile phone name = 'Realme'

);

Explanation:

- Inner query : gets Realme's brand ID (say 101)
- outer query : find all "mobiles with brand ID = 101"

output

Realme

Redmi

2. correlated nested queries

Syntax:

```
SELECT column-list
```

```
FROM table t1
```

```
WHERE EXISTS (
```

```
  SELECT
```

```
  FROM table t2
```

```
  WHERE condition t1.column = t2.column
```

```
);
```

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

```
SELECT s mobile name
```

```
FROM mobile's
```

```
WHERE EXISTS (
```

```
  SELECT 1
```

```
  FROM purchases
```

```
  WHERE mobile brand = purchases mobile brand
```

```
);
```

Output:

Realme

Redmi

Vivo

TECNO

VEL TECH	
EX NO.	A
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
DATE WITH DATE	9/9

Result: Thus the implementation and independent and correlated nested query is executed successfully.