

25/11/25

Task 5: Writing Join Queries, equivalent, and/or recursive queries

Aim: To perform the advanced query Processing and test its heuristics using designing of optimal correlated and nested sub queries such as finding Summary statistics.

- 5.1: To retrieve all cricket boards and their teams.
- 5.2: To list all matches along with the teams and their captains.
- 5.3: To count the number of matches played by each team.
- 5.4: To find all the players who are part of the team named "TIGER ROCK".
- 5.5: To retrieve all team details, including the count of winning matches for each team.
- 5.6: To retrieve the total number of 'Tie' matches in a team-wise manner.
- 5.7: To retrieve player and match details of players who are above 25 years old.
- 5.8: To retrieve the details of Team who have not played any matches.
- 5.10: To retrieve the teamid, boardid, teamname, and playername for a particular Playerid given.

- 5.1: To retrieve all cricket boards and their teams.

SQL > SELECT cb.Name AS CricketBoard, t.Name AS Team
FROM CricketBoard cb JOIN Team t ON cb.BoardID
= t.BoardID.

Cricket Board	Name
Chennai Cricket Board	ABS EXPRESS
Chennai Cricket Board	AVG EXPRESS
Tiruvallur Cricket Board	ANGRY BARD
Tiruvallur Cricket Board	TIGER ROCK
Trichy Cricket Board	Rock
Villupuram Cricket Board	RAINBOW
Madurai Cricket Board	PANTHER
Tuticorin Cricket Board	THUNDER
Selam Cricket Board	EAGLE
Tiruppur Cricket Board	KINGS

5.2 List all matches along with the teams and their captains.

SQL> SELECT m.match_date, m.Time 1, m.matchID, t1.name AS team1-name, t1.captain AS team1-captain, t2.name AS team2-name, t2.captain AS captain FROM match m JOIN team t1 ON m.teamID = t1.teamID JOIN team t2 ON m.player2ID = t2.teamID.

Match-Date	Time 1	matchID	team1-name	team1-captain	team2-name	team2-captain
22-JUN-2022	1-3	M01	AVG EXPRESS	SAMPATH KUMAR	ANGRY BARD	CINIL JOHN
22-JUN-2022	8-3	M02	AVG EXPRESS	Y. JOHN	TIGER ROCK	BEN GEORGE
24-JUN-2022	8-3	M03	ROCK	K. MUTHU	ANGRY BARY	CINIL JOHN
25-JUN-2022	8-3	M04	Rock	K. MUTHU	TIGER ROLE	BEN GEORGE
4-APR-2023	T3	M05	EAGLE	SRI HARI	AVG Express	Y. JOHN

5.3: count the number of matches played each team.

SQL> SELECT t.name AS Team, COUNT(mt.TeamID) AS MatchesPlayed FROM Team t LEFT JOIN Match mt ON t.TeamID = mt.TeamID GROUP BY t.name;

Team	Matches Played
ABS EXPRESS	1
ANGRY BARD	0
ANG GYRESS	1
EAGLE	1
KINGS	0
PANTHER	0
RAINBOW	0
ROCK	2
THUNDER	0
TIGER Rock	0

5.4: To find all players who are part of team named "TIGER ROCK".

SQL> SELECT P.PlayerID, P.fname, P.lname, P.teamID, t.coach, t.captain FROM Player P JOIN team t ON P.teamID = t.teamID WHERE tname = 'TIGER ROCK';

PlayerID	Fname	TeamID	Coach	Captain
102	Akash	TCB02	S.KANNAN	BEN GEORG
12	Premkumar	TCB02	S.KANNAN	BEN GEORG

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

SQL> SELECT t.TeamID, t.Name AS TeamName, t.coach, t.captain, COUNT(m.MatchID) AS WinningMatchCount 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	Team name	Coach	Captain	wining count
CCB01	ABS EXPRESS	G.D.RAMESH	SAMPATH KUMAR	1
CCB02	AUG EXPRESS	T.KARTHIK	J. JOHN	0
MICB01	PANTHER	SARAVANAN	R.SUNIL KUMAR	0
SCB01	EAGLE	SOMU	SRI KARI	0
TCB01	ANGRY BARD	TOM BABU	CINSL JOHN	2
TCB02	TIGER ROCK	S. KANNIA	REN GEORGE	0
TICB01	KINGS	D ANAND	FATHAN	0
TRCB01	ROCK	F. PAUL	K.MUTHO	0
TUCB01	THUNDER	D.ALEX	BARATHI	0
UCB01	RAINBOW	S. RAJESH KUMAR	MANIMARAM	0

5.6: 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 Match_result mt ON t.TeamID = mt.TeamID
 JOIN Match_result m ON mt.MatchID = m.MatchID WHERE
 m.Result = 'Tie' GROUP BY t.Name;

TeamName	Total Tie matches
ROCK	1

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

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

TeamID	BoardSD	Name	Coach	Captain
CCB01	BSD01	ABS EXPRESS	G.D.RAMESH	SAMPATH KUMAR,
TCB01	BSD02	ANGRYBAARD	TOM BABU	CINEL JOHN
TCICB01	BSD04	ROCK	K.PAUL	K.MUTHU

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

SQL > SELECT P.PlayerID, P.FName AS PlayerName, P.Age, MatchID, M.MatchDate, M.Time1, M.Result FROM Player P, match M WHERE P.PlayerID IN (SELECT PlayerID FROM Player WHERE Age > 25);

Player ID	Player Name	Age	MatchID	Match Date	Time 1	Result
1	RAF	27	M01	22-JUN-22	1.3	TCB01-WIN
1	RAJ	27	M02	22-JUN-22	8.3	CCB01-WIN
1	RAJ	27	M03	24-JUN-22	8.3	TCB01-WIN
1	RAJ	27	M04	25-JUN-22	8.3	TCICB01-WIN
1	RAJ	27	M05	4-APR-2023	7.3	Tie

5.9 : To retrieve the details of Team who have not played any matches:

SQL > SELECT * FROM team WHERE teamID NOT IN (SELECT teammid FROM match UNION SELECT playerid FROM match);

TeamID	BoardID	Name	Coach	Captain
VCBO1	B1D03	RAINBOW	S.PRAJESHKUMAR	MANIMARAN
MCB01	B1D05	PANTHER	PANTHER	R.SUDHILKUMAR
TUCBO1	B1D06	THUNDER	DALEX	BARATHI
TICBO1	B1D08	KINGS	D.ANDRO	MARAPPAAN

5.10 : To retrieve the teamid, boardid, teamname, and playername, for a particular id given.

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

TeamID	Board ID	Name	FNAME
VCBO1	B1D03	RAINBOW	Ganesh

VEL TECH CSE	
EX NO	5
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	3
RECORD (5)	5
TOTAL (20)	18
SIGN WITH DATE	8

RESULT:

Thus the query using Join Queries equivalent, and/or recursive query has been done successfully.