

QUERIES

1) Show all the league names after 2015 along with the cricket type, year and number of teams playing for that specific league. Order by league year with the latest first.

If the users want to see all the leagues after some year with cricket type and number of teams playing for that league one can use this query.

```
SELECT L.League_Name, L.League_Year, L.Type, COUNT(T.Team_ID) AS Total_Teams
FROM Leagues L
JOIN Teams_Selected T
ON L.League_ID = T.League_ID
WHERE L.League_Year > 2015
GROUP BY L.League_Year
ORDER BY L.League_Year DESC;
```

2) Show all players' names along with teams they are playing for and their ages.

If the team owner wants to see ages of players (as age is one of the factors need to be considered for knowing fitness) to choose players for a match, they can use this query.

```
SELECT P.Player_Name, T.Team_Name, TIMESTAMPDIFF(YEAR, Date_of_Birth, CURDATE()) AS Age
FROM Players P
JOIN Teams T
ON P.Team_ID = T.Team_ID
ORDER BY T.Team_Name;
```

3) Sometimes user wants to see all leagues along with the winner team. In that case they can use this query. This will show all leagues with year and winning team.

```
SELECT L.League_Name, L.League_Year, T.Team_Name AS Winner_team
FROM Leagues L
JOIN Matches M
ON M.League_ID = L.League_ID
JOIN Scores S
ON S.Match_ID = M.Match_ID
JOIN Teams T
ON T.Team_ID = S.Team_ID
WHERE M.Match_Type LIKE "Final" AND S.Runs IN (SELECT MAX(Runs) FROM Scores GROUP BY Match_ID)
GROUP BY L.League_ID;
```

4) This query shows all the matches along with venue name, city, country, stadium capacity, date, and time for the league 'ICC Cricket World Cup' in 2015.

Sometimes users want to see the match schedules along with venue, to book a ticket for attending the match.

```
SELECT M.Match_Type, S.Stadium_Name, S.City, S.Stadium_Country, S.Capacity AS Stadium_Capacity,
M.Date_and_Time
FROM Matches M
JOIN Stadiums S
ON S.Stadium_ID = M.Stadium_ID
JOIN Leagues L
ON L.League_ID = M.League_ID
WHERE L.League_Name = 'ICC Cricket World Cup' AND L.League_Year = 2015
ORDER BY Date_and_Time ASC;
```

5) This query shows all the player names along with the batting averages and number of matches played in all the leagues.

If the selection team wants to check the batting averages of players to select players for further leagues, they can use this query. A fan, who is interested in seeing batting average of a player can also use this query.

```
SELECT P.Player_Name, L.League_Name, L.League_Year, COUNT(PS.Match_ID) AS Matches_Played,
ROUND(AVG(PS.Runs), 2) AS Batting_Average
FROM Players P
JOIN Player_Stats PS
ON P.Player_ID = PS.Player_ID
JOIN Matches M
ON M.Match_ID = PS.Match_ID
JOIN Leagues L
ON L.League_ID = M.League_ID
GROUP BY PS.Player_ID
ORDER BY L.League_Year;
```

6) This query shows all the player names with highest strike rate in each match for the tournament or league ICC Cricket World Cup in 2015.

If a cricket organization wants to check the strike rate of each player to assign 'man of the match' or 'best player' awards can use this query. Fans can also use this query to see players performances.

```
SELECT P.Player_Name, M.Match_ID, ROUND(((PS.Runs/PS.Balls_Played)*100), 2) AS Strike_Rate
FROM Players P
JOIN Player_Stats PS
ON P.Player_ID = PS.Player_ID
JOIN Matches M
ON M.Match_ID = PS.Match_ID
JOIN Leagues L
ON L.League_ID = M.League_ID
WHERE L.League_Name = 'ICC Cricket World Cup' AND L.League_Year = 2015
AND (PS.Runs/PS.Balls_Played)*100 IN (SELECT MAX((Runs/Balls_Played)*100)
                                     FROM Player_Stats
                                     GROUP BY Match_ID)
GROUP BY Match_ID;
```

7) Create a view to display all the players with strike rate over 100. Show all the players name with strike rate more than 100 with their match ID and team name.

This query can be used by the selection team to choose best players for a particular team.

```
CREATE VIEW Strike_Rates AS
SELECT Player_ID, ((Runs/Ball_Played)*100) AS Strick_Rate
FROM Player_Stats
WHERE Strick_Rate > 100 ;
```

```
SELECT P.Player_Name, T.Team_Name
FROM Players P
JOIN Teams T
ON P.Team_ID = T.Team_ID
WHERE P.Player_ID IN (SELECT Player_ID FROM strike_rates);
```

8) Show all the teams with their owner and coach, selected for Cricket World Cup in 2019.

If anyone interested in seeing the owner's name and coach of all teams for a particular league, they can use this query.

```
SELECT T.Team_Name, T.Owner, T.Coach
FROM Teams T
JOIN Teams_Selected TS
ON T.Team_ID = TS.Team_ID
JOIN Leagues L
ON L.League_ID = TS.League_ID
WHERE L.League_Name = "ICC Cricket World Cup" AND L.League_Year = 2019
ORDER BY T.Team_Name ASC;
```

SQL Queries used for Web Interface.

#1 To check matches details of a league.

```
CREATE PROCEDURE IF NOT EXISTS Team_Results
(IN Cricket_Type VARCHAR(50), IN League VARCHAR(100), IN League_Year INT)

SELECT M.Match_Type, M.Date_and_Time, T.Team_Name AS Winner, S.Runs AS Total_Runs,
S.Wickets
FROM Matches M
JOIN Scores S
ON M.Match_ID = S.Match_ID
JOIN Teams T
ON S.Team_ID = T.Team_ID
JOIN Leagues L
ON L.League_ID = M.League_ID
WHERE L.Type LIKE Cricket_Type AND L.League_Name LIKE League AND L.League_Year = League_Year
AND S.Runs IN (SELECT MAX(Runs) FROM Scores GROUP BY Match_ID)
GROUP BY M.Match_ID;
```

#2 To check players stats for a particular cricket type and a team.

```
CREATE PROCEDURE IF NOT EXISTS Players_Stats  
(IN Cricket_Type VARCHAR(10), IN Team INT)
```

```
SELECT P.Player_Name, P.Player_Type, COUNT(PS.Match_ID) AS Matches_Played, SUM(PS.Runs) AS  
Total_Runs, ROUND(SUM(PS.Runs)/COUNT(PS.Match_ID), 2) AS Batting_Average, SUM(PS.Wickets)  
As Total_Wickets  
FROM Players P  
LEFT JOIN Player_Stats PS  
ON P.Player_ID = PS.Player_ID  
JOIN Matches M  
ON PS.Match_ID = M.Match_ID  
JOIN Leagues L  
ON L.League_ID = M.League_ID  
WHERE L.Type = Cricket_Type AND P.Team_ID = Team  
GROUP BY PS.Player_ID  
ORDER BY Total_Runs DESC;
```