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-- STEP 1: Create SportsEntry Table

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DROP TABLE IF EXISTS SportsEntry;

CREATE TABLE SportsEntry (

EntryID INT PRIMARY KEY,

PlayerName VARCHAR(50),

SportName VARCHAR(50),

Country VARCHAR(50),

Age INT,

IsActive BOOLEAN

);

-- Insert Sample Players

INSERT INTO SportsEntry VALUES (1, 'Virat Kohli', 'Cricket', 'India', 35, TRUE);

INSERT INTO SportsEntry VALUES (2, 'Lionel Messi', 'Football', 'Argentina', 37, TRUE);

INSERT INTO SportsEntry VALUES (3, 'Serena Williams', 'Tennis', 'USA', 42, FALSE);

INSERT INTO SportsEntry VALUES (4, 'PV Sindhu', 'Badminton', 'India', 30, TRUE);

INSERT INTO SportsEntry VALUES (5, 'Usain Bolt', 'Athletics', 'Jamaica', 39, FALSE);

INSERT INTO SportsEntry VALUES (6, 'Roger Federer', 'Tennis', 'Switzerland', 44, FALSE);

INSERT INTO SportsEntry VALUES (7, 'MS Dhoni', 'Cricket', 'India', 44, TRUE);

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-- STEP 2: Create CoachInfo Table

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DROP TABLE IF EXISTS CoachInfo;

CREATE TABLE CoachInfo (

CoachID INT PRIMARY KEY,

CoachName VARCHAR(50),

SportName VARCHAR(50),

Country VARCHAR(50)

);

-- Insert Sample Coaches

INSERT INTO CoachInfo VALUES (1, 'Ravi Shastri', 'Cricket', 'India');

INSERT INTO CoachInfo VALUES (2, 'Pep Guardiola', 'Football', 'Spain');

INSERT INTO CoachInfo VALUES (3, 'Patrick Mouratoglou', 'Tennis', 'France');

INSERT INTO CoachInfo VALUES (4, 'Pullela Gopichand', 'Badminton', 'India');

INSERT INTO CoachInfo VALUES (5, 'Glen Mills', 'Athletics', 'Jamaica');

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-- STEP 3: JOIN Examples

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-- 1. INNER JOIN: Players with matching coaches

SELECT s.PlayerName, s.SportName, c.CoachName, c.Country AS CoachCountry

FROM SportsEntry s

INNER JOIN CoachInfo c

ON s.SportName = c.SportName;

-- 2. LEFT JOIN: All players, even if no coach

SELECT s.PlayerName, s.SportName, c.CoachName

FROM SportsEntry s

LEFT JOIN CoachInfo c

ON s.SportName = c.SportName;

-- 3. RIGHT JOIN: All coaches, even if no player

SELECT s.PlayerName, s.SportName, c.CoachName

FROM SportsEntry s

RIGHT JOIN CoachInfo c

ON s.SportName = c.SportName;

-- 4. FULL OUTER JOIN: All players and all coaches (works in SQL Server/Postgres)

-- MySQL workaround: LEFT JOIN UNION RIGHT JOIN

SELECT s.PlayerName, s.SportName, c.CoachName

FROM SportsEntry s

LEFT JOIN CoachInfo c

ON s.SportName = c.SportName

UNION

SELECT s.PlayerName, s.SportName, c.CoachName

FROM SportsEntry s

RIGHT JOIN CoachInfo c

ON s.SportName = c.SportName;

-- 5. CROSS JOIN: All possible player–coach pairs

SELECT s.PlayerName, c.CoachName, s.SportName, c.Country AS CoachCountry

FROM SportsEntry s

CROSS JOIN CoachInfo c;