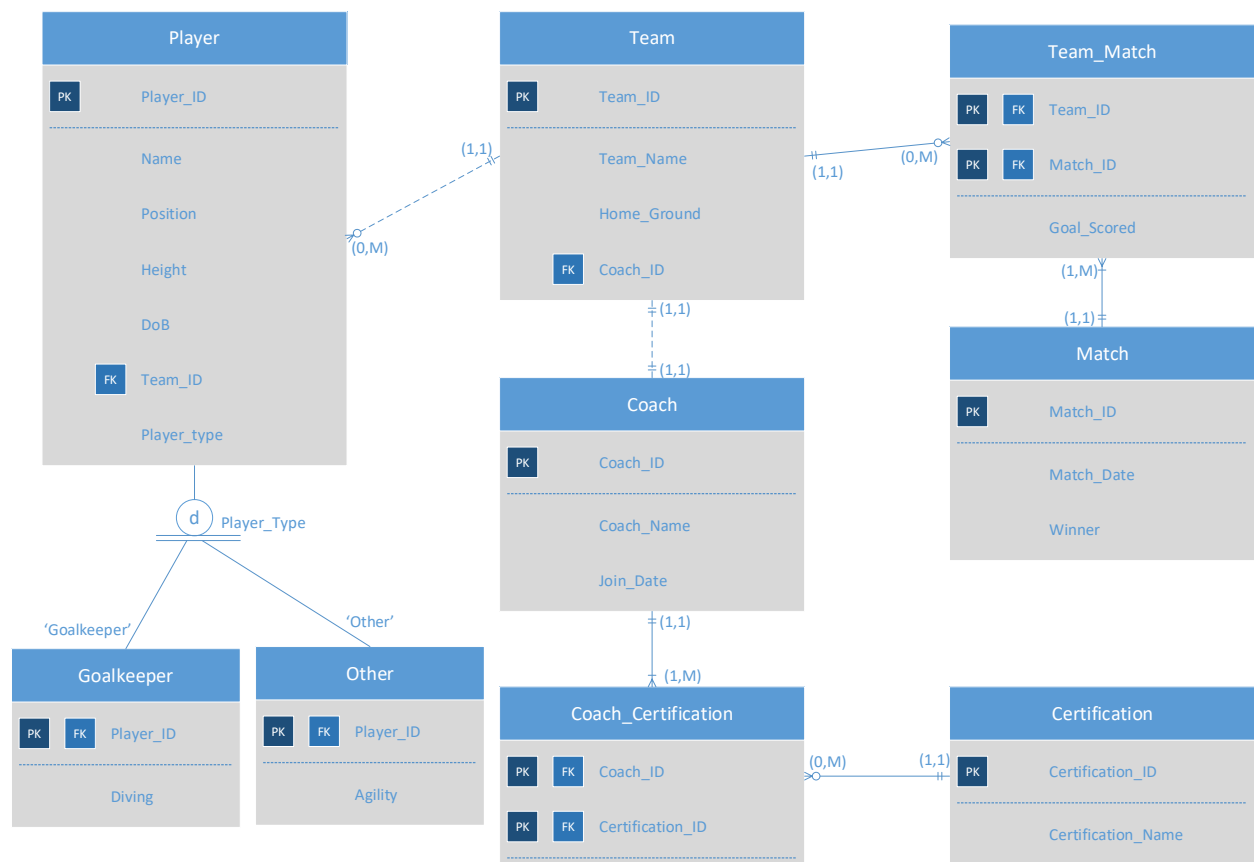


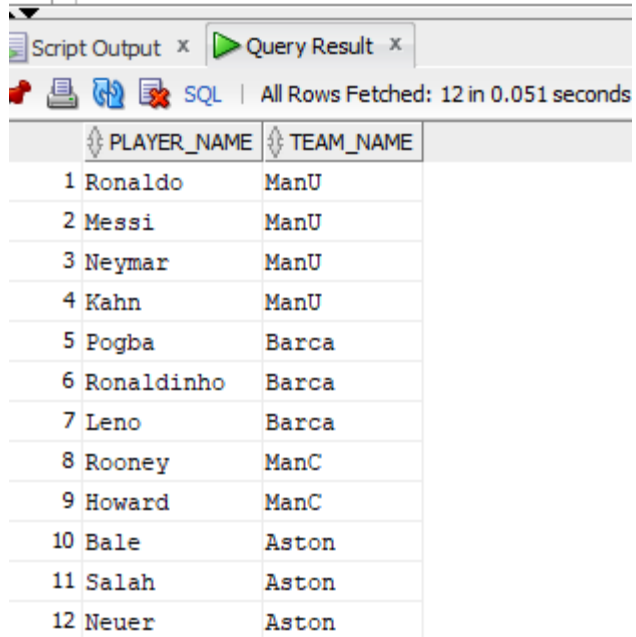
Project Report 4



1. .

```
-- JIYAD UR REHMAN  
-- 1
```

```
Select p.player_name, t.team_name FROM  
Player p, Team t WHERE  
t.team_id = p.team_id;
```



The screenshot shows a database query result window. At the top, there are tabs for 'Script Output' and 'Query Result'. Below the tabs, there is a status bar that says 'SQL | All Rows Fetched: 12 in 0.051 seconds'. The main area of the window displays a table with two columns: 'PLAYER_NAME' and 'TEAM_NAME'. The table contains 12 rows of data, numbered 1 through 12. The players and their teams are: Ronaldo (ManU), Messi (ManU), Neymar (ManU), Kahn (ManU), Pogba (Barca), Ronaldinho (Barca), Leno (Barca), Rooney (ManC), Howard (ManC), Bale (Aston), Salah (Aston), and Neuer (Aston).

	PLAYER_NAME	TEAM_NAME
1	Ronaldo	ManU
2	Messi	ManU
3	Neymar	ManU
4	Kahn	ManU
5	Pogba	Barca
6	Ronaldinho	Barca
7	Leno	Barca
8	Rooney	ManC
9	Howard	ManC
10	Bale	Aston
11	Salah	Aston
12	Neuer	Aston

The query extracts the player names and the team name for which these player plays.

2. .

```
-- JIYAD UR REHMAN
-- 2
Select p.player_name, t.team_name FROM
Player p JOIN Team t USING (team_id);
-- JIYAD UR REHMAN
```

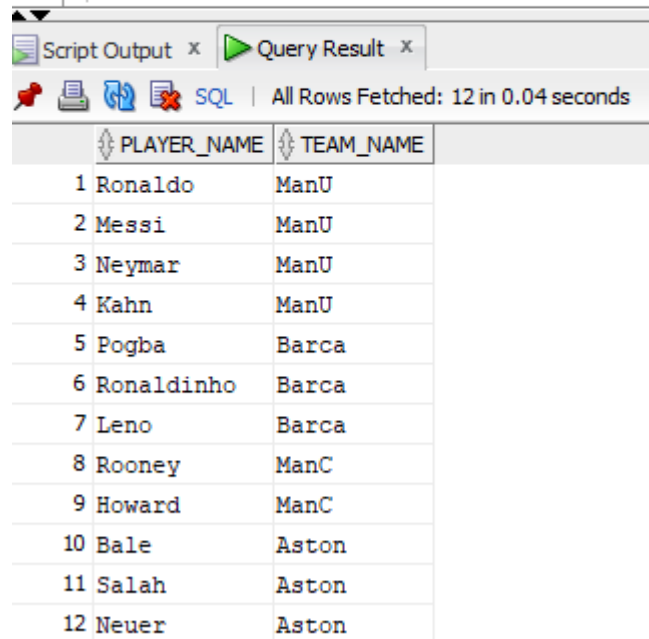
	PLAYER_NAME	TEAM_NAME
1	Ronaldo	ManU
2	Messi	ManU
3	Neymar	ManU
4	Kahn	ManU
5	Pogba	Barca
6	Ronaldinho	Barca
7	Leno	Barca
8	Rooney	ManC
9	Howard	ManC
10	Bale	Aston
11	Salah	Aston
12	Neuer	Aston

The query extracts the player names and the team name for which these player plays through JOIN...USING

3. .

```
-- JIYAD UR REHMAN  
-- 3
```

```
Select p.player_name, t.team_name FROM  
Player p JOIN Team t ON  
t.team_id = p.team_id;
```



	PLAYER_NAME	TEAM_NAME
1	Ronaldo	ManU
2	Messi	ManU
3	Neymar	ManU
4	Kahn	ManU
5	Pogba	Barca
6	Ronaldinho	Barca
7	Leno	Barca
8	Rooney	ManC
9	Howard	ManC
10	Bale	Aston
11	Salah	Aston
12	Neuer	Aston

The query extracts the player names and the team name for which these player plays through JOIN...ON

4. .

```
-- JIYAD UR REHMAN
-- 4

Select p.player_name, t.team_name, p.height FROM
Player p, Team t WHERE
t.team_id = p.team_id AND
p.height > 180 AND t.team_name LIKE ('Ma%');
```

```
-- JIYAD UR REHMAN
```

Script Output x Query Result x

SQL | All Rows Fetched: 6 in 0.036 seconds

	PLAYER_NAME	TEAM_NAME	HEIGHT
1	Ronaldo	ManU	182
2	Messi	ManU	184
3	Neymar	ManU	188
4	Kahn	ManU	181
5	Rooney	ManC	187
6	Howard	ManC	183

The query extracts player name, team name, and height of the player whose height is greater than 180 cm and his team name starts with 'Ma'

5. .

```
-- JIYAD UR REHMAN
-- 5

Select p.player_name, t.team_name FROM
Player p JOIN Team t USING (team_id) WHERE
p.DOB < '31-DEC-90' AND t.team_name IN ('Aston','Barca');
```

```
-- JIYAD UR REHMAN
```

Script Output x Query Result x

SQL | All Rows Fetched: 4 in 0.022 seconds

	PLAYER_NAME	TEAM_NAME
1	Pogba	Barca
2	Ronaldinho	Barca
3	Leno	Barca
4	Bale	Aston

The query extracts player name and their team names of all the players who were born before 31-Dec-90 and are either playing for Barca or Aston.

6. .

```
-- JIYAD UR REHMAN
-- 6

Select p.player_name, t.team_name, c.coach_name FROM
Player p, Team t, coach c WHERE
t.team_id = p.team_id AND
c.coach_id = t.coach_id;

-- JIYAD UR REHMAN
```

Script Output x Query Result x

SQL | All Rows Fetched: 12 in 0.028 seconds

	PLAYER_NAME	TEAM_NAME	COACH_NAME
1	Ronaldo	ManU	Zidane
2	Messi	ManU	Zidane
3	Neymar	ManU	Zidane
4	Kahn	ManU	Zidane
5	Pogba	Barca	Beckham
6	Ronaldinho	Barca	Beckham
7	Leno	Barca	Beckham
8	Rooney	ManC	Carlos
9	Howard	ManC	Carlos
10	Bale	Aston	Fido
11	Salah	Aston	Fido
12	Neuer	Aston	Fido

The query extracts the player names their team name and coach name of that teams.

7. .

```
-- JIYAD UR REHMAN
-- 7

Select p.player_name, t.team_name, c.coach_name FROM
Player p JOIN Team t USING (team_id) JOIN coach c USING (coach_id);

-- JIYAD UR REHMAN
```

	PLAYER_NAME	TEAM_NAME	COACH_NAME
1	Ronaldo	ManU	Zidane
2	Messi	ManU	Zidane
3	Neymar	ManU	Zidane
4	Kahn	ManU	Zidane
5	Pogba	Barca	Beckham
6	Ronaldinho	Barca	Beckham
7	Leno	Barca	Beckham
8	Rooney	ManC	Carlos
9	Howard	ManC	Carlos
10	Bale	Aston	Fido
11	Salah	Aston	Fido
12	Neuer	Aston	Fido

The query extracts the player names their team name and coach name of that teams through JOIN...USING.

8. .

```
-- JIYAD UR REHMAN
-- 8

Select p.player_name, t.team_name, c.coach_name FROM
Player p JOIN Team t ON
t.team_id = p.team_id JOIN coach c ON
c.coach_id = t.coach_id;

-- JIYAD UR REHMAN
```

Script Output x Query Result x

SQL | All Rows Fetched: 12 in 0.019 seconds

	PLAYER_NAME	TEAM_NAME	COACH_NAME
1	Ronaldo	ManU	Zidane
2	Messi	ManU	Zidane
3	Neymar	ManU	Zidane
4	Kahn	ManU	Zidane
5	Pogba	Barca	Beckham
6	Ronaldinho	Barca	Beckham
7	Leno	Barca	Beckham
8	Rooney	ManC	Carlos
9	Howard	ManC	Carlos
10	Bale	Aston	Fido
11	Salah	Aston	Fido
12	Neuer	Aston	Fido

The query extracts the player names their team name and coach name of that teams through JOIN...ON.

9. .


```
-- JIYAD UR REHMAN
-- 9

Select p.player_name, t.team_name, p.height, c.coach_name FROM
Player p, Team t, coach c WHERE
t.team_id = p.team_id AND
c.coach_id = t.coach_id AND
p.height > 180 AND t.team_name LIKE ('Ma%');
```

Script Output x Query Result x

SQL | All Rows Fetched: 6 in 0.022 seconds

	PLAYER_NAME	TEAM_NAME	HEIGHT	COACH_NAME
1	Ronaldo	ManU	182	Zidane
2	Messi	ManU	184	Zidane
3	Neymar	ManU	188	Zidane
4	Kahn	ManU	181	Zidane
5	Rooney	ManC	187	Carlos
6	Howard	ManC	183	Carlos

The query extract the player name their team name, and the coach of the team for the players whose height is more than 180cm and their team name starts with 'Ma'.

10. .

```
-- JIYAD UR REHMAN
-- 10

Select p.player_name, t.team_name, c.coach_name, g.diving FROM
Player p, Team t, coach c, goalkeeper g WHERE
t.team_id = p.team_id AND
c.coach_id = t.coach_id AND
g.player_id = p.player_id AND
t.team_name LIKE ('Ma%') AND
g.diving > 95;
```

-- DROP Commands

Script Output x Query Result x

SQL | All Rows Fetched: 1 in 0.024 seconds

	PLAYER_NAME	TEAM_NAME	COACH_NAME	DIVING
1	Howard	ManC	Carlos	98

The query extracts the names of the goalkeeper, his team name, his coach name and diving capability whose diving capability is more than 95 and his team name starts with 'Ma'

CODE

```
CREATE TABLE PLAYER
(
  Player_ID NUMBER(4),
  Player_Name Varchar2(25),
  Player_Position char(2),
  Height NUMBER(4,1),
  DoB Date,
  Team_ID Number(4),
  Player_Type Char(10),

  CONSTRAINT Player_PlayerID_PK Primary KEY (Player_ID),
  CONSTRAINT Player_Type_ck CHECK (Player_Type IN ('Goalkeeper', 'Other'))

);

CREATE TABLE TEAM
(
  Team_ID Number(4),
  Team_Name Varchar2(25),
  Home_Ground VARCHAR2(25),
  Coach_ID Number(4) NOT NULL,

  CONSTRAINT Team_TeamID_PK Primary KEY (Team_ID),
  CONSTRAINT Team_CoachID_UK UNIQUE (Coach_ID)

);

CREATE TABLE TEAM_MATCH
(
  Team_ID Number(4),
  Match_ID Number(4),
  Goal_Scored Number(2) DEFAULT 0 NOT NULL,

  CONSTRAINT Team_Match_PK Primary KEY (Team_ID, Match_ID)

);
```

```
CREATE TABLE MATCH
(
  Match_ID Number(4),
  Winner Varchar2(25),
  Match_Date Date,

  CONSTRAINT Match_MatchID_PK Primary KEY (Match_ID)

);
```

```
CREATE TABLE COACH
(
  Coach_ID Number(4),
  Coach_Name Varchar2(25),
  Join_Date Date,

  CONSTRAINT Coach_CoachID_PK Primary KEY (Coach_ID)

);
```

```
CREATE TABLE COACH_CERTIFICATION
(
  Coach_ID Number(4),
  CERTIFICATION_ID Number(4),

  CONSTRAINT Coach_Certification_PK Primary KEY (Coach_ID, CERTIFICATION_ID)

);
```

```
CREATE TABLE CERTIFICATION
(
  CERTIFICATION_ID Number(4),
  CERTIFICATION_Name Varchar2(25),

  CONSTRAINT Certification_CertificationID_PK Primary KEY (CERTIFICATION_ID)

);
```

```
CREATE TABLE GOALKEEPER
(
  Player_ID NUMBER(4),
  Diving Number(2),

  CONSTRAINT GOALKEEPER_PlayerID_PK Primary KEY (Player_ID)

);
```

```
CREATE TABLE OTHER
(
  Player_ID NUMBER(4),
  Agility Number(2),

  CONSTRAINT OTHER_PlayerID_PK Primary KEY (Player_ID)

);
```

-- ADDING FOREIGN KEYS

```
--Players
ALTER TABLE PLAYER
  ADD CONSTRAINT Player_TeamID_FK FOREIGN KEY (Team_ID)
    REFERENCES TEAM (Team_ID);
```

```
--Team
ALTER TABLE TEAM
  ADD CONSTRAINT Team_CoachID_FK FOREIGN KEY (Coach_ID)
    REFERENCES COACH (Coach_ID);
```

```
--Team_Match
ALTER TABLE TEAM_MATCH
  ADD CONSTRAINT Team_Match_TeamID_FK FOREIGN KEY (Team_ID)
    REFERENCES TEAM (Team_ID);
```

```
ALTER TABLE TEAM_MATCH
  ADD CONSTRAINT Team_Match_MatchID_FK FOREIGN KEY (Match_ID)
    REFERENCES MATCH (Match_ID);
```

```
--Coach_Certification
```

```
ALTER TABLE Coach_Certification
ADD CONSTRAINT Coach_Certification_CoachID_FK FOREIGN KEY (Coach_ID)
REFERENCES COACH (Coach_ID);
```

```
ALTER TABLE Coach_Certification
ADD CONSTRAINT Coach_Certification_CertificationID_FK FOREIGN KEY (Certification_ID)
REFERENCES CERTIFICATION (Certification_ID);
```

```
--Goalkeeper
```

```
ALTER TABLE Goalkeeper
ADD CONSTRAINT Goalkeeper_PlayerID_FK FOREIGN KEY (Player_ID)
REFERENCES PLAYER (Player_ID);
```

```
--Other
```

```
ALTER TABLE Other
ADD CONSTRAINT Other_PlayerID_FK FOREIGN KEY (Player_ID)
REFERENCES PLAYER (Player_ID);
```

```
--
```

```
*****
*****
```

```
-- INSERT COMMANDS
```

```
--
```

```
*****
*****
```

```
-- Coach
```

```
INSERT INTO COACH VALUES (1000, 'Zidane', '02-Jan-2019');
```

```
INSERT INTO COACH VALUES (1001, 'Beckham', '20-Feb-2019');
```

```
INSERT INTO COACH VALUES (1002, 'Carlos', '02-May-2019');
```

```
INSERT INTO COACH VALUES (1003, 'Fido', '18-Jun-2019');
```

```
-- Team
```

```
INSERT INTO TEAM VALUES (2000, 'ManU', 'Green', 1000);
```

```
INSERT INTO TEAM VALUES (2001, 'Barca', 'Blue', 1001);
```

```
INSERT INTO TEAM VALUES (2002, 'ManC', 'Red', 1002);
```

```
INSERT INTO TEAM VALUES (2003, 'Aston', 'White', 1003);
```

```
-- Match
```

```
INSERT INTO MATCH VALUES (3000, 'ManU', '01-Oct-2019');
```

```
INSERT INTO MATCH VALUES (3001, 'Barca', '02-Oct-2019');
```

```
-- Certification
```

```
INSERT INTO CERTIFICATION VALUES (4000, 'Attack');
```

```
INSERT INTO CERTIFICATION VALUES (4001, 'Defend');
```

```
INSERT INTO CERTIFICATION VALUES (4002, 'Mid');
```

```
-- Team_Match
```

```
INSERT INTO TEAM_MATCH VALUES (2000, 3000, 2);
```

```
INSERT INTO TEAM_MATCH VALUES (2003, 3000, 1);
```

```
INSERT INTO TEAM_MATCH VALUES (2001, 3001, 1);
```

```
INSERT INTO TEAM_MATCH VALUES (2002, 3001, 0);
```

```
-- Coach_Certification
```

```
INSERT INTO COACH_CERTIFICATION VALUES (1000, 4000);
```

```
INSERT INTO COACH_CERTIFICATION VALUES (1000, 4001);
```

```
INSERT INTO COACH_CERTIFICATION VALUES (1000, 4002);
```

```
INSERT INTO COACH_CERTIFICATION VALUES (1001, 4002);
```

```
INSERT INTO COACH_CERTIFICATION VALUES (1002, 4001);
```

```
INSERT INTO COACH_CERTIFICATION VALUES (1003, 4001);
```

```
INSERT INTO COACH_CERTIFICATION VALUES (1003, 4002);
```

```
-- Player
```

```
--          T1 2000
```

```
INSERT INTO PLAYER VALUES (0001, 'Ronaldo', 'CF', 182, '02-Jan-1982', 2000, 'Other');
```

```
INSERT INTO PLAYER VALUES (0002, 'Messi', 'LF', 184, '03-Feb-1982', 2000, 'Other');
```

```
INSERT INTO PLAYER VALUES (0003, 'Neymar', 'RM', 188, '22-Mar-1984', 2000, 'Other');
```

```
INSERT INTO PLAYER VALUES (0004, 'Kahn', 'GK', 181, '22-Jul-1984', 2000, 'Goalkeeper');
```

```
--          T2 2001
```

```
INSERT INTO PLAYER VALUES (0005, 'Pogba', 'LF', 183, '03-Feb-1982', 2001, 'Other');
```

```
INSERT INTO PLAYER VALUES (0006, 'Ronaldo', 'LM', 185, '22-Mar-1984', 2001, 'Other');
```

```
INSERT INTO PLAYER VALUES (0007, 'Leno', 'GK', 181, '22-Mar-1988', 2001, 'Goalkeeper');
```

```
--          T3 2002
```

```
INSERT INTO PLAYER VALUES (0008, 'Rooney', 'LM', 187, '01-Jan-1980', 2002, 'Other');
```

```
INSERT INTO PLAYER VALUES (0009, 'Howard', 'GK', 183, '20-Dec-1990', 2002, 'Goalkeeper');
```

```
--          T4 2003
```

```
INSERT INTO PLAYER VALUES (0010, 'Bale', 'CF', 184, '21-Oct-1988', 2003, 'Other');
```

```
INSERT INTO PLAYER VALUES (0011, 'Salah', 'LM', 189, '17-Nov-1994', 2003, 'Other');
```

```
INSERT INTO PLAYER VALUES (0012, 'Neuer', 'GK', 183, '29-Sep-1995', 2003, 'Goalkeeper');
```

```
-- Goalkeeper
```

```
INSERT INTO GOALKEEPER VALUES (0004, 95);
```

```
INSERT INTO GOALKEEPER VALUES (0007, 92);
```

```
INSERT INTO GOALKEEPER VALUES (0009, 98);
```

```
INSERT INTO GOALKEEPER VALUES (0012, 88);
```

```
-- Other
```

```
INSERT INTO OTHER VALUES (0001, 90);
```

```
INSERT INTO OTHER VALUES (0002, 91);
```

```
INSERT INTO OTHER VALUES (0003, 92);
```

```
INSERT INTO OTHER VALUES (0005, 98);
```

```
INSERT INTO OTHER VALUES (0006, 85);
```

```
INSERT INTO OTHER VALUES (0008, 82);
```

```
INSERT INTO OTHER VALUES (0010, 96);
```

```
INSERT INTO OTHER VALUES (0011, 96);
```

```
-- SELECT COMMANDS
```

```
-- JIYAD UR REHMAN
```

```
SELECT * FROM player;
```

```
-- JIYAD UR REHMAN
```

```
SELECT * FROM certification;
```

```
-- JIYAD UR REHMAN
```

```
SELECT * FROM coach;
```

```
-- JIYAD UR REHMAN
```

```
SELECT * FROM coach_certification;
```



```
-- JIYAD UR REHMAN  
SELECT * FROM goalkeeper;
```

```
-- JIYAD UR REHMAN  
SELECT * FROM match;
```

```
-- JIYAD UR REHMAN  
SELECT * FROM other;
```

```
-- JIYAD UR REHMAN  
SELECT * FROM team;
```

```
-- JIYAD UR REHMAN  
SELECT * FROM team_match;
```

```
-- Assignment 10 (JOINS)
```

```
-- JIYAD UR REHMAN  
-- 1
```

```
Select p.player_name, t.team_name FROM  
Player p, Team t WHERE  
t.team_id = p.team_id;
```

```
-- JIYAD UR REHMAN  
-- 2
```

```
Select p.player_name, t.team_name FROM  
Player p JOIN Team t USING (team_id);
```

```
-- JIYAD UR REHMAN  
-- 3
```

```
Select p.player_name, t.team_name FROM  
Player p JOIN Team t ON  
t.team_id = p.team_id;
```

```
-- JIYAD UR REHMAN  
-- 4
```

```
Select p.player_name, t.team_name, p.height FROM
Player p, Team t WHERE
t.team_id = p.team_id AND
p.height > 180 AND t.team_name LIKE ('Ma%');
```

```
-- JIYAD UR REHMAN
-- 5
```

```
Select p.player_name, t.team_name FROM
Player p JOIN Team t USING (team_id) WHERE
p.DOB < '31-DEC-90' AND t.team_name IN ('Aston','Barca');
```

```
-- JIYAD UR REHMAN
-- 6
```

```
Select p.player_name, t.team_name, c.coach_name FROM
Player p, Team t, coach c WHERE
t.team_id = p.team_id AND
c.coach_id = t.coach_id;
```

```
-- JIYAD UR REHMAN
-- 7
```

```
Select p.player_name, t.team_name, c.coach_name FROM
Player p JOIN Team t USING (team_id) JOIN coach c USING (coach_id);
```

```
-- JIYAD UR REHMAN
-- 8
```

```
Select p.player_name, t.team_name, c.coach_name FROM
Player p JOIN Team t ON
t.team_id = p.team_id JOIN coach c ON
c.coach_id = t.coach_id;
```

```
-- JIYAD UR REHMAN
-- 9
```

```
Select p.player_name, t.team_name, p.height, c.coach_name FROM
Player p, Team t, coach c WHERE
t.team_id = p.team_id AND
```

```
c.coach_id = t.coach_id AND  
p.height > 180 AND t.team_name LIKE ('Ma%');
```

```
-- JIYAD UR REHMAN
```

```
-- 10
```

```
Select p.player_name, t.team_name, c.coach_name, g.diving FROM  
Player p, Team t, coach c, goalkeeper g WHERE  
t.team_id = p.team_id AND  
c.coach_id = t.coach_id AND  
g.player_id = p.player_id AND  
t.team_name LIKE ('Ma%') AND  
g.diving > 95;
```

```
-- DROP Commands
```

```
DROP TABLE PLAYER CASCADE CONSTRAINTS;  
DROP TABLE TEAM CASCADE CONSTRAINTS;  
DROP TABLE COACH CASCADE CONSTRAINTS;  
DROP TABLE TEAM_MATCH CASCADE CONSTRAINTS;  
DROP TABLE MATCH CASCADE CONSTRAINTS;  
DROP TABLE COACH_CERTIFICATION CASCADE CONSTRAINTS;  
DROP TABLE CERTIFICATION CASCADE CONSTRAINTS;  
DROP TABLE GOALKEEPER CASCADE CONSTRAINTS;  
DROP TABLE OTHER CASCADE CONSTRAINTS;
```