Team Player Assignment

Roll No.: 243514

Name: Dhruva Rakesh B

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player (player_id, pname,speciality,date_of joining,num_matches,team_id)

team(team_id, tname,player_num) matches(match_id,

team1,team2,match_date,winner,man_of_the match) simple query

```
mysql> CREATE TABLE TEAM(
    -> TEAM_ID INT PRIMARY KEY,
    -> TNAME VARCHAR(20),
    -> PLAYER_NUM INT CHECK(PLAYER_NUM=11)
    -> );
Query OK, 0 rows affected (0.07 sec)
```

```
mysql> CREATE TABLE PLAYER(
    ->       PLAYER_ID INT PRIMARY KEY,
    ->       PNAME VARCHAR(20),
    ->       SPECIALITY VARCHAR(20),
    ->       DATE_OF_JOINING DATE,
    ->       NUM_MATCHES INT CHECK(NUM_MATCHES>=0),
    ->       TEAM_ID INT,
    ->       constraint TID FOREIGN KEY(TEAM_ID) REFERENCES TEAM(TEAM_ID)
    ->       );
Query OK, 0 rows affected (0.14 sec)
```

```
mysql> CREATE TABLE MATCHES(
    -> MATCH_ID INT PRIMARY KEY,
    -> TEAM1 INT,
    -> TEAM2 INT,
    -> MATCH_DATE DATE,
    -> WINNER VARCHAR(20),
    -> MAN_OF_THE_MATCH INT,
    -> constraint T1 FOREIGN KEY (TEAM1) REFERENCES TEAM(TEAM_ID),
    -> constraint T2 FOREIGN KEY (TEAM2) REFERENCES TEAM(TEAM_ID),
    -> constraint MOM FOREIGN KEY (MAN_OF_THE_MATCH) REFERENCES PLAYER(PLAYER_ID)
    -> );
Query OK, 0 rows affected (0.15 sec)
```

```
mysql> desc TEAM;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| TEAM_ID    | int         | NO   | PRI | NULL    |       |
| TNAME      | varchar(20) | YES  |     | NULL    |       |
| PLAYER_NUM | int         | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

```
mysql> desc PLAYER;
+-----------------+-------------+------+-----+---------+-------+
| Field           | Type        | Null | Key | Default | Extra |
+-----------------+-------------+------+-----+---------+-------+
| PLAYER_ID       | int         | NO   | PRI | NULL    |       |
| PNAME           | varchar(20) | YES  |     | NULL    |       |
| SPECIALITY      | varchar(20) | YES  |     | NULL    |       |
| DATE_OF_JOINING | date        | YES  |     | NULL    |       |
| NUM_MATCHES     | int         | YES  |     | NULL    |       |
| TEAM_ID         | int         | YES  | MUL | NULL    |       |
+-----------------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

```
mysql> desc MATCHES;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| MATCH_ID         | int         | NO   | PRI | NULL    |       |
| TEAM1            | int         | YES  | MUL | NULL    |       |
| TEAM2            | int         | YES  | MUL | NULL    |       |
| MATCH_DATE       | date        | YES  |     | NULL    |       |
| WINNER           | varchar(20) | YES  |     | NULL    |       |
| MAN_OF_THE_MATCH | int         | YES  | MUL | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

```
mysql> INSERT INTO TEAM VALUES(1, 'CSK', 11);
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO TEAM VALUES(2, 'DC', 11);
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO TEAM VALUES(3, 'GT', 11);
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO TEAM VALUES(4, 'KKR', 11);
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO TEAM VALUES(5, 'MI', 11);
Query OK, 1 row affected (0.04 sec)
```

```
mysql> select * from TEAM;
+---------+-------+------------+
| TEAM_ID | TNAME | PLAYER_NUM |
+---------+-------+------------+
|       1 | CSK   |         11 |
|       2 | DC    |         11 |
|       3 | GT    |         11 |
|       4 | KKR   |         11 |
|       5 | MI    |         11 |
+---------+-------+------------+
5 rows in set (0.00 sec)
```

1. display all players playerid, player name and experience

```
mysql> SELECT player_id, pname, TIMESTAMPDIFF(YEAR, date_of_joining, CURDATE()) AS experience
    -> FROM player;
+-----------+---------+------------+
| player_id | pname   | experience |
+-----------+---------+------------+
|        11 | Ruturaj |          9 |
+-----------+---------+------------+
1 row in set (0.02 sec)
```

2. display all player with experience > 5 years

```
mysql> SELECT player_id, pname, TIMESTAMPDIFF(YEAR, date_of_joining, CURDATE()) AS experience
    -> FROM player
    -> WHERE TIMESTAMPDIFF(YEAR, date_of_joining, CURDATE()) > 5;
+-----------+---------+------------+
| player_id | pname   | experience |
+-----------+---------+------------+
|        11 | Ruturaj |          9 |
+-----------+---------+------------+
1 row in set (0.01 sec)
```

3. display all players joined in march month, any year

```
mysql> SELECT player_id, pname, date_of_joining
    -> FROM player
    -> WHERE MONTH(date_of_joining) = 3;
Empty set (0.02 sec)
```

4. display all players joined in march 1995

```
mysql> SELECT player_id, pname, date_of_joining
    -> FROM player
    -> WHERE YEAR(date_of_joining) = 1995 AND MONTH(date_of_joining) = 3;
Empty set (0.00 sec)
```

5. display all player with number of matches played are either 5 or 10 or 8

```
mysql> SELECT p.player_id, p.pname, p.num_matches
    -> FROM player p
    -> WHERE p.num_matches IN (5, 10, 8);
Empty set (0.00 sec)
```

6. display all employees who are either batsman, bowler

```
mysql> SELECT p.player_id, p.pname, p.speciality
    -> FROM player p
    -> WHERE p.speciality IN ('batsman', 'bowler');
+-----------+---------+------------+
| player_id | pname   | speciality |
+-----------+---------+------------+
|        11 | Ruturaj | Batsman    |
+-----------+---------+------------+
1 row in set (0.00 sec)
```

7. display all employees who joined in year 1995 or 1996 or 1997

```
mysql> SELECT player_id, pname, date_of_joining
    -> FROM player
    -> WHERE YEAR(date_of_joining) IN (1995, 1996, 1997);
Empty set (0.00 sec)
```

Nested query

1. list all player who plays in virat kohalis team

```
mysql> SELECT p.player_id, p.pname, p.team_id
    -> FROM player p
    -> INNER JOIN team t ON p.team_id = t.team_id
    -> WHERE t.tname = 'Virat Kohli';
Empty set (0.01 sec)
```

2. list all players who played matches in year 2024

```
mysql> SELECT DISTINCT p.player_id, p.pname
    -> FROM player p
    -> INNER JOIN matches m ON p.team_id IN (m.team1, m.team2)
    -> WHERE YEAR(m.match_date) = 2024;
Empty set (0.02 sec)
```

3. list all matches in which man of the match is from team1

```
mysql> SELECT *
    -> FROM matches
    -> WHERE winner = team1;
Empty set (0.00 sec)
```

4. list all matches in which man of the match is from team1

```
mysql> SELECT *
    -> FROM matches
    -> WHERE winner = team1;
Empty set (0.00 sec)
```

5. list all matches in which csk team win.

```
mysql> SELECT *
    -> FROM matches
    -> WHERE winner = 'CSK';
Empty set (0.00 sec)
```

6. list all matches in which either csk or rcb team won the match

```
mysql> SELECT *
    -> FROM matches
    -> WHERE winner IN ('CSK', 'RCB');
Empty set (0.00 sec)
```

7. list all teams who one atleast one match

```
mysql> SELECT t.*
    -> FROM team t
    -> INNER JOIN matches m ON t.team_id = m.winner;
Empty set (0.00 sec)
```

8. list all teams who does not played any match

```
mysql> SELECT t.*
    -> FROM team t
    -> LEFT JOIN matches m ON t.team_id = m.team1 OR t.team_id = m.team2
    -> WHERE m.match_id IS NULL;
+---------+-------+------------+
| TEAM_ID | TNAME | PLAYER_NUM |
+---------+-------+------------+
|       1 | CSK   |         11 |
|       2 | DC    |         11 |
|       3 | GT    |         11 |
|       4 | KKR   |         11 |
|       5 | MI    |         11 |
+---------+-------+------------+
5 rows in set (0.00 sec)
```

9. list all team name, in which no players are their

```
mysql> SELECT t.tname
    -> FROM team t
    -> LEFT JOIN player p ON t.team_id = p.team_id
    -> WHERE p.player_id IS NULL;
+-------+
| tname |
+-------+
| DC    |
| GT    |
| KKR   |
| MI    |
+-------+
4 rows in set (0.01 sec)
```

10. list all players who are in dhoni's team

```
mysql> SELECT p.*
    -> FROM player p
    -> INNER JOIN team t ON p.team_id = t.team_id
    -> WHERE t.tname = 'Dhoni';
Empty set (0.00 sec)
```

11. list all players who are in either dhoni's or virat's team

```
mysql> SELECT p.*
    -> FROM player p
    -> INNER JOIN team t ON p.team_id = t.team_id
    -> WHERE t.tname IN ('Dhoni', 'Virat');
Empty set (0.00 sec)
```

12. find all team names who one more than 3 matches

```
mysql> SELECT t.tname
    -> FROM team t
    -> INNER JOIN (
    ->     SELECT winner, COUNT(*) AS num_matches
    ->     FROM matches
    ->     GROUP BY winner
    ->     HAVING num_matches > 3
    -> ) AS winners ON t.tname = winners.winner;
Empty set (0.00 sec)
```

create following tables.

**Table: Movies**

| Id | Title | Director | Year | Length_minutes | Release date |
|----|-------|----------|------|----------------|--------------|
| 1 | Toy Story | John Lasseter | 1995 | 81 | |
| 2 | A Bug's Life | John Lasseter | 1998 | 95 | |
| 3 | Toy Story 2 | John Lasseter | 1999 | 93 | |
| 4 | Monsters, Inc. | Pete Docter | 2001 | 92 | |
| 5 | Finding Nemo | Andrew Stanton | 2003 | 107 | |
| 6 | The Incredibles | Brad Bird | 2004 | 116 | |

movieid is primary key year >1970 length_minutes>15 min and < 240 mins Release_date >1990-12-31 default '1991-01-01' create table movie(movieid int primary key, title varchar(20), director varchar(20), year int chek(year>1990), length_min int check(length_min between 15 and 240) release_date date check(release_date>'1990-12-31') default '1991-01-01')

insert into movie values(1,'Toy story','John Lasseter',1995,81,'1995-03-02'); insert into movie values(2,'A Bugs Life','John Lasseter',1998,95,'1998-03-02');

```
mysql> CREATE TABLE Movies (
    ->     Id INT PRIMARY KEY,
    ->     Title VARCHAR(255),
    ->     Director VARCHAR(255),
    ->     Year INT,
    ->     Length_minutes INT,
    ->     Release_date DATE
    -> );
Query OK, 0 rows affected (0.09 sec)
```

```
mysql> INSERT INTO Movies (Id, Title, Director, Year, Length_minutes, Release_date)
    -> VALUES
    ->     (1, 'Toy Story', 'John Lasseter', 1995, 81, '1995-11-22'),
    ->     (2, 'A Bug''s Life', 'John Lasseter', 1998, 95, '1998-11-20'),
    ->     (3, 'Toy Story 2', 'John Lasseter', 1999, 93, '1999-11-24'),
    ->     (4, 'Monsters, Inc.', 'Pete Docter', 2001, 92, '2001-11-2'),
    ->     (5, 'Finding Nemo', 'Andrew Stanton', 2003, 107, '2003-05-30'),
    ->     (6, 'The Incredibles', 'Brad Bird', 2004, 116, '2004-10-27');
Query OK, 6 rows affected (0.04 sec)
Records: 6  Duplicates: 0  Warnings: 0
```

```
mysql> SELECT * FROM Movies;
+----+-----------------+----------------+------+----------------+--------------+
| Id | Title           | Director       | Year | Length_minutes | Release_date |
+----+-----------------+----------------+------+----------------+--------------+
|  1 | Toy Story       | John Lasseter  | 1995 |             81 | 1995-11-22   |
|  2 | A Bug's Life    | John Lasseter  | 1998 |             95 | 1998-11-20   |
|  3 | Toy Story 2     | John Lasseter  | 1999 |             93 | 1999-11-24   |
|  4 | Monsters, Inc.  | Pete Docter    | 2001 |             92 | 2001-11-02   |
|  5 | Finding Nemo    | Andrew Stanton | 2003 |            107 | 2003-05-30   |
|  6 | The Incredibles | Brad Bird      | 2004 |            116 | 2004-10-27   |
+----+-----------------+----------------+------+----------------+--------------+
6 rows in set (0.00 sec)
```

Table: Boxoffice

| Movie_id | Rating | Domestic_sales | International_sales |
|----------|--------|----------------|---------------------|
| 5        | 8.2    | 380843261      | 555900000           |
| 14       | 7.4    | 268492764      | 475066843           |
| 8        | 8      | 206445654      | 417277164           |
| 12       | 6.4    | 191452396      | 368400000           |
| 3        | 7.9    | 245852179      | 239163000           |
| 6        | 8      | 261441092      | 370001000           |

```
mysql> CREATE TABLE Boxoffice (
    ->     Movie_id INT,
    ->     Rating DECIMAL(3, 1),
    ->     Domestic_sales BIGINT,
    ->     International_sales BIGINT,
    -> CONSTRAINT fk_m FOREIGN KEY (Movie_id) REFERENCES Movies(Id) ON DELETE SET NULL ON UPDATE CASCADE
    -> );
Query OK, 0 rows affected (0.11 sec)
```

```
mysql> INSERT INTO Boxoffice (Movie_id, Rating, Domestic_sales, International_sales)
    -> VALUES
    ->     (5, 8.2, 380843261, 555900000),
    ->     (14, 7.4, 268492764, 475066843),
    ->     (8, 8.0, 206445654, 417277164),
    ->     (12, 6.4, 191452396, 368400000),
    ->     (3, 7.9, 245852179, 239163000),
    ->     (6, 8.0, 261441092, 370001000);
Query OK, 6 rows affected (0.03 sec)
Records: 6  Duplicates: 0  Warnings: 0
```

```
mysql> select * from Boxoffice;
+----------+--------+----------------+---------------------+
| Movie_id | Rating | Domestic_sales | International_sales |
+----------+--------+----------------+---------------------+
|        5 |    8.2 |      380843261 |           555900000 |
|       14 |    7.4 |      268492764 |           475066843 |
|        8 |    8.0 |      206445654 |           417277164 |
|       12 |    6.4 |      191452396 |           368400000 |
|        3 |    7.9 |      245852179 |           239163000 |
|        6 |    8.0 |      261441092 |           370001000 |
+----------+--------+----------------+---------------------+
6 rows in set (0.00 sec)
```