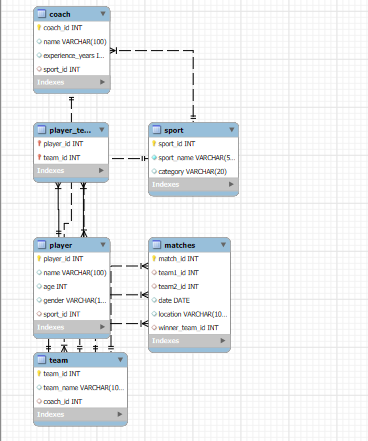
**ER Diagram**

****

**CREATE DATABASE SportManagement;**

**USE SportManagement;**

**CREATE TABLE Sport (**

**sport\_id INT AUTO\_INCREMENT PRIMARY KEY,**

**sport\_name VARCHAR(50) NOT NULL,**

**category VARCHAR(20)**

**);**

**CREATE TABLE Player (**

**player\_id INT AUTO\_INCREMENT PRIMARY KEY,**

**name VARCHAR(100),**

**age INT,**

**gender VARCHAR(10),**

**sport\_id INT,**

**FOREIGN KEY (sport\_id) REFERENCES Sport(sport\_id)**

**);**

**CREATE TABLE Coach (**

**coach\_id INT AUTO\_INCREMENT PRIMARY KEY,**

**name VARCHAR(100),**

**experience\_years INT,**

**sport\_id INT,**

**FOREIGN KEY (sport\_id) REFERENCES Sport(sport\_id)**

**);**

**CREATE TABLE Team (**

**team\_id INT AUTO\_INCREMENT PRIMARY KEY,**

**team\_name VARCHAR(100),**

**coach\_id INT,**

**FOREIGN KEY (coach\_id) REFERENCES Coach(coach\_id)**

**);**

**CREATE TABLE Player\_Team (**

**player\_id INT,**

**team\_id INT,**

**PRIMARY KEY (player\_id, team\_id),**

**FOREIGN KEY (player\_id) REFERENCES Player(player\_id),**

**FOREIGN KEY (team\_id) REFERENCES Team(team\_id)**

**);**

**CREATE TABLE Matches (**

**match\_id INT AUTO\_INCREMENT PRIMARY KEY,**

**team1\_id INT,**

**team2\_id INT,**

**date DATE,**

**location VARCHAR(100),**

**winner\_team\_id INT,**

**FOREIGN KEY (team1\_id) REFERENCES Team(team\_id),**

**FOREIGN KEY (team2\_id) REFERENCES Team(team\_id),**

**FOREIGN KEY (winner\_team\_id) REFERENCES Team(team\_id)**

**);**

**INSERT INTO Sport (sport\_name, category) VALUES**

**('Football', 'Outdoor'),**

**('Basketball', 'Indoor'),**

**('Cricket', 'Outdoor'),**

**('Tennis', 'Outdoor'),**

**('Volleyball', 'Indoor'),**

**('Badminton', 'Indoor'),**

**('Hockey', 'Outdoor'),**

**('Table Tennis', 'Indoor'),**

**('Rugby', 'Outdoor'),**

**('Handball', 'Indoor');**

**INSERT INTO Coach (name, experience\_years, sport\_id) VALUES**

**('John Doe', 10, 1),**

**('Emily Smith', 8, 2),**

**('Raj Patel', 12, 3),**

**('Sophia Green', 5, 4),**

**('Liam Brown', 7, 5),**

**('Emma Johnson', 9, 6),**

**('William Lee', 6, 7),**

**('Olivia Davis', 11, 8),**

**('Noah Wilson', 3, 9),**

**('Ava Martinez', 4, 10);**

**INSERT INTO Team (team\_name, coach\_id) VALUES**

**('Tigers', 1),**

**('Eagles', 2),**

**('Warriors', 3),**

**('Panthers', 4),**

**('Sharks', 5),**

**('Dragons', 6),**

**('Falcons', 7),**

**('Lions', 8),**

**('Bulls', 9),**

**('Wolves', 10);**

**INSERT INTO Player (name, age, gender, sport\_id) VALUES**

**('Alice', 22, 'Female', 2),**

**('Bob', 24, 'Male', 1),**

**('Charlie', 21, 'Male', 1),**

**('Diana', 23, 'Female', 2),**

**('Ethan', 25, 'Male', 3),**

**('Fiona', 20, 'Female', 4),**

**('George', 26, 'Male', 5),**

**('Hannah', 22, 'Female', 6),**

**('Ian', 27, 'Male', 7),**

**('Julia', 21, 'Female', 8),**

**('Kevin', 23, 'Male', 9),**

**('Laura', 24, 'Female', 10),**

**('Mike', 22, 'Male', 1),**

**('Nina', 23, 'Female', 2),**

**('Oscar', 20, 'Male', 3);**

**INSERT INTO Player\_Team VALUES**

**(1, 2), (2, 1), (3, 1), (4, 2),**

**(5, 3), (6, 4), (7, 5), (8, 6),**

**(9, 7), (10, 8), (11, 9), (12, 10),**

**(13, 1), (14, 2), (15, 3);**

**INSERT INTO Matches (team1\_id, team2\_id, date, location, winner\_team\_id) VALUES**

**(1, 2, '2025-05-10', 'Stadium A', 1),**

**(2, 1, '2025-05-17', 'Stadium B', 2),**

**(3, 4, '2025-06-01', 'Stadium C', 3),**

**(5, 6, '2025-06-05', 'Stadium D', 6),**

**(7, 8, '2025-06-10', 'Stadium E', 7),**

**(9, 10, '2025-06-12', 'Stadium F', 9),**

**(1, 3, '2025-06-15', 'Stadium A', 1),**

**(4, 2, '2025-06-18', 'Stadium B', 4),**

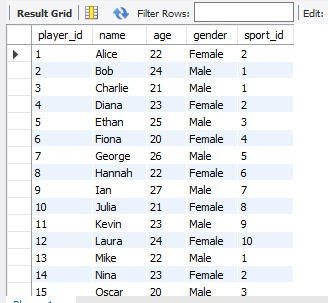
**(5, 7, '2025-06-21', 'Stadium C', 5),**

**(6, 8, '2025-06-25', 'Stadium D', 8);**

**SELECT \* FROM Player;**

**1. List all players**

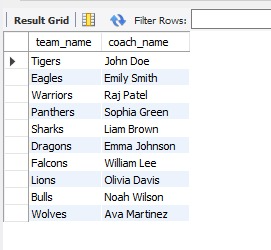
**SELECT \* FROM Player;**

****

**2. List all teams with their coach name**

**SELECT T.team\_name, C.name AS coach\_name**

**FROM Team T JOIN Coach C ON T.coach\_id = C.coach\_id;**

****

**3. List all matches with team names and winner**

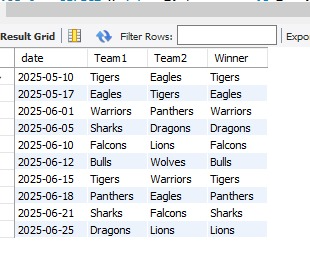
**SELECT M.date, T1.team\_name AS Team1, T2.team\_name AS Team2, TW.team\_name AS Winner**

**FROM Matches M**

**JOIN Team T1 ON M.team1\_id = T1.team\_id**

**JOIN Team T2 ON M.team2\_id = T2.team\_id**

**JOIN Team TW ON M.winner\_team\_id = TW.team\_id;**

****

**4. Show all players in team 'Tigers'**

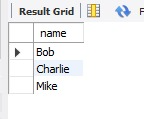
**SELECT P.name**

**FROM Player P**

**JOIN Player\_Team PT ON P.player\_id = PT.player\_id**

**JOIN Team T ON PT.team\_id = T.team\_id**

**WHERE T.team\_name = 'Tigers';**

****

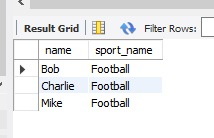
**5. List all players of a particular sport (e.g., Football)**

**SELECT P.name, S.sport\_name**

**FROM Player P**

**JOIN Sport S ON P.sport\_id = S.sport\_id**

**WHERE S.sport\_name = 'Football';**

****

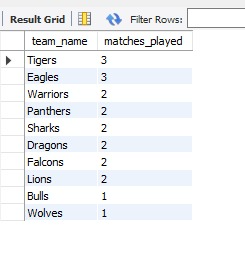
**6. Show total matches played by each team**

**SELECT T.team\_name, COUNT(\*) AS matches\_played**

**FROM Team T**

**JOIN Matches M ON T.team\_id = M.team1\_id OR T.team\_id = M.team2\_id**

**GROUP BY T.team\_name;**

****

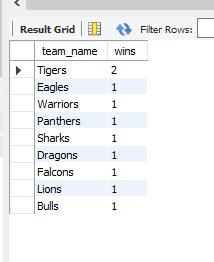
**7. Show win count for each team**

**SELECT T.team\_name, COUNT(\*) AS wins**

**FROM Team T**

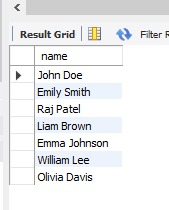
**JOIN Matches M ON T.team\_id = M.winner\_team\_id**

**GROUP BY T.team\_name;**

****

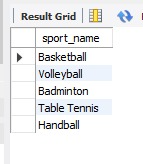
**8. Find coaches with more than 5 years experience**

**SELECT name FROM Coach WHERE experience\_years > 5;**

****

**9. Find all indoor sports**

**SELECT sport\_name FROM Sport WHERE category = 'Indoor';**

****

**10. List all teams coached by 'Emily Smith'**

**SELECT team\_name FROM Team**

**JOIN Coach ON Team.coach\_id = Coach.coach\_id**

**WHERE Coach.name = 'Emily Smith';**

