

Q4. Database task (25 points)

You have been given a cricket database of IPL 2022 that has already happened. It contains 3 tables. There are 10 teams in IPL 2022.

1- Summary Table, containing summary of each match of both teams.

2- Scoreboard, scoreboard of each match. There will be 22 columns for players, 2 columns for total run by each team, and 1 uniqueId column, so a total of 25 columns. (Hint: for player column consider value stored as string "playerId-runScored", e.x "11-64")

3- Players table, players basic information lets say name, age, playerId. This table contain only player who played IPL 2020

Write SQL/MongoDb query of below questions. You are free to include required columns in the above table required to form a query.

1) Write query to return top 4 team from 10 teams



2) Highest run scored by each batsman. Output should contain name, playerId, highestRun.

3) Which team has hit maximum sixes in the entire tournament. Hint: Use the summary table for this, it will contain sixes hit in each match.

1) Write query to return top 4 team from 10 teams

In Scoreboard table there is 2(two) columns for total run by each team and teamName

```
SELECT teamName, SUM(run) AS TotalRun FROM SCOREBOARD GROUP  
BY teamName ORDER BY TotalRun DESC LIMIT 4;
```

2) Highest run scored by each batsman

In scoreboard table there is 22 columns for players which contain player name, playerId-runScored and many more. From that above column name we can select name playerId and runscore by batsman. We can separate the "playerId-runScored" the column name using **SUBSTRING_INDEX** function for query.

```
SELECT name, SUBSTRING_INDEX(playerId-runScored,"-",1) AS playerId,  
MAX(SUBSTRING_INDEX(playerId-runScored,"-",1) FROM  
SCOREBOARD GROUP BY SUBSTRING_INDEX(playerId-runScored,"-",1);
```

3) Which team has hit maximum sixes

In Summary table it contains columns like teamName, sixes of each team.

```
SELECT teamName, SUM(sixes) as totalSixes FROM SUMMARY GROUP  
BY teamName ORDER BY totalSixes DESC LIMIT 1;
```