Sports League - Full SQL Schema Setup Script (With Drop Statements)

-- Drop tables in reverse dependency order  
DROP TABLE IF EXISTS goals;  
DROP TABLE IF EXISTS matchreferees;  
DROP TABLE IF EXISTS teamseasonstats;  
DROP TABLE IF EXISTS matches;  
DROP TABLE IF EXISTS players;  
DROP TABLE IF EXISTS referees;  
DROP TABLE IF EXISTS teams;  
DROP TABLE IF EXISTS seasons;  
DROP TABLE IF EXISTS leagues;  
  
-- Create Leagues table  
CREATE TABLE leagues (  
 id SERIAL PRIMARY KEY,  
 name TEXT NOT NULL  
);  
  
-- Create Seasons table  
CREATE TABLE seasons (  
 id SERIAL PRIMARY KEY,  
 league\_id INTEGER REFERENCES leagues(id),  
 start\_date DATE NOT NULL,  
 end\_date DATE NOT NULL  
);  
  
-- Create Teams table  
CREATE TABLE teams (  
 id SERIAL PRIMARY KEY,  
 name TEXT NOT NULL  
);  
  
-- Create Players table  
CREATE TABLE players (  
 id SERIAL PRIMARY KEY,  
 name TEXT NOT NULL,  
 team\_id INTEGER REFERENCES teams(id)  
);  
  
-- Create Referees table  
CREATE TABLE referees (  
 id SERIAL PRIMARY KEY,  
 name TEXT NOT NULL  
);  
  
-- Create Matches table  
CREATE TABLE matches (  
 id SERIAL PRIMARY KEY,  
 season\_id INTEGER REFERENCES seasons(id),  
 home\_team\_id INTEGER REFERENCES teams(id),  
 away\_team\_id INTEGER REFERENCES teams(id),  
 match\_date DATE NOT NULL  
);  
  
-- Create MatchReferees table (many-to-many relationship)  
CREATE TABLE matchreferees (  
 match\_id INTEGER REFERENCES matches(id),  
 referee\_id INTEGER REFERENCES referees(id),  
 PRIMARY KEY (match\_id, referee\_id)  
);  
  
-- Create Goals table  
CREATE TABLE goals (  
 id SERIAL PRIMARY KEY,  
 match\_id INTEGER REFERENCES matches(id),  
 player\_id INTEGER REFERENCES players(id),  
 minute\_scored INTEGER NOT NULL  
);  
  
-- Create TeamSeasonStats table  
CREATE TABLE teamseasonstats (  
 team\_id INTEGER REFERENCES teams(id),  
 season\_id INTEGER REFERENCES seasons(id),  
 wins INTEGER DEFAULT 0,  
 losses INTEGER DEFAULT 0,  
 draws INTEGER DEFAULT 0,  
 points INTEGER DEFAULT 0,  
 PRIMARY KEY (team\_id, season\_id)  
);  
  
-- Optional seed data  
INSERT INTO leagues (name) VALUES ('Premier League'), ('Championship');  
  
INSERT INTO seasons (league\_id, start\_date, end\_date) VALUES  
(1, '2024-08-01', '2025-05-20'),  
(2, '2024-09-01', '2025-04-30');  
  
INSERT INTO teams (name) VALUES ('Lions'), ('Tigers'), ('Bears');  
  
INSERT INTO players (name, team\_id) VALUES   
('Alice', 1),  
('Bob', 1),  
('Charlie', 2),  
('Dave', 3);  
  
INSERT INTO referees (name) VALUES ('Ref A'), ('Ref B');  
  
INSERT INTO matches (season\_id, home\_team\_id, away\_team\_id, match\_date) VALUES  
(1, 1, 2, '2024-09-15'),  
(1, 2, 3, '2024-09-22');  
  
INSERT INTO matchreferees (match\_id, referee\_id) VALUES  
(1, 1),  
(1, 2),  
(2, 2);  
  
INSERT INTO goals (match\_id, player\_id, minute\_scored) VALUES  
(1, 1, 23),  
(1, 2, 45),  
(2, 3, 60);  
  
INSERT INTO teamseasonstats (team\_id, season\_id, wins, losses, draws, points) VALUES  
(1, 1, 2, 0, 1, 7),  
(2, 1, 1, 1, 1, 4),  
(3, 1, 0, 2, 1, 1);