

CPSC 304 Project Cover Page

Milestone #: 4 _____

Date: 2022/4/6 _____

Group Number: 73 _____

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Repo Link: https://github.students.cs.ubc.ca/CPSC304-2022W-T2/project_b4h1q_v5a3b_y1g7t

Description:

Our final project uses PHP, sqlplus based on Oracle. There are five components: the cover page, head page, player page, team page, and staff page. There are many functionalities our database can do including inserting, deleting, and updating players. Also, count how many players and show all the player's details. In addition, it also shows the teams which have players from two countries the users inputted (division).

In the teams page, you can view all or some selected columns of all teams in the database. I can also filter teams based on standings, age, and points. Another function is to calculate the total salary of each team (which implemented nested aggregation).

On the staff page, you can show the number of staff grouped by country, show the names of all staff and also join the staff and team table to show it as one table.

Schema Difference:

We changed the relationship between sponsor, player, team to only between sponsor and team. Same as the relation supports.

And we move the salary for ISA to the parent entity.

3. A PDF file containing:

- a. A short description of the final project, and what it accomplished.
- b. A description of how your final schema differed from the schema you turned in. i. If the final schema differed, explain why. Note that turning in a final schema that's different from what you planned is fine, we just want to know what changed and why.

- c. A copy of the schema and screenshots that show what data is present in each relation after the SQL script from item #2 is run.

On the bottom

- d. A list of all SQL queries used and where they can be found in the code (i.e., file name and line number(s)). For SQL query requirements, check the rubric listed on Canvas for Milestone 4.

- e. Screenshots demonstrating the functionality of each query using the GUI. We want to see a before/during/after progression of events. For example, the before screenshot would be what data is in the table before you run the query, the during screenshot(s) is how the query is triggered using the GUI, and the after screenshot is what data is in your table afterwards. Please label each set of screenshots with the name of the query it is meant to address (e.g., “Insert Operation”).
- i. You need only to include screenshots for the required queries – if you implemented more than what was required, screenshots are not needed for those extra queries.

INSERT:

```
function handleInsertRequest() {  
    global $db_conn, $success;  
    $id = $_POST['id'];  
    $name = $_POST['name'];  
    $goals = $_POST['goals'];  
    $age = $_POST['age'];  
    $country = $_POST['country'];  
    $teamName = $_POST['teamName'];  
    $gamePlayed = $_POST['gamePlayed'];  
    $salary = $_POST['salary'];  
  
    executePlainSQL("INSERT INTO Player_Salary VALUES ($gamePlayed, $goals, $age, $salary)");  
    executePlainSQL("INSERT INTO Player_Info VALUES ($id, '$name', $goals, $age, '$country', $gamePlayed, '$teamName')");  
    OCICommit($db_conn);  
    echo "Player '$name' added Successfully<br>";  
}
```

Insert Players into Team

ID:

Name:

Goals:

Age:

Country:

Team_Name:

Game_Played:

Salary:

Player 'abc' added Successfully

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PID	Name	Goals	Age	Country	Game Played	Team Name
12345	Leo Messi	1000	35	Argentina	100	Paris Saint-Germain
23456	Cristiano Ronaldo	800	36	Portugal	90	Manchester United
34567	Neymar Jr.	700	29	Brazil	80	Paris Saint-Germain
45678	Kylian Mbappe	600	23	France	95	Paris Saint-Germain
56789	Mohamed Salah	500	29	Egypt	90	Liverpool
11111	Marcos Rojo	400	20	Argentina	100	Manchester United
22222	Franco Cervi	300	20	Argentina	30	Real Madrid
33333	Paulo Dybala	80	28	Argentina	235	Juventus
44444	Roberto Firmino	57	30	Brazil	231	Liverpool
55555	Casemiro	29	29	Brazil	87	Real Madrid
66666	Erling Haaland	47	21	Norway	68	Borussia Dortmund
77777	N Golo Kante	10	30	France	36	Chelsea
88888	Pierre-Emerick	10	32	Gabon	28	Arsenal
99999	Jonathan David	12	22	Canada	28	Lille
98765	Zlatan Ibrahimovic	15	40	Sweden	19	AC Milan
87654	abc	10	30	CHIAN	20	Paris Saint-Germain

DELETE:

```
function handleDeleteRequest() {
    global $db_conn;
    $delName = $_POST['delName'];
    executePlainSQL("DELETE FROM Player_Salary
    WHERE (game_played, goals, age) IN (
        SELECT game_played, goals, age
        FROM Player_Info
        WHERE name = '$delName'
    )");
    // executePlainSQL("DELETE FROM Player_Salary WHERE game_played IN (SELECT game_
    OCICommit($db_conn);
    echo "Values Deleted Successfully<br>";
}
```

Delete Values from team

Name:

Delete

Values Deleted Successfully

PID	Name	Goals	Age	Country	Game Played	Team Name
23456	Cristiano Ronaldo	800	36	Portugal	90	Manchester United
34567	Neymar Jr.	700	29	Brazil	80	Paris Saint-Germain
45678	Kylian Mbappe	600	23	France	95	Paris Saint-Germain
56789	Mohamed Salah	500	29	Egypt	90	Liverpool
11111	Marcos Rojo	400	20	Argentina	100	Manchester United
22222	Franco Cervi	300	20	Argentina	30	Real Madrid
33333	Paulo Dybala	80	28	Argentina	235	Juventus
44444	Roberto Firmino	57	30	Brazil	231	Liverpool
55555	Casemiro	29	29	Brazil	87	Real Madrid
66666	Erling Haaland	47	21	Norway	68	Borussia Dortmund
77777	N Golo Kante	10	30	France	36	Chelsea
88888	Pierre-Emerick	10	32	Gabon	28	Arsenal
99999	Jonathan David	12	22	Canada	28	Lille
98765	Zlatan Ibrahimovic	15	40	Sweden	19	AC Milan
87654	abc	10	30	CHIAN	20	Paris Saint-Germain

UPDATE:

```
function handleUpdateRequest() {  
    global $db_conn;  
  
    $old_name = $_POST['oldName'];  
    $new_name = $_POST['newName'];  
  
    // you need to wrap the old name and new name values with single quotations  
    executePlainSQL("UPDATE Player_Info SET name='" . $new_name . "' WHERE name='" . $old_name . "'");  
    OCICommit($db_conn);  
    echo "<p>Successfully updated player $id.</p>";  
}
```

Update info in team

The values are case sensitive and if you enter in the wrong case, the update statement will not do anything.

Old Name:

New Name:

Successfully updated player .

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PID	Name	Goals	Age	Country	Game Played	Team Name
23456	Cristiano Ronaldo	800	36	Portugal	90	Manchester United
34567	Neymar Jr.	700	29	Brazil	80	Paris Saint-Germain
45678	Kylian Mbappe	600	23	France	95	Paris Saint-Germain
56789	Mohamed Salah	500	29	Egypt	90	Liverpool
11111	Marcos Rojo	400	20	Argentina	100	Manchester United
22222	Franco Cervi	300	20	Argentina	30	Real Madrid
33333	Paulo Dybala	80	28	Argentina	235	Juventus
44444	Roberto Firmino	57	30	Brazil	231	Liverpool
55555	Casemiro	29	29	Brazil	87	Real Madrid
66666	Erling Haaland	47	21	Norway	68	Borussia Dortmund
77777	N Golo Kante	10	30	France	36	Chelsea
88888	Pierre-Emerick	10	32	Gabon	28	Arsenal
99999	Jonathan David	12	22	Canada	28	Lille
98765	Zlatan Ibrahimovic	15	40	Sweden	19	AC Milan
87654	Leo Messi	10	30	CHIAN	20	Paris Saint-Germain

SELECTION:

```
267 function handleFilter() {
268     global $db_conn;
269
270     $filterConditions = array();
271
272     if (!empty($_POST['filterRank'])) {
273         $filterRank = intval($_POST['filterRank']);
274         $filterConditions[] = "Rank >= $filterRank";
275     }
276
277     if (!empty($_POST['filterAge'])) {
278         $filterAge = intval($_POST['filterAge']);
279         $filterConditions[] = "Age >= $filterAge";
280     }
281
282     if (!empty($_POST['filterPoints'])) {
283         $filterPoints = intval($_POST['filterPoints']);
284         $filterConditions[] = "Points >= $filterPoints";
285     }
286
287     $filterConditionsStr = implode(' AND ', $filterConditions);
288     $filterConditionsStr = $filterConditionsStr ? "WHERE $filterConditionsStr" : "";
289
290     $result = executePlainSQL("SELECT Name, Rank, Age, Points FROM Team $filterConditionsStr");
291     printTeamResult($result);
292 }
```


Filter Team

Filter the results based on the fields below(Greater and Equal Than):

Rank:

Age:

Points:

Team Name	Rank	Age	Points
Arsenal	11	99	22
Real Madrid	9	11	33
Manchester United	15	20	38
Chelsea	18	37	26
AC Milan	17	26	39
Borussia Dortmund	26	43	20
Paris Saint-Germain	37	40	36
Lille	13	21	48
PSG	36	44	25
Liverpool	50	75	29

PROJECTION:

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```
236     function handleView() {
237         global $db_conn;
238
239         if (!empty($_POST['teamNameRequest'])) {
240             $teamName = "Name";
241         } else {
242             $teamName = "null";
243         }
244
245         if (!empty($_POST['teamRankRequest'])) {
246             $teamRank = "Rank";
247         } else {
248             $teamRank = "null";
249         }
250
251         if (!empty($_POST['teamAgeRequest'])) {
252             $teamAge = "Age";
253         } else {
254             $teamAge = "null";
255         }
256
257         if (!empty($_POST['teamPointsRequest'])) {
258             $teamPoints = "Points";
259         } else {
260             $teamPoints = "null";
261         }
262
263         $result = executePlainSQL("SELECT $teamName, $teamRank, $teamAge, $teamPoints FROM Team");
264         printTeamResult($result);
265     }
266 }
```

View Team

Check The Fields You Want To View:

Team Name: ☒

Rank: ☒

Age: ☐

Points: ☐

Team Name	Rank Age Points
Barcelona	1
Juventus	2
Arsenal	11
Bayern Munich	3
Real Madrid	9
Manchester United	15
Chelsea	18
AC Milan	17
Borussia Dortmund	26
Paris Saint-Germain	37
Lille	13
PSG	36
Liverpool	50

```
149     function handleProjectStaffNameRequest() {
150         global $db_conn;
151
152         $result = executePlainSQL("select name
153         from Staff_Info");
154         printProjectStaffNameResult($result);
155     }
```

Show the number of staffs grouped by country(more than 1)

[Home](#)

Show the name of all staff

name
a
b
c
d
e
f
g
h
i
j
k
l
m
n
o

JOIN:

Aggregation with Group By:

```
173     function handleGroupByRequest() {
174         global $db_conn;
175
176         $result = executePlainSQL("SELECT c.country, count(*)
177         FROM Staff_Country c
178         join Staff_Info i on c.team_name = i.team_name
179         GROUP BY country");
180         printGroupByResult($result);
181     }
```

Show the number of staffs grouped by country

show group by result

Show the number of staffs grouped by country(more than 1)(having)

show having result

Show the name of all staff

show projection result

Show the staff and team information(join)

show join result

Country	Count
England	3
Germany	3
Spain	3
France	5
Italy	1

Aggregation with Having:

```
function handleGroupByHavingRequest() {  
    global $db_conn;  
  
    $result = executePlainSQL("SELECT c.country, count(*)  
FROM Staff_Country c  
join Staff_Info i on c.team_name = i.team_name  
GROUP BY country  
Having count(*) > 1 ");  
    printGroupByHavingResult($result);  
}
```

Show the number of staffs grouped by country(more than 1)(having)

show having result

Show the name of all staff

show projection result

Show the staff and team information(join)

show join result

Country Count

England 3

Germany 3

Spain 3

France 5

Nested Aggregation with Group By:

```
function handleTotalSalary() {  
    global $db_conn;  
  
    $result = executePlainSQL("SELECT team_name, COALESCE(SUM(staff_salary),0) + COALESCE(SUM(player_salary),0) AS total_salary  
FROM (  
    SELECT team_name, salary AS staff_salary, NULL AS player_salary  
    FROM staff_info  
    UNION ALL  
    SELECT pi.team_name, NULL AS staff_salary, ps.salary AS player_salary  
    FROM player_info pi  
    JOIN player_salary ps ON pi.game_played = ps.game_played AND pi.goals = ps.goals AND pi.age = ps.age  
) t  
GROUP BY team_name  
ORDER BY team_name ASC");  
    printTeamTotalSalaryResult($result);  
}
```

Team Total Salary

Click the button to view the total salary of each team:

Show Total Salaries

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Team Name	Total Salary
AC Milan	230000
Arsenal	777777
Barcelona	300
Bayern Munich	1500
Borussia Dortmund	660000
Chelsea	666666
Juventus	650400
Lille	888888
Liverpool	2700000
Manchester United	1000900
Paris Saint-Germain	15000000
Real Madrid	1051400

Division:

```
function handleDivisionRequest() {
    global $db_conn;

    $nat1 = $_POST['nationality1'];
    $nat2 = $_POST['nationality2'];

    $result = executePlainSQL("select distinct t.name
    from Player_Info p
    join Team t on p.team_name = t.name
    where p.country IN ('$nat1','$nat2')
    group by t.name
    having count(distinct p.country) = 2");

    echo "<table>";
    echo "<tr><th>Team that contains '$nat1' and '$nat2' players</th></tr>";

    while ($row = OCI_Fetch_Array($result, OCI_BOTH)) {
        echo "<tr><td>" . $row[0] . "</td><tr>" ;
    }

    echo "</table>";
}
```

Select the team with players from both countries

The values are case sensitive and if you enter in the wrong case, the update statement will not do anything.

Nationality1:

Nationality2:

Select the team with players from both countries

The values are case sensitive and if you enter in the wrong case, the update statement will not do anything.

Nationality1:

Nationality2:

Team that contains 'Argentina' and 'Brazil' players

Paris Saint-Germain

Real Madrid

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4. Lastly, include a README.txt file if there's anything you want to add that's not included in your PDF file.

Confirm with your group that the submission has happened and that it's on time.

SQL script:

```
DROP TABLE Player_Info cascade constraints;
DROP TABLE Player_Salary cascade constraints;
DROP TABLE Team cascade constraints;
DROP TABLE Fans cascade constraints;
DROP TABLE League cascade constraints;
DROP TABLE Referee cascade constraints;
DROP TABLE Staff_Info cascade constraints;
DROP TABLE Staff_Country cascade constraints;
DROP TABLE Medical cascade constraints;
DROP TABLE Coach cascade constraints;
DROP TABLE GM cascade constraints;
DROP TABLE Sponsor cascade constraints;
DROP TABLE Sponsors cascade constraints;
DROP TABLE Stadium cascade constraints;
DROP TABLE Training_team cascade constraints;
DROP TABLE Match cascade constraints;
DROP TABLE Supports cascade constraints;
DROP TABLE Referees cascade constraints;
```

```
CREATE TABLE League(
  name char(20),
  rank int,
  PRIMARY KEY (name)
);
```

```
INSERT INTO League VALUES ('Premier League', 1);
INSERT INTO League VALUES ('La Liga', 2);
INSERT INTO League VALUES ('Serie A', 3);
INSERT INTO League VALUES ('Bundesliga', 4);
INSERT INTO League VALUES ('Ligue 1', 5);
```



```
SQL> select * from league;
```

NAME	RANK
Premier League	1
La Liga	2
Serie A	3
Bundesliga	4
Ligue 1	5

```
CREATE TABLE Referee(  
  ID int,  
  name char(20),  
  age int,  
  experience int,  
  PRIMARY KEY (ID)  
);
```

```
INSERT INTO Referee VALUES (1, 'a', 52, 10);  
INSERT INTO Referee VALUES (2, 'b', 46, 12);  
INSERT INTO Referee VALUES (3, 'c', 55, 8);  
INSERT INTO Referee VALUES (4, 'd', 49, 14);  
INSERT INTO Referee VALUES (5, 'e', 40, 6);
```

```
SQL> select * from referee  
2 ;
```

ID	NAME	AGE	EXPERIENCE
1	a	52	10
2	b	46	12
3	c	55	8
4	d	49	14
5	e	40	6

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```
CREATE TABLE Referees(  
  RID int NOT NULL,  
  Lname char(20),  
  PRIMARY KEY (RID,Lname),  
  FOREIGN KEY (RID) REFERENCES Referee  
  ON DELETE CASCADE,  
  FOREIGN KEY (Lname) REFERENCES LEAGUE  
  ON DELETE CASCADE  
);
```

```
INSERT INTO Referees VALUES (1, 'Premier League');  
INSERT INTO Referees VALUES (2, 'La Liga');  
INSERT INTO Referees VALUES (3, 'Serie A');  
INSERT INTO Referees VALUES (4, 'Premier League');  
INSERT INTO Referees VALUES (5, 'Ligue 1');
```

```
SQL> select * from referees;
```

RID	LNAME
1	Premier League
2	La Liga
3	Serie A
4	Premier League
5	Ligue 1

```
CREATE TABLE Stadium(  
  name char(20),  
  age int,  
  capacity int,  
  PRIMARY KEY (name)  
);
```

```
INSERT INTO Stadium VALUES ('Old Trafford',100, 20000);  
INSERT INTO Stadium VALUES ('Camp Nou', 101, 99000);
```

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```
INSERT INTO Stadium VALUES ('Anfield', 102, 54074);
```

```
INSERT INTO Stadium VALUES ('Allianz Arena', 103, 75000);
```

```
INSERT INTO Stadium VALUES ('Santiago Bernabeu', 104, 81044);
```

```
SQL> select * from stadium  
2 ;
```

NAME	AGE	CAPACITY
Old Trafford	100	20000
Camp Nou	101	99000
Anfield	102	54074
Allianz Arena	103	75000
Santiago Bernabeu	104	81044

```
CREATE TABLE Team(  
rank int,  
age int,  
League_name char(20) NOT NULL,  
stadium_name char(20) NOT NULL,  
points int,  
name char(20),  
PRIMARY KEY (name),  
FOREIGN KEY (League_name) REFERENCES LEAGUE  
ON DELETE CASCADE,  
FOREIGN KEY (stadium_name) REFERENCES STADIUM  
ON DELETE CASCADE  
);
```

```
INSERT INTO Team VALUES (1,100, 'Premier League','Old Trafford',23,'Barcelona');
```

```
INSERT INTO Team VALUES (2,10, 'La Liga','Camp Nou',13,'Juventus');
```

```
INSERT INTO Team VALUES (11,99, 'Serie A','Anfield',22,'Arsenal');
```

```
INSERT INTO Team VALUES (3,20, 'Bundesliga','Allianz Arena',45,'Bayern Munich');
```

```
INSERT INTO Team VALUES (9,11, 'Ligue 1','Santiago Bernabeu',33,'Real Madrid');
```

```
INSERT INTO Team VALUES (15,20,'Premier League', 'Old Trafford', 38,'Manchester United');
```

```
INSERT INTO Team VALUES (18,37,'Premier League','Camp Nou',26,'Chelsea');
```

```
INSERT INTO Team VALUES (17, 26, 'Serie A', 'Anfield', 39,'AC Milan');
```

```
INSERT INTO Team VALUES (26, 43,'Bundesliga', 'Allianz Arena',20,'Borussia Dortmund');
```

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```
INSERT INTO Team VALUES (37,40, 'Ligue 1', 'Anfield', 36,'Paris Saint-Germain');
```

```
INSERT INTO Team VALUES (13,21, 'Serie A', 'Camp Nou', 48,'Lille');
```

```
--INSERT INTO Team VALUES (36, 44, 'Bundesliga', 'Old Trafford', 25, 'Paris Saint-Germain');
```

```
INSERT INTO Team VALUES (50,75, 'Premier League', 'Camp Nou', 29, 'Liverpool');
```

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```
SQL> select * from Team
2 ;
```

RANK	AGE	LEAGUE_NAME	STADIUM_NAME	POINTS
NAME				
1	100	Premier League	Old Trafford	23
Barcelona				
2	10	La Liga	Camp Nou	13
Juventus				
11	99	Serie A	Anfield	22
Arsenal				

RANK	AGE	LEAGUE_NAME	STADIUM_NAME	POINTS
NAME				
3	20	Bundesliga	Allianz Arena	45
Bayern Munich				
9	11	Ligue 1	Santiago Bernabeu	33
Real Madrid				
15	20	Premier League	Old Trafford	38
Manchester United				

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RANK	AGE	LEAGUE_NAME	STADIUM_NAME	POINTS
NAME				
18	37	Premier League	Camp Nou	26
Chelsea				
17	26	Serie A	Anfield	39
AC Milan				
26	43	Bundesliga	Allianz Arena	20
Borussia Dortmund				
RANK	AGE	LEAGUE_NAME	STADIUM_NAME	POINTS
NAME				
37	40	Ligue 1	Anfield	36
Paris Saint-Germain				
13	21	Serie A	Camp Nou	48
Lille				
50	75	Premier League	Camp Nou	29
Liverpool				

```
CREATE TABLE Training_team(  
  t_name char(20),  
  team_name char(20) NOT NULL,  
  average_age int,  
  PRIMARY KEY (t_name, team_name),  
  FOREIGN KEY (team_name) REFERENCES Team  
  ON DELETE CASCADE  
);
```

```
INSERT INTO Training_team VALUES ('Barca U17','Barcelona', 17);  
INSERT INTO Training_team VALUES ('Juventus U14', 'Juventus', 14);  
INSERT INTO Training_team VALUES ('Arsenal U16', 'Arsenal', 16);  
INSERT INTO Training_team VALUES ('Bayern Munich U18', 'Bayern Munich', 18);  
INSERT INTO Training_team VALUES ('Real Madrid U19', 'Real Madrid', 19);
```

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```
SQL> select * from training_team
2 ;
```

T_NAME	TEAM_NAME	AVERAGE_AGE
Barca U17	Barcelona	17
Juventus U14	Juventus	14
Arsenal U16	Arsenal	16
Bayern Munich U18	Bayern Munich	18
Real Madrid U19	Real Madrid	19

```
CREATE TABLE Match(
  ID int,
  winner_score int,
  loser_score int,
  Match_date date,
  home_team_name char(20) NOT NULL,
  away_team_name char(20) NOT NULL,
  PRIMARY KEY (ID, home_team_name, away_team_name),
  FOREIGN KEY (home_team_name) REFERENCES Team
  ON DELETE CASCADE,
  FOREIGN KEY (away_team_name) REFERENCES Team
  ON DELETE CASCADE
);
```

```
INSERT INTO Match VALUES (1, 5, 2, to_date('2002-12-23','yyyy-mm-dd'), 'Barcelona', 'Real
Madrid');
INSERT INTO Match VALUES (2, 3, 1, to_date('2022-01-15','yyyy-mm-dd'), 'Manchester
United', 'Chelsea');
INSERT INTO Match VALUES (3, 2, 2, to_date('2021-11-21','yyyy-mm-dd'), 'Juventus', 'AC
Milan');
INSERT INTO Match VALUES (4, 4, 0, to_date('2022-05-07','yyyy-mm-dd'), 'Bayern Munich',
'Borussia Dortmund');
INSERT INTO Match VALUES (5, 1, 0, to_date('2022-03-19','yyyy-mm-dd'), 'Paris
Saint-Germain', 'Lille');
```

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```
SQL> select * from match
2 ;
```

	ID	WINNER_SCORE	LOSER_SCORE	MATCH_DAT	HOME_TEAM_NAME
AWAY_TEAM_NAME					
Real Madrid	1	5	2	23-DEC-02	Barcelona
Chelsea	2	3	1	15-JAN-22	Manchester United
AC Milan	3	2	2	21-NOV-21	Juventus

	ID	WINNER_SCORE	LOSER_SCORE	MATCH_DAT	HOME_TEAM_NAME
AWAY_TEAM_NAME					
Borussia Dortmund	4	4	0	07-MAY-22	Bayern Munich
Lille	5	1	0	19-MAR-22	Paris Saint-Germain

```
CREATE TABLE Player_Salary(
  game_played int,
  goals int,
  age int,
  salary int,
  PRIMARY KEY (game_played, goals, age)
);
```

```
INSERT INTO Player_Salary VALUES (100, 1000, 35, 1000000);
INSERT INTO Player_Salary VALUES (90, 800, 36, 200000);
INSERT INTO Player_Salary VALUES (80, 700, 29, 12000000);
INSERT INTO Player_Salary VALUES (95, 600, 23, 2000000);
INSERT INTO Player_Salary VALUES (90, 500, 29, 2000000);
INSERT INTO Player_Salary VALUES (100, 400, 20, 800000);
INSERT INTO Player_Salary VALUES (30, 300, 20, 500000);
```


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```
INSERT INTO Player_Salary VALUES (235, 80, 28, 650000);
INSERT INTO Player_Salary VALUES (231, 57, 30, 700000);
INSERT INTO Player_Salary VALUES (87, 29, 29, 550000);
INSERT INTO Player_Salary VALUES (68, 47, 21, 660000);
INSERT INTO Player_Salary VALUES (36, 10, 30, 666666);
INSERT INTO Player_Salary VALUES (28, 10, 32, 777777);
INSERT INTO Player_Salary VALUES (28, 12, 22, 888888);
INSERT INTO Player_Salary VALUES (19, 15, 40, 230000);
```

```
SQL> select * from player_salary
2 ;
```

GAME_PLAYED	GOALS	AGE	SALARY
100	1000	35	1000000
90	800	36	200000
80	700	29	12000000
95	600	23	2000000
90	500	29	2000000
100	400	20	800000
30	300	20	500000
235	80	28	650000
231	57	30	700000
87	29	29	550000
68	47	21	660000

GAME_PLAYED	GOALS	AGE	SALARY
36	10	30	666666
28	10	32	777777
28	12	22	888888
19	15	40	230000

```
15 rows selected.
```

```
CREATE TABLE Player_Info(
  PID int,
```

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```
name char(20),
goals int,
age int,
country char(20),
game_played int,
team_name char(20) NOT NULL,
PRIMARY KEY (PID),
FOREIGN KEY (game_played, goals, age) REFERENCES Player_Salary
ON DELETE CASCADE,
FOREIGN KEY (team_name) REFERENCES Team
ON DELETE CASCADE
);
```

```
INSERT INTO Player_Info VALUES (12345, 'Leo Messi', 1000, 35, 'Argentina', 100, 'Paris
Saint-Germain');
INSERT INTO Player_Info VALUES (23456, 'Cristiano Ronaldo', 800, 36, 'Portugal', 90,
'Manchester United');
INSERT INTO Player_Info VALUES (34567, 'Neymar Jr.', 700, 29, 'Brazil', 80, 'Paris
Saint-Germain');
INSERT INTO Player_Info VALUES (45678, 'Kylian Mbappe', 600, 23, 'France', 95, 'Paris
Saint-Germain');
INSERT INTO Player_Info VALUES (56789, 'Mohamed Salah', 500, 29, 'Egypt', 90, 'Liverpool');
INSERT INTO Player_Info VALUES (11111, 'Marcos Rojo', 400, 20, 'Argentina', 100,
'Manchester United');
INSERT INTO Player_Info VALUES (22222, 'Franco Cervi', 300, 20, 'Argentina', 30, 'Real
Madrid');
INSERT INTO Player_Info VALUES (33333, 'Paulo Dybala', 80, 28, 'Argentina', 235, 'Juventus');
INSERT INTO Player_Info VALUES (44444, 'Roberto Firmino', 57, 30, 'Brazil', 231, 'Liverpool');
INSERT INTO Player_Info VALUES (55555, 'Casemiro', 29, 29, 'Brazil', 87, 'Real Madrid');
INSERT INTO Player_Info VALUES (66666, 'Erling Haaland', 47, 21, 'Norway', 68, 'Borussia
Dortmund');
INSERT INTO Player_Info VALUES (77777, 'N Golo Kante', 10, 30, 'France', 36, 'Chelsea');
INSERT INTO Player_Info VALUES (88888, 'Pierre-Emerick', 10, 32, 'Gabon', 28, 'Arsenal');
INSERT INTO Player_Info VALUES (99999, 'Jonathan David', 12, 22, 'Canada', 28, 'Lille');
INSERT INTO Player_Info VALUES (98765, 'Zlatan Ibrahimovic', 15, 40, 'Sweden', 19, 'AC
Milan');
```

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```
SQL> select * from player_info  
2 ;
```

PID	NAME	GOALS	AGE	COUNTRY
12345	Leo Messi	1000	35	Argentina
100	Paris Saint-Germain			
23456	Cristiano Ronaldo	800	36	Portugal
90	Manchester United			
34567	Neymar Jr.	700	29	Brazil
80	Paris Saint-Germain			
45678	Kylian Mbappe	600	23	France
95	Paris Saint-Germain			
56789	Mohamed Salah	500	29	Egypt
90	Liverpool			
11111	Marcos Rojo	400	20	Argentina
100	Manchester United			

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PID	NAME	GOALS	AGE	COUNTRY
22222	Franco Cervi	300	20	Argentina
30	Real Madrid			
33333	Paulo Dybala	80	28	Argentina
235	Juventus			
44444	Roberto Firmino	57	30	Brazil
231	Liverpool			
PID	NAME	GOALS	AGE	COUNTRY
55555	Casemiro	29	29	Brazil
87	Real Madrid			
66666	Erling Haaland	47	21	Norway
68	Borussia Dortmund			
77777	N Golo Kante	10	30	France
36	Chelsea			

PID	NAME	GOALS	AGE	COUNTRY
88888	Pierre-Emerick	10	32	Gabon
28	Arsenal			
99999	Jonathan David	12	22	Canada
28	Lille			
98765	Zlatan Ibrahimovic	15	40	Sweden
19	AC Milan			

15 rows selected.

```
CREATE TABLE Staff_Country(  
  team_name char(20),  
  country char(10),  
  PRIMARY KEY (team_name),  
  FOREIGN KEY (team_name) REFERENCES Team  
  ON DELETE CASCADE
```

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);

```
INSERT INTO Staff_Country VALUES ('Barcelona', 'Spain');
INSERT INTO Staff_Country VALUES ('Real Madrid', 'France');
INSERT INTO Staff_Country VALUES ('Manchester United', 'England');
INSERT INTO Staff_Country VALUES ('Juventus', 'Italy');
INSERT INTO Staff_Country VALUES ('Bayern Munich', 'Germany');
```

```
SQL> select * from staff_country
2 ;
```

TEAM_NAME	COUNTRY
-----	-----
Barcelona	Spain
Real Madrid	France
Manchester United	England
Juventus	Italy
Bayern Munich	Germany

```
CREATE TABLE Staff_Info(
  ID int,
  name char(20),
  age int,
  team_name char(20) NOT NULL,
  salary int,
  PRIMARY KEY (ID),
  FOREIGN KEY (team_name) REFERENCES Team
  ON DELETE CASCADE,
  FOREIGN KEY (team_name) REFERENCES Staff_Country
  ON DELETE CASCADE
);
```

```
INSERT INTO Staff_Info VALUES (1, 'a', 23, 'Barcelona', 100);
```

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```
INSERT INTO Staff_Info VALUES (2, 'b', 28, 'Real Madrid', 200);
INSERT INTO Staff_Info VALUES (3, 'c', 32, 'Manchester United', 300);
INSERT INTO Staff_Info VALUES (4, 'd', 25, 'Real Madrid', 400);
INSERT INTO Staff_Info VALUES (5, 'e', 30, 'Bayern Munich', 500);
INSERT INTO Staff_Info VALUES (6, 'f', 43, 'Barcelona', 100);
INSERT INTO Staff_Info VALUES (7, 'g', 48, 'Real Madrid', 200);
INSERT INTO Staff_Info VALUES (8, 'h', 42, 'Manchester United', 300);
INSERT INTO Staff_Info VALUES (9, 'i', 39, 'Real Madrid', 400);
INSERT INTO Staff_Info VALUES (10, 'j', 55, 'Bayern Munich', 500);
INSERT INTO Staff_Info VALUES (11, 'k', 53, 'Barcelona', 100);
INSERT INTO Staff_Info VALUES (12, 'l', 48, 'Real Madrid', 200);
INSERT INTO Staff_Info VALUES (13, 'm', 36, 'Manchester United', 300);
INSERT INTO Staff_Info VALUES (14, 'n', 34, 'Juventus', 400);
INSERT INTO Staff_Info VALUES (15, 'o', 41, 'Bayern Munich', 500);
```

```
SQL> select * from staff_info;
```

ID	NAME	AGE	TEAM_NAME	SALARY
1	a	23	Barcelona	100
2	b	28	Real Madrid	200
3	c	32	Manchester United	300
4	d	25	Real Madrid	400
5	e	30	Bayern Munich	500
6	f	43	Barcelona	100
7	g	48	Real Madrid	200
8	h	42	Manchester United	300
9	i	39	Real Madrid	400
10	j	55	Bayern Munich	500
11	k	53	Barcelona	100
12	l	48	Real Madrid	200
13	m	36	Manchester United	300
14	n	34	Juventus	400
15	o	41	Bayern Munich	500

```
15 rows selected.
```

```
CREATE TABLE Medical(
  ID int,
  speciality char(20),
  PRIMARY KEY (ID),
  FOREIGN KEY (ID) REFERENCES Staff_Info
  ON DELETE CASCADE
);
```

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```
INSERT INTO Medical VALUES (1, 'Eye surgent');
INSERT INTO Medical VALUES (2, 'Orthopedic surgeon');
INSERT INTO Medical VALUES (3, 'Dentist');
INSERT INTO Medical VALUES (4, 'Neurosurgeon');
INSERT INTO Medical VALUES (5, 'Cardiologist');
```

```
SQL> select * from medical;
```

ID	SPECIALITY
1	Eye surgent
2	Orthopedic surgeon
3	Dentist
4	Neurosurgeon
5	Cardiologist

```
CREATE TABLE Coach(
  ID int,
  experience int,
  PRIMARY KEY (ID),
  FOREIGN KEY (ID) REFERENCES Staff_Info
  ON DELETE CASCADE
);
```

```
INSERT INTO Coach VALUES (6, 5);
INSERT INTO Coach VALUES (7, 10);
INSERT INTO Coach VALUES (8, 8);
INSERT INTO Coach VALUES (9, 6);
INSERT INTO Coach VALUES (10, 4);
```

```
SQL> select * from coach;
```

ID	EXPERIENCE
6	5
7	10
8	8
9	6
10	4

```
CREATE TABLE GM(  
  ID int,  
  rating int,  
  PRIMARY KEY (ID),  
  FOREIGN KEY (ID) REFERENCES Staff_Info  
  ON DELETE CASCADE  
);
```

```
INSERT INTO GM VALUES (11, 9);  
INSERT INTO GM VALUES (12, 8);  
INSERT INTO GM VALUES (13, 7);  
INSERT INTO GM VALUES (14, 6);  
INSERT INTO GM VALUES (15, 8);
```



```
SQL> select * from GM;
```

ID	RATING
11	9
12	8
13	7
14	6
15	8

```
CREATE TABLE Fans(  
  count int,  
  country char(20),  
  average_age int,  
  platform char(20),  
  PRIMARY KEY (country,average_age,platform)  
);
```

```
INSERT INTO Fans VALUES (101, 'USA',35, 'Twitter');  
INSERT INTO Fans VALUES (102, 'India',25, 'Facebook');  
INSERT INTO Fans VALUES (103, 'Brazil',45, 'Instagram');  
INSERT INTO Fans VALUES (104, 'Russia',35, 'Instagram');  
INSERT INTO Fans VALUES (105, 'Nigeria',25, 'Twitter');
```

```
SQL> select * from fans  
2 ;
```

COUNT	COUNTRY	AVERAGE_AGE	PLATFORM
101	USA	35	Twitter
102	India	25	Facebook
103	Brazil	45	Instagram
104	Russia	35	Instagram
105	Nigeria	25	Twitter

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```
CREATE TABLE Supports(  
  country char(20),  
  average_age int,  
  platform char(20),  
  team_name char(20),  
  PRIMARY KEY (country,average_age,platform,team_name),  
  FOREIGN KEY (country,average_age,platform) REFERENCES Fans  
  ON DELETE CASCADE,  
  FOREIGN KEY (team_name) REFERENCES Team  
  ON DELETE CASCADE  
);
```

```
INSERT INTO Supports VALUES ('USA',35, 'Twitter', 'Manchester United');  
INSERT INTO Supports VALUES ('India',25, 'Facebook', 'Paris Saint-Germain');  
INSERT INTO Supports VALUES ('Brazil',45, 'Instagram', 'Liverpool');  
INSERT INTO Supports VALUES ('Russia',35, 'Instagram', 'Paris Saint-Germain');  
INSERT INTO Supports VALUES ('Nigeria',25, 'Twitter','Paris Saint-Germain');
```

```
SQL> select * from supports;
```

COUNTRY	AVERAGE_AGE	PLATFORM	TEAM_NAME
Brazil	45	Instagram	Liverpool
India	25	Facebook	Paris Saint-Germain
Nigeria	25	Twitter	Paris Saint-Germain
Russia	35	Instagram	Paris Saint-Germain
USA	35	Twitter	Manchester United

```
CREATE TABLE Sponsor(  
  brand char(20),  
  contract int,  
  PRIMARY KEY (brand)  
);
```

```
INSERT INTO Sponsor VALUES ('NIKE', 2);  
INSERT INTO Sponsor VALUES ('Adidas', 1);  
INSERT INTO Sponsor VALUES ('Puma', 3);  
INSERT INTO Sponsor VALUES ('Under Armour', 4);  
INSERT INTO Sponsor VALUES ('New Balance', 5);
```

```
SQL> select * from sponsor;
```

BRAND	CONTRACT
-----	-----
NIKE	2
Adidas	1
Puma	3
Under Armour	4
New Balance	5

```
CREATE TABLE Sponsors(  
  brand char(20),  
  team_name char(20),  
  amount int,  
  PRIMARY KEY (brand, team_name),  
  FOREIGN KEY (brand) REFERENCES SPONSOR  
  ON DELETE CASCADE,  
  FOREIGN KEY (team_name) REFERENCES Team  
  ON DELETE CASCADE  
);
```

```
INSERT INTO Sponsors VALUES ('NIKE', 'Barcelona', 1000000);  
INSERT INTO Sponsors VALUES ('Adidas', 'Real Madrid', 800000);  
INSERT INTO Sponsors VALUES ('Puma', 'Manchester United', 700000);  
INSERT INTO Sponsors VALUES ('Under Armour', 'Chelsea', 600000);  
INSERT INTO Sponsors VALUES ('New Balance', 'Liverpool', 500000);
```

```
SQL> select * from sponsors;
```

BRAND	TEAM_NAME	AMOUNT
-----	-----	-----
NIKE	Barcelona	1000000
Adidas	Real Madrid	800000
Puma	Manchester United	700000
Under Armour	Chelsea	600000
New Balance	Liverpool	500000

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