

Task 4: using functions in queries and writing sub queries

Aim: To perform the advanced query processing and test it using option materialized and nested sub queries such as finding summary statistics.

1. To retrieve the total number of 'tie' matches in a team-wise manner.
2. To retrieve the total number of matches.
3. To retrieve the team details who won the matches.
4. To retrieve Player and match details of Players who are above 25 years old.
5. To retrieve the details to team who have not played any matches.

4.1: To retrieve all team details including the count of winning matches for each team.

SQL > select t.TeamID, t.Name as Team Name, t.coach, t.captain, count as winning match count from Team
+ left join match m on t.team ID = subtr
Group by t.team ID, t.Name, t.coach, t.captain.

Output:

TeamID	Team Name	coach	captain	winning matches.
CCB01	ABS Express	Ranjith	Sampath	1
CCB02	AVG exp	Karthik	John	0
MCB01	Panther	Saravanan	Sunil	0
SCB01	Eagle	Somn	Srihari	0
TCB01	Angry Bird	Tom	John	2
TCB02	Tiger	Kanan	Ben	0
TCB01	King	Anand	Mathan	0
TB01	Rock	K. Paul	Muthu	0
TUCB01	Thunder	D. Alex	Barati	0
VCB01	Rainbow	Rajesh	Mani	0

4.2: To retrieve the total no. of 'Tie' matches in a team wise manner.

SQL > select t.Name AS Team Name, (count *) AS total Tie matches from team t join match_result mt on t.Team ID = mt.Team ID join match_result m on mt.match ID = m.match ID where m.result = Tie group by t.Name.

Team Name	Total Tie matches
Rock	1

4.3: To retrieve the team details who won the matches.

SQL > select t from team where Team ID in (select mr.Team ID from match_result mr left join team t on mr.team ID = t.team ID where mr.result = 'win');

Team ID	Board ID	Name	coach	captain
CCB01	BID01	ABS EXP	G. Ramesh	SamPath John
TCB01	BID02	Angry Rock	Tom K. Paul	K. Muthu

4.4: To retrieve players and match details of players who are above 25 years old.

SQL > select P-Player ID, P-F Name AS Player Name, P. Age, m-match ID, m match - Date, m-time t, m.result from Player P, match, m where P.player ID in (select player ID from Player where age > 25);

Player ID	Player Name	Age	match ID	Match Date	Time	result
1	ray	27	M01	22/jun	1:3	win
1	ray	27	M02	23/jun	8:3	win
1	raj	27	M03	24/jun	7:5	win
1	raj	27	M04	25/jun	8:5	win

Q5: To retrieve the details of team who have not played any match.

SQL > select * from team where team ID not in (select teamid from match union select played from match)

Team ID	Board ID	name	coach	captain
VCB01	BID03	Rainbow	S. Rajesh	Mani
MCB01	BID05	Panther	Saravanan	Sonil
TUCB01	BID06	Thunder	Alex	Sarathi
TICB01	BID08	Kings	Anand	Mahi

Q6: To retrieve the team ID, Board ID, team name, and player name for a particular player id given.

SQL > select t.teamid, t.boardid, t.name, p.fname, and playername for a particular player id given.

Team ID	Board ID	name	F Name
VCB01	BID03	Rainbow	Ganesh

VEL TECH - C	4
A NO.	5
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
TIVA VOCE (5)	5
RECORD (5)	20
TOTAL (20)	
SIGN WITH DATE	

Result:

Thus the query using joins and writing sub queries has been done successfully.