

TASKS

Writing join queries, equivalent and/or recursive queries.

Aim: To perform the advanced query processing and test its heuristics using designing of optimal or related and nested subqueries such as finding summary statistics

S-1 To retrieve all cricket boards and their teams

S-2 To list all matches along with the teams and their captains

S-3 To count the number of matches played by each team.

S-4 To find all the players who are part of the team named "TIGER Rock"

S-5 To determine all team details, including the count of winning matches for team.

S-6 To retrieve the total number of 'tie' matches in a team-wise manner.

S-7 To retrieve the team details of players who are above 25 years old.

S-8 To retrieve players and match details of players who are above 25 years old.

S-9 To retrieve the details of team who have not played

S-10 To retrieve the team id, board id, team name, and player name for a

S-1 To retrieve all cricket boards and their teams.

SQ1? SELECT cb.name AS Cricket Board, t.name AS Team FROM cricketBoard cb JOIN team t ON cb.

Board ID = t. Board ID;

Cricket Board

Chennai Cricket Board

Chennai Cricket Board

Tiruvallur Cricket Board

Team

AB's Express

AVG Express

ANONY BOARD

Tiruvallur cricket Board
Trichy cricket Board

TIGER Rock

Rock

Viluppuram cricket Board

RAINBOW

Madurai cricket Board

PANTHER

Tuticorin cricket Board

THUNDER

SELAM cricket Board

GRASSHOPPER

Tiruppur cricket Board

BALF

S.2 List all matches along with the teams and their captains

SQL > SELECT m.Matchid, m.match_date, m.result, t1.teamid AS team1_id, t1.name AS team1_name, t1.captain, t2.teamid AS team2_id, t2.name AS team2_name, t2.captain AS team2_captain FROM match m JOIN team t1 ON m.teamid1 = t1.id JOIN team t2 ON m.teamid2 = t2.id ORDER BY m.matchid;

MATCHID	MATCH-DATE	RESULT	TEAMID	TEAM-NAME	TEAM2-ID	TEAM2-NAME	CAPTAIN	TC BOL
M01	22-JUN-22	TCB01-WIN	CCB01	ABS EXPRESS	TCB02	K. MUTHU	TC B01	
M02	22-JUN-22	CCB01-WIN	CCB02	AUG EXPRESS	TCB01	K. MUTHU	TC B01	
M03	24-JUN-22	TCB01-WIN	TCB01	ROCK	TCB02	K. MUTHU	TC B01	
M04	25-JUN-22	TRICB01-WIN	TRICB01	ROCK	TCB03	K. MUTHU	TC B01	
M05	28-JUN-22	TRICB01-WIN	TRICB01	ROCK	TCB04	K. MUTHU	TC B01	
			TEAM2-NAME	TEAM2-CAPTAIN				
			ANGRY BARD	CIVIL - SOTHI				
			TIGER Rock	REN GEORGE				
			ANGRY BARD	CIVIL - SOTHI				
			TIGER Rock	REN GEORGE				

S.3 count the number of matches played each team.

SQL > SELECT t.teamid, t.name AS team-name, COUNT(m.matchid) AS matches_played FROM team t JOIN match m ON t.teamid = m.teamid1 OR t.teamid = m.teamid2 GROUP BY t.teamid ORDER BY matches_played DESC

TEAMID	TEAM-NAME	MATCHES-PLAYED
TC B01	ROCK	4
TC B02	ROCK	3
TC B03	ROCK	2
TC B04	ROCK	1
CC B01	ANGRY BARD	1
CC B02	AUG EXPRESS	1
CC B03	AUG EXPRESS	1

SQL >

SQL > To find all the players who are part of the team named "TIGER Rock".

SQL > SELECT P.PlayerID, P.TeamID, T.coach, T.captain FROM Player P JOIN Team T ON P.TeamID = T.TeamID WHERE T.Name = 'TIGER Rock'.

PLAYERNAME TEAMID COACH CAPTAIN

102 Arash	TCB02	S. KANNAN	BEN GEORGE
12 premkumar	TCD02	S. KANNAN	BEN GEORGE

SQL > 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 TEAMNAME COACH

101	WINNINGMATCHCOUNT	
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TCB01	Rock	K. PAUL	MUTHU
TCB02	AUDI EXPRESS	T. RATHI	SAMPATH KUMAR
TCB03	EAGLE	S. MUTHU	SRI HARI
TCB04	PANTHER	SARAVANAN	R. SUNIL KUMAR
TUCB01	THUNDER	DALEX	BARATHI
TTCB01	ANONY BAP	VOMA BABU	SUNIL JOHN
TVCB01	RAINBOW	S. RAJESH KUMAR	MANINIAKAN
TTCB02	TIGER Rock	S. KANNAN	BEN GEORGE
TCCB01	ABS EXPRESS	R. D. RAMESH	SAMPATH KUMAR
TFCB01	GOALS	O AYAND	MATHAN

10 rows selected.

SQL > To retrieve the total number of 'TIP' matches, again in a team-wise manner.

SQL > SELECT T.TeamID, T.Name AS TeamName, COUNT(M.MatchID) AS TipMatches FROM Team T JOIN Match M ON T.TeamID = M.TeamID WHERE TeamID = (SELECT TeamID FROM Team WHERE Name = 'TIGER Rock') GROUP BY TeamID ORDER BY TipMatches DESC;

TEAMID TEAM NAME TIE-MATCHES

TC002 TIMEPORT

TRICB01 Rock

Q.7 To retrieve the team details who won the matches.

SOL> SELECT DISTINCT t.teamid, t.boardmid, t.name
AS team-name, t.coach, t.captain FROM team t JOIN
MATCH M ON (INSTR(m.result, m.teamid1) > 0 AND
t.teamid = m.teamid1) OR (INSTR(m.result, m.teamid2)
0 AND t.teamid = m.teamid2);

<u>TEAMID</u>	<u>BOARDID</u>	<u>TEAM-NAME</u>	<u>COACH</u>	<u>CAPTAIN</u>
TC B01	BD002	ABGRY CARD	TOMBADU	CINDRO HAI
TRICB01	BD004	Rock	K. PUUL	K. MUTHU

Q.8 To retrieve players and match details of players
who are above 25 years old.

SOL> SELECT p.playerid, p.name, p.name, p.age,
p.playingrole, t.teamid

* from match;

<u>TEAMID</u>	<u>BOARDID</u>	<u>TEAM-NAME</u>	<u>COACH</u>	<u>CAPTAIN</u>
TC B01	BD003	RAINBOW	S. RAJESW	MANISNARAN
MC B01	BD005	PARTNER	SARAVANAN	SUNILKUMAR
TUCB01	BD006	THUNDER	DALIA	BARATHI
SC B01	BD007	EAGLE	SUNIL	SPREHARE
TRICB01	BD008	FINGERS	MANIKUDI	MATHAN

<u>PLAYER NAME</u>	<u>NAME</u>	<u>AGE</u>	<u>PLAY-ROLE</u>	<u>TEAMID</u>	<u>TEAM-NAME</u>
1. Ray	N	29	Bowler	TC B01	TIMEPORT

Q.9 To retrieve & retrieve the details of team who
have not played any matches.

SOL> SELECT t.teamid, t.boardmid, t.name, AS team-
name, t.coach, t.captain FROM team t WHERE
t.teamid NOT IN (SELECT teamid1 FROM match
UNION SELECT teamid2 FROM match)

5.10 to retrieve the teamid, boardid, team name, and
 playername for a particular playerid given
~~SQL SELECT t.teamid, t.boardid, t.name,~~
~~FROM team t JOIN playertable p ON t.teamid = p.~~
~~teamid WHERE p.playerid = 166;~~

VEL TECH USE	
EX NO.	902
PERFORMANCE (1)	100
RESULT AND ANALYSIS (3)	100
VIVA VOCE (1)	100
RECOMMENDATION (4)	100
TOTAL (15) DV	100
SIGN WITH DATE	100

~~Result: thus the query join queries, equivalent, and/or recursive queries has been done successfully.~~