**Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology**

 **(Deemed to be University Estd. u/s 3 of UGC Act, 1956)**

**School of Computing**

**B.Tech. – Computer Science and Engineering**

**VTR UGE2021- (CBCS)**

Academic Year: 2025–2026

SUMMER SEMESTER - SS2526

Course Code : 10211CS207

Course Name : Database Management Systems

Slot No : S1L4

DBMS TASK - 4 REPORT

Title: Using Functions in Queries and Writing Sub Queries

Submitted by:

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**TASK 4**

**Using Functions in Queries and Writing Sub 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.

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.
   1. 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,(SELECT COUNT(m.MatchID)FROM Match m WHERE t.TeamID = SUBSTR(m.result, 1, 5)) AS WinningMatchCount FROM Team t;

**Output:**

**TEAMID TEAMNAME COACH CAPTAIN WINNINGMATCHCOUNT**

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**TRICB01 ROCK K.PAUL K.MUTHU 0**

**CCB02 AVG EXPRESS T.KARTHIK Y.JOHN 0**

**SCB01 EAGLE SOMU SRI HARI 0**

**MCB01 PANTHER SARAVANAN R.SUNILKUMAR 0**

**TUCB01 THUNDER D ALEX BARATHI 0**

**TCB01 ANGRY BARD TOM BABU CINIL JOHN 2**

**VCB01 RAINBOW S.RAJESHKUMAR MANIMARAN 0**

**TCB02 TIGER ROCK S.KANNAN BEN GEORGE 0**

**CCB01 ABS EXPRESS G.D.RAMESH SAMPATH KUMAR 1**

**TICB01 KINGS D ANAND MATHAN 0**

**10 rows selected.**

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

SQL> SELECT t.TeamID, t.Name AS TeamName,(SELECT COUNT(m.MatchID) FROM Match m WHERE(t.TeamID = m.TeamID1 OR t.TeamID = m.TeamID2) AND INSTR(m.Result, 'Tie') > 0) AS TieCount FROM Team t group by t.teamid, t.name;

TEAMID TEAMNAME TIECOUNT

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TUCB01 THUNDER 0

TRICB01 ROCK 1

VCB01 RAINBOW 0

CCB02 AVG EXPRESS 0

MCB01 PANTHER 0

CCB01 ABS EXPRESS 0

TCB01 ANGRY BARD 0

TCB02 TIGER ROCK 1

SCB01 EAGLE 0

TICB01 KINGS 0

10 rows selected.

* 1. To retrieve the team details who won the matches.

SQL> SELECT \* FROM team t WHERE t.teamid IN (SELECT teamid1 FROM match WHERE INSTR(result, teamid1) > 0 UNION SELECT teamid2 FROM match WHERE INSTR(result, teamid2) >)

TEAMID BOARDID NAME COACH CAPTAIN

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TCB01 BID02 ANGRY BARD TOM BABU CINIL JOHN

TRICB01 BID04 ROCK K.PAUL K.MUTHU

2 rows selected.

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

SQL> SELECT p.playerID,p.FName,p.LName,p.age,m.matchid,m.match\_Date, m.Time1,m.result FROM player p, match m WHERE p.age > 25 AND (p.teamid = m.teamid1 OR p.teamid = m.teamid2);

PLAYER PLAYERNAME AGE MATCHID MATCH\_DAT TIME1 RESULT

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* 1. To retrieve the details of Team who have not played any matches.

SQL> SELECT t.TeamID, t.Name AS TeamName, t.Coach, t.Captain FROM Team t WHERE t.TeamID NOT IN (SELECT TeamID1 FROM Match UNION SELECT TeamID2 FROM Match);

TEAMID TEAMNAME COACH CAPTAIN

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VCB01 RAINBOW S.RAJESHKUMAR MANIMARAN

MCB01 PANTHER SARAVANAN R.SUNILKUMAR

TUCB01 THUNDER D ALEX BARATHI

SCB01 EAGLE SOMU SRI HARI

TICB01 KINGS D ANAND MATHAN

* 1. 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 BOARDID NAME FNAME

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VCB01 BID03 RAINBOW Ganesh

**Result:**

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