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 statics

1. To retrieve the total number of 'Tie' matches in a team-wise manner.
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 playersname 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, (SELECT COUNT(M.MatchID) From match m WHERE t.teamID = SUBSTR(m.result, 1, 5)) AS winning_Match_count From team t;

output:

TEAMID	TEAMNAME	COACH		WINNINGMATCACOUNT
TRICB01	Rock	K.PAUL	K.MUTHU	0
CCB02	AVG express	T.KARTHIK	V.JOHN	0
SCB01	EAGLE	SOMU	SRI HARI	0
MACB01	PANTHER	SARAVANAN	R.SUNIL KUMAR	0
TUCB01	THUNDER	DALEX	BARATHI	6
TCB01	ANGRY BIRD	TOM BABY	CINIL JOHN	2
VCB01	RAIN BOW	S.RAJESHKUMAR	MANIMARAN	0
TCB02	TIGER Rock	S. KANNAN	BEN GEORGE	0
CCB01	ABS EXPRESS	G.D.RAMESH	SAMINATH KUMAR	1
TICB01	KING	D ANAND	MATHAN	0

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 Tie count FROM Team t group by t.teamid, t.Name;

TEAMID	TEAMNAME	TIECOUNT
TUCBO1	THUNDER	0
TRICBO1	Rock	0
VC BO1	RAINBOW	
CC BO2	AVG EXPRESS	0
MACBO1	PANTHER ABS express	0
CC BO1	ANGRY BARD	0
TC BO1		0
TC BO2	TIGER ROCK	1
SC BO1	EAGLE	0
TIC BO1	KINGS	0

10 rows selected.

4.3 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, teamid1) > 0 UNION SELECT teamid2 FROM match WHERE INSTR(Result, teamid2) >);

TEAMID	BOARDID	NAME	COACH	CAPTAIN
TC BO1	BID02	ANGRY BARD	TONI BABU	CINI JOHN
TRICBO1	BID04	Rock	K. PAUL	K. MUTHU

2 Rows selected

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

SQL> SELECT p.playerID, p.PlayerName, p.Name, p.age, m.matchid, m.Match_Date, m.teamid1 OR p.teamid = m.teamid2);

PLAYER	PLAYERNAME	AGE	MATCHID	MATCH_DAT	TIME	Result
	Raj	27	M01	22-JUN-22	1:3	TCB01-WIN

1:

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

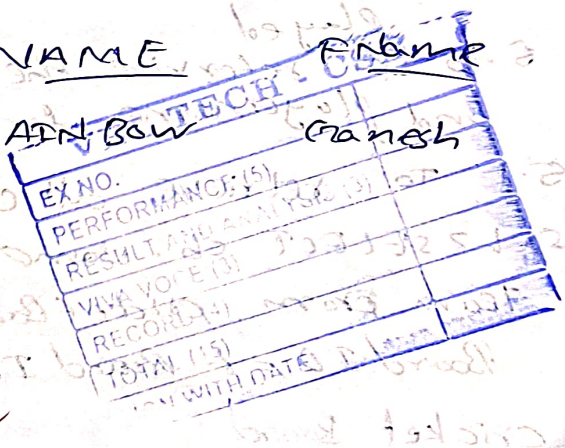
SQL > SELECT t.teamID, t.Name AS TeamName, t.coach, t.captain FROM t WHERE t.TEAM ID NOT IN (SELECT TEAMID1 FROM match UNION SELECT teamID2 FROM match);

TEAMID	TEAMNAME	COACH	CAPTAIN
VCB01	RAINBOW	S.RAJESH KUMAR	ANANTHARAN
MCB01	PANTHER	SARAVANAN	R. SUNIL KUMAR
TUCB01	THUNDER	D ALEX	BARATHI
SCB01	EAGLE	SOMU	SRI HARI
TIEB01	KINGS	D ANAND	MATHAN

4.6 To retrieve the teamid, boardid, teamname, and player name for a particular playerid given.

SQL > SELECT t.teamid, t.boardid, t.name, p.fname FROM team t JOIN player p ON

TEAMID	BOARID	NAME	Fname
VCB01	BID03	RAINBOW	Ganesh



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