Task-5:- Writing join Queries, equivalent and (a 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.

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 the players who are part of the team named "Tiger vock!

S.5:- To retrieve all team details, Including the count of winning matches for each team.

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

S.7:- To retrieve the team details who was the maths

S.8:- To retrieve of details of team who have not played any matches

S.9:- To retrieve players and match details of players who are above 25 years old..

S.10:- To retrieve the teamid, board, team name and player name for a particular player ID given

*S.11:- To retrieve all cricket Boards and their teams

SOL -> Select Cb. name AS. Cricket Board, t. Name AS Team from Cricket Board Join team t on Cb. Board IDs t. Board ID;

Cricket Board	Team	Cricket Board	Team
Chennai cricket Board	ABS Express	Villuppuram cricket Board	Rah Dev
Chennai Cricket Board	AVG Express	madurai cricket Board	Panther
Tirunallur Cricket Bard	Angry BARD	tuticorin cricket Board	Thunder
Thirunallur Cricket Bord	Tiger Rock	Selam Cricket Board	EAgle
Trichy Cricket Bay	Rock	Tiruppur cricket Board	Kings

★ S2:-

List all matches along with the teams & their captains

SQL> select m.match_Date, m.Time1, m.match ID, t1. name As team 1-name, b1.captain As team1 captain, t2.name As team ID = b1. teamID Join team b2 on m.player ID = b2.. team ID;

match-Date	Time1	match ID	Team 1 name	Team1 captain	Team 2-nac	Team-captain
22-6-22	1-3	M01	ABS Express	Surpath. kumar	Angry BARD	CIVIL JOHAN
22-6-22	9-3	M02	AVG Express	Y. JOHN	Tiger rock	BEN geoge
24-6-22	8-3	M03	Rock	k. muthu	Angry BARD	CiVIL JOHN
25-6-22	8-3	M04	Rock	k. muthu	Tiger Rock	BEN George
4-4-23	7-3	M05	EAgle	Sri Hari	AVG Express	Y-JOHN

★ S.2 :- Count the number of matches played each team.

SQL> select t.name As Team. count (m.Team (L) As matches Played From team t. LEFT Join match m on b Team ID = m.t, Team ID By t.name;

Team	matches Played
ABS Express	1
Angry BAND	0
Avg Express	1
EAgle	1
kings	0

Team	matches played
Panther	0
RAINBOW	0
Rock	2
Thunder	0
Tiger Rock	0

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

SQL> select p.player ID, p.fname, p.tem ID, t.coach, t.captain from player p.Join team t ON p.tem ID = t.team " where t.name = "Tiger Rock";

Player ID	F Name	Team ID	Coach	Captain
62	Akash	TCB02	S. KANNAN	BEN GEORGE
12	Phemkena	TCB02	S. KANNAN	DEN Greoge

S.5: - To Retrive all team details, Including the count of winning matches, for each other team.

SQL> result t.Team ID, t.name AS Team Name, t.coach, t.captain, count (m. match ID) As winning match count. from t.left join match m on t.team ID = substr (m. result , (/s) Group By t. Team ID, t.name, t. Coach, t. Captain;

Team ID	Team name	Coach	Captain	winning match count
CCB01	ABS Express	G.D. varesh	Saupath Kumar	1
CCB02	Avg Express	T. kartik	y. JOHN	0
reB01	panther	SARANANA	R suril Kumar	0
ScB01	EAgle	Soru	Sri Hari	0
TC B01	Angy BAND	TOMBABO	Cinil JOHN	2
TCB02	Tiger Rock	S. kANNAN	Ben gauge	0

Tr Bol	kings	D. ANAND	NATHAN	O
TnCBol	lock	K.PAul	k. muthu	O
ThcBol	Thunder	D. Alex	BAvathi	O
VcBol	Rainbow	s. vajshkina	mani maran	O

* S.6 :- TO retrive the total number of 'Tie' matches in a team wise manner

Sol> SELECT t.Name As Team Name, COUNT (*) As Total Tie matches FROM Teamb

Join match -result mb ON t.Team ID= mb.Team ID Join match -result m ON mb. match ID = m. Match RD where m. result =Tic Group By t.Name;

Team Name	Total Tie matebs
Rocle	1

* S.7 :- TO retrive, the team details., who won the matches

SOL> select * from team where Team ID in (select mv.Team Io from match -result m leftJoin team t On m. team.t. team Id=b. team ID where m. result = (win());

Team ID	BoardID	Name	Coach	Captain
CcBol	BIDOl	ABS Express	G.O. Vanesh	SAmpath Kuma
TcBol	Bloo2	Ajay BARD	Tom BABU	Emil JOHN
TRcBol	Bloo4	Rocle	k. APul	k. Muthu

* S.8 :- TO retrieve player's and match Details of players who are above 25 years old.

SQL> select p.players ID P.F.Name As players name, P.Age, m. match _Date, m. Time, m. result from players p, match m where p.player ID in (select ID from player where age>25);

Player ID	Player Name	Age	mabc ID	match - Date	Time	result
1	Raj	27	M01	22 - Jun-2022	1.3	TCB01-Win
1	Raj	27	M02	22 - jun -2022	8.3	CCB01 -win
1	Raj	27	M03	24 - jun - 2022	1.3	1 oR
1	Raj	27	M04	25 - jun - 2022	8.3	oT
	Raj	27	M05	4 - APR - 2023	7.3	

★ S.9 :- To retrieve the details of Team who have not played any matches.

SQL > select from team where team ID not in (select team ID from match union select played from match);

Team ID	Board ID	Name	Coach	Captain
VCB01	B1D03	RainBow	S. vajeshkuma	maithaNAN
MCB01	B1D05	Panther	SARAVANAN	n.sunilkumar
TCB01	D1D06	Thundor	D. ALEX	BARATHI
TICB01	B1D08	kings	D.ANAND	me.HAM

★ S.10 SQL> Seleel t. Teamid, t. Board ID, t. name, P. tname from team t join player P. team id = P. teamid where p.played = '6';

Team ID	Board ID	Name	
VCB01	B1003	RainBow	Ganesh