

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 the total number of 'Tie' matches in a team-wise manner.
 2. To retrieve the total number of 'tie' matches in 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 teamName, t-coach
 1. t-captain, (SELECT COUNT(m.MatchID) FROM match
 m WHERE t-teamID = SUBSTR(m.result, 1, 5)) AS
 winningMatchCount FROM teamDetails

TEAMID	TEAMNAME	COACH	CAPTAIN
WINNINGMATCHCOUNT			
TRICB01	Rock	K. PAUL	K. MUTHU
CCB02	AVG express	T. KARTHIK	V. JOHN
SCB01	EAGLE	SOMU	SRI HARI
NACB01	PANTHER	SARAVANAN	R. SUNIL KUMAR
TUCB01	THUNDER	D ALEX	BARATHI
TCB01	ANGRY BABY	TOM BABY	CINEL JOHN
VCB01	RAIN BOW	S RAJESH KUMAR	MANIMARATHI
TCB02	TIGER Rock	S. KANNAN	BEN GEOREE
CCB01	ABS EXPRESS	G. O. RAMESHT	SAMINITH KUMAR
TICB01	KING	D ANAND	MATTHAM

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

SQl : SELECT t.teamID, t.Name AS Team Name (SELECT COUNT(m.MatchID) FROM Match m WHERE t.teamID = m.teamID AND t.teamID = m.teamID)
AND INSTR(m.Result, 'tie') > 0) AS TieCount

Tie count from team t grouped by t.teamID, t.name,

<u>TEAMID</u>	<u>TEAMNAME</u>	<u>TIECOUNT</u>
TUGB01	THUNDER	0
TRICB01	Rock	0
VCB01	RAINBOW	0
CCB02	AVG EXPRESS	0
MCB01	PANTHER	0
CCB01	ABS EXPRESS	0
TCB01	ANGRY DARD	0
TCB01	TIGER Rock	0
TCB02	EAGLE	1
SCB01	KING	0
TICB01	KING (2)	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, teamID2) > 0 UNION SELECT teamID2 FROM Match WHERE INSTR(Result, teamID2, teamID1) > 0)

<u>TEAMID</u>	<u>BOARDID</u>	<u>NAME</u>	<u>COACH</u>	<u>CAPTAINT</u>
TCB01	BID02	ANGRY DARD		
TRICB01	BBF04	Rock	K-PAUL	K-MUTTU
2 Rows selected				

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

SQl : SELECT p.PlayerID, p.FName, p.LName, p.LName, p.Age, m.matchID, m.matchDate, m1.teamID1 OR p.teamID = m1.teamID2;

<u>PLAYER NAME</u>	<u>ABF</u>	<u>MATCH ID</u>	<u>MATCH DATE</u>	<u>TIME</u>	<u>RESULT</u>
Raj	27	MOI	22-JUN-22	13	TEAM1-WIN

Q.5. To retrieve the details of team who have not played any matches.

SQL: SELECT t.teamID, t.name AS teamName, t.coach, f.captain FROM t WHERE t.teamID NOT IN (SELECT teamID FROM match UNION SELECT teamID FROM match);

<u>TEAMID</u>	<u>TEAMNAME</u>	<u>COACH</u>	<u>CAPTAIN</u>
VCB01	RAINBOW	S. RAJESH KUMAR	MANI MARIAN
NACB01	PANTHER	SARAVANAN	R. SUNIL KUMAR
TUCB01	THUNDER	D ALEX	BARATH RINI
SLCB01	EAGLE	S. RAMESH	SREE HARI
TIEB01	KINGS	D ANAND	MATITAN

Q.6 To retrieve the teamid, board id, teamname, and player name for a particular player id given.

SQL: SELECT t.teamID, t.boardID, t.name, p.name
FROM team t JOIN player p ON t.id = p.teamID

<u>TEAMID</u>	<u>BOARDID</u>	<u>NAME</u>	<u>NAME</u>
VCB01	B1003	RAINBOW TECH	Ganesh

EX NO.	PERFORMANCE	RESULTS	DATE
1	100	100	2022-06-22
2	100	100	2022-06-22
3	100	100	2022-06-22
4	100	100	2022-06-22
5	100	100	2022-06-22
6	100	100	2022-06-22
7	100	100	2022-06-22
8	100	100	2022-06-22
9	100	100	2022-06-22
10	100	100	2022-06-22
11	100	100	2022-06-22
12	100	100	2022-06-22
13	100	100	2022-06-22
14	100	100	2022-06-22
15	100	100	2022-06-22
16	100	100	2022-06-22
17	100	100	2022-06-22
18	100	100	2022-06-22
19	100	100	2022-06-22
20	100	100	2022-06-22
21	100	100	2022-06-22
22	100	100	2022-06-22
23	100	100	2022-06-22
24	100	100	2022-06-22
25	100	100	2022-06-22
26	100	100	2022-06-22
27	100	100	2022-06-22
28	100	100	2022-06-22
29	100	100	2022-06-22
30	100	100	2022-06-22
31	100	100	2022-06-22
32	100	100	2022-06-22
33	100	100	2022-06-22
34	100	100	2022-06-22
35	100	100	2022-06-22
36	100	100	2022-06-22
37	100	100	2022-06-22
38	100	100	2022-06-22
39	100	100	2022-06-22
40	100	100	2022-06-22
41	100	100	2022-06-22
42	100	100	2022-06-22
43	100	100	2022-06-22
44	100	100	2022-06-22
45	100	100	2022-06-22
46	100	100	2022-06-22
47	100	100	2022-06-22
48	100	100	2022-06-22
49	100	100	2022-06-22
50	100	100	2022-06-22
51	100	100	2022-06-22
52	100	100	2022-06-22
53	100	100	2022-06-22
54	100	100	2022-06-22
55	100	100	2022-06-22
56	100	100	2022-06-22
57	100	100	2022-06-22
58	100	100	2022-06-22
59	100	100	2022-06-22
60	100	100	2022-06-22
61	100	100	2022-06-22
62	100	100	2022-06-22
63	100	100	2022-06-22
64	100	100	2022-06-22
65	100	100	2022-06-22
66	100	100	2022-06-22
67	100	100	2022-06-22
68	100	100	2022-06-22
69	100	100	2022-06-22
70	100	100	2022-06-22
71	100	100	2022-06-22
72	100	100	2022-06-22
73	100	100	2022-06-22
74	100	100	2022-06-22
75	100	100	2022-06-22
76	100	100	2022-06-22
77	100	100	2022-06-22
78	100	100	2022-06-22
79	100	100	2022-06-22
80	100	100	2022-06-22
81	100	100	2022-06-22
82	100	100	2022-06-22
83	100	100	2022-06-22
84	100	100	2022-06-22
85	100	100	2022-06-22
86	100	100	2022-06-22
87	100	100	2022-06-22
88	100	100	2022-06-22
89	100	100	2022-06-22
90	100	100	2022-06-22
91	100	100	2022-06-22
92	100	100	2022-06-22
93	100	100	2022-06-22
94	100	100	2022-06-22
95	100	100	2022-06-22
96	100	100	2022-06-22
97	100	100	2022-06-22
98	100	100	2022-06-22
99	100	100	2022-06-22
100	100	100	2022-06-22

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