

01-09-25

TASK - 4

Independent and Correlated Nested Queries:

Aim: To implement and understand Nested queries in SQL, including independent and correlated sub-queries, with practical example in

Procedure:

1. Create required table (e.g. Guest_name, Reservations --)
2. Insert sample data.
3. Write and execute independent nested queries.
4. Write and execute correlated nested queries.
5. observe and analyse the differences in execution and result.

Syntax:

SELECT Advaita FROM Name WHERE SSN = 'CUSTOMER02';

Output: Advaita

2) Correlated Nested Queries:

Syntax:

SELECT g.GuestName
FROM Guests g, WHERE EXISTS (SELECT 1 FROM Reservation r
WHERE r.GuestID = g.GuestID);

Output:

Guest name
Advaita
Allin
Shanvi

3) Independent Nested query:

Syntax: SELECT RoomNumber, Price FROM Rooms WHERE Price > (
SELECT Avg(Price) FROM Rooms);

Output :

Room Number	Price
103	\$ 1000

⇒ Correlated Nested Query:

Syntax:

```
SELECT n.ReservationID, n.TotalBill FROM Reservations  
WHERE n.TotalBill > (SELECT AVG(n2.TotalBill)  
FROM Reservations n2  
WHERE n2.GuestID = n.GuestID);
```

Output:

ReservationID	Total Bill
R2	5200
R4	\$ 500

VEL TECH	
EX No.	45
PERFORMANCE (5)	5
RESULT AND ANALYSIS (3)	5
VIVA VOCE (3)	5
RECORD (4)	5
TOTAL (15)	15
	6
	819

819

Output: Independent and correlated nested queries are executed successfully.