

18/2/24

## Task-4

Using functions in Queries and writing Sub queries.

Aim:

To Perform the advanced query processing and to get the results using designing of optimal corrected and nested Subqueries such as finding summary statistics.

1. To retrieve all team details, including the count of winning matches for each team.
2. To retrieve the total number of 'Tie' matches in a team-wise manner.
3. To retrieve the team details who won the matches.
4. To retrieve players and match details of players who are above 25 years old.
5. To retrieve the details of Team who have not played any matches.
6. To retrieve the teamid, boardid, teamname, and playername for a particular playerid given.

- 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(m.MatchID) AS Winning Match Count  
FROM Team t LEFT JOIN Match m ON t.TeamID =  
SUBSTR(m.Result, 1, 1) GROUP BY t.TeamID, t.Name,  
t.Coach, t.Captain;

Output:

TeamID	TeamName	Coach	Captain	winning match count
CCB01	ABS EXPRESS	G.D. RAJESH	SAMPATH KUMAR	1
CCB02	AVG EXPRESS	T. KANTHIC		
M C B01	PANTHER	SARAVANAN	V. TOHP	0
B C B01	EAGLE	SOMU	R. SUNILKUMAR	0
T C B01	ANGRY BARD	TOM BABU	SRI MARY	0
T C B02	TIGER ROCK	S. KANNAN	C S NEL JOHN	2
T C B03	KINGS	P ANAND	BEN GEORGE	0
T R I C B01	ROCK	K. PAUL	MATHAN	0
T U C B01	THUNDER	D ALEX	K. MUTHU	0
V C B01	RAINBOW	S. RAJESTHKUMAR	BARATHI	0
			MANI MARGAN	0

4.2 To retrieve the total number of 'Tie' matches in a team-wise manner.

SQL > SELECT t.Name AS TeamName, COUNT(\*) AS TotalTieMatches  
 FROM Team t JOIN MatchResult mr ON t.TeamID = mr.TeamID  
 JOIN Match m ON mr.MatchID = m.MatchID WHERE  
 m.Result = 'tie' GROUP BY t.Name;

TeamName	Total Tie Matches
ROCK	1.

4.3 To retrieve the team details who won the matches.

SQL > SELECT \* FROM Team WHERE TeamID IN (SELECT mr.TeamID FROM MatchResult mr LEFT JOIN Team t ON mr.TeamID = t.TeamID WHERE mr.Result = 'win');

TeamID	PlayerID	Name	Cench	Captain
TCB01	BS001	ABIS RAMESH	R.D.RAMESH	SANJAY KUMAR
TCB01	BG001	AMARIBAAPP	TM BABU	CANIL JOHN
TRIC01	BT001	PEPP	R.PAUL	K.MURKU

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

SQL > SELECT p.PlayerID, P.Fname AS PlayerName, P.Age, m.MatchID, m.MatchDate, m.Time, m.Result FROM Player, Match m WHERE P.PlayerID IN (SELECT PlayerID FROM Player WHERE Age > 25);

PlayerID	PlayerName	Age	MatchID	Match-Date	Time	Result
1	Raj	27	M01	22-JUN-2022	1.3	TCB01-Win
1	Raj	27	M02	22-JUN-2022	8.3	TCB01-Loss
1	Raj	27	M03	24-JUN-2022	8.3	TCB01-Win
1	Raj	27	M04	25-JUN-2022	8.3	TCB01-Win
1	Raj	27	M05	06-APR-2023	7-3	Tie

4.5 To retrieve the details of team who have not played any matches

SQL > Select \* from team where teamID not in (select teamID from match union select playerID from match);

TeamID	BoardID	Name	Coach	Captain
VCBO1	B5D003	Rainbow	S.Rajesh Kumar	Mani Maran
MCB01	B5D005	PANTHER	SARAVANAN	R.Sunil Kumar
TUCBO1	B5D006	THUNDER	D ALEX	BARATHI
TSIBO1	B5D008	Kings	D ANAND	MATHAN

Q.6 : To retrieve the teamid, boardid, teamname, and playername for a particular playerid given

SQL > SELECT t.teamid , t.boardid , t.name , p.fname FROM team t JOIN player p ON t.teamid = p.teamid WHERE p.playerid = '66';

~~TEAMID      Board ID      NAME      FNAME~~

~~VCBO1      B5D003      Rainbow      Ganesh~~

VEL TECH CSE	
EX NO.	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	15
SIGN WITH DATE	

Result:  
thus the query using joins and writing subqueries has been done successfully.