Task 4

Using Functions in Queries and writing subqueries:

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

1. To retrieve all details, including the count of winning matches for each team.
2. To retrieve the total number of 'Tie' matches in team-wise number
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, board id, team name, and player name for particular player id given.

4.1 To retrieve all team details, including count of winning matches for each team.

output:

TEAM ID	TEAM NAME	coach	captain	winning match count
TR1CB01	ROCK	K.paul	K.Muthu	0
CTCB02	Avg Express	T-karthik	y.John	0
SCB01	Eagle	Somu	SRIHARI	0
MCB01	panther	Saivanan	R.sunil kumar	0
TVB01	Thunder	D.ALEX	BARATH	0
TLB01	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	sampathkumar	1
TICB01	KINGS	P.ANAND	MATHAN	0

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

SQL>select t. Team ID, AS Team Name, count (n match ID) AS TieCount FROM Team t John match m on (t. Team ID = m. TeamDI OR t. Team ID = m. TeamID or t. Team ID = m. Team ID 2) AND INSTR (m. Result, 'TIE') >0

GROUP BY t. Team ID, t. Name'.

TEAM ID	TEAM NAME	TIE COUNT
TRICB01	ROCK	1
TCB02	TIGER ROCK	1.

4.3 TO retrieve the team details who won the matches

SQL > select * from team where team ID in (select t. team ID from team t left join match m on (t. Team ID = m. Team ID 1 OR t. Team ID = m. Team ID 2) AND INSTR (m. Result, 'WIN') >0)

Team ID	BOARD ID	NAME	COACH	CAPTAIN
CCB01	BID01	ABS Express	G.D RAMESH	SAMPATH kumar
CCB02	BID01	Avg Express	T. Karthik	Y. John
TCB01	BID02	Angry BARP	TOM BABU	CINIL JOHN
TCB02	BID02	Tiger Rock	S. KANNAN	BEN GEORGE
TRICB0P	BID04	Rock	K. Paul	K. Muthu
VCB01	BID03	Rainbow	S. Rajeshkumar	Manimaran
MCB01	BID05	Panther	saravanan	R. Sunil kumar
TUCB01	BID06	Thund-	D. ALEx	BARATHI
SLB01	BID07	Eagle	SOUMU	SRIHARI
TLCB01	BID08	Kings	D. ANAND	MATHAN

10 rows selected

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

SQL> select P.player ID, P.F Name As player name, P.Age, m.Match ID, m.match_Date, m.Time 1, m.Result FROM player P, match m where P.player ID in (select player ID = m team id 2).

PLAYER	PLAYERNAME	AGE	MATCHID	MATCH DAT	TIME	RGI
1.	RAJ	27	MOI	22-Jun-22	1.3	TCBOI-M

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

SQL> selelct t.team ID, t.Name As team name, t.coach, t.catptai From team t where t.team ID not in (select Team ID1 From match union select team ID2 From Match);

Team ID	Team Name	coach	captain
VCBOI	Rainbow	S. Rajeshkumar	mani maran
MCBOI	Panther	sarevanan	R. Sunilkumar
TUCBOI	Thunder	D Alex	BARATHI
SCBOI	EAGLE	SOMO	SRI HARI
TICBOI	KINGS	D ANAND	MARIHAN

4.6. To retrieve the team id, board id, team name, and player name for particular player id gin.

SQL> select t.team id, t.board id, t.name, p.fname from team t join player p on t.team id = p.team id where p.player id = '66';

Team ID	BOARD ID	Name	F Nam
VCBOI	BID03	RAINBOW	Ganesh

Result: Thus, the query has been done successfully using Joins and writing subqueries