**SQL – II PROJECT**

IPL DATASET

Q1

Show the percentage of wins of each bidder in the order of highest to lowest percentage.

1. SELECT bidder\_id, bidder\_name,

2. IFNULL(Win\_count, 0) AS Win\_Count,

3. IFNULL(Total\_count, 0) AS Total\_Count,

4. IFNULL(Win\_Percentage, 0) AS Win\_Percentage FROM ipl\_bidder\_details

5. LEFT JOIN

6. (Select \*, ROUND((Win\_count/Total\_count\*100), 2) AS Win\_Percentage FROM

7. (SELECT Bidder\_id, COUNT(\*) AS Win\_count FROM ipl\_bidding\_details

8. WHERE bid\_status = "Won"

9. GROUP BY bidder\_id) AS t1

10. JOIN

11. (SELECT bidder\_id, COUNT(\*) AS Total\_count FROM ipl\_bidding\_details

12. GROUP BY bidder\_id) AS t2

13. USING(bidder\_id)) AS t3

14. USING(bidder\_id)

15. ORDER BY Win\_Percentage DESC;

**Insights:**

Bidder, Megaduta Dheer has highest win percentage i.e., 100%. There are total 30 bidders in that 3 bidders have not bided even for a single match that is approximately 10% of the total bidders. From this we can infer that in a set of bidders there are at least 10% people who just enroll but don't bid in matches.

Q2

Display the number of matches conducted at each stadium with the stadium name and city.

1. SELECT stadium\_id, stadium\_name, city, No\_of\_matches\_played FROM

2. (SELECT Stadium\_id, COUNT(match\_id) AS No\_of\_matches\_played FROM ipl\_match\_schedule

3. GROUP BY stadium\_id) AS t1

4. JOIN ipl\_stadium

5. USING(stadium\_id);

**Insights:**

By the output we can say that top matches that is 18 matches have been played in Wankhede Stadium which is in Mumbai and the least matches have been played in Hyderabad and Pune that is 7 matches each.

Q3

In a given stadium, what is the percentage of wins by a team that has won the toss?

1. SELECT \*, ROUND(Won\_toss\_and\_match/No\_of\_matches\_played \* 100, 2) AS Percentage\_of\_won FROM

2. (SELECT stadium\_id, stadium\_name, city, No\_of\_matches\_played FROM

3. (SELECT Stadium\_id, COUNT(match\_id) AS No\_of\_matches\_played FROM ipl\_match\_schedule

4. GROUP BY stadium\_id) AS t1

5. JOIN ipl\_stadium

6. USING(stadium\_id)) AS t3

7. JOIN

8. (SELECT stadium\_id, COUNT(\*) AS Won\_toss\_and\_match FROM

9. (SELECT match\_id FROM ipl\_match

10. WHERE toss\_winner = match\_winner) AS t2

11. JOIN ipl\_match\_schedule

12. USING(match\_id)

13. GROUP BY stadium\_id) AS t4

14. USING(stadium\_id);

**Insights:**

From the data we can tell that the top win percentage is 70% and that percentage has been brought by stadium Swame Mansingh Stadium which is located in Jaipur. In that stadium 10 matches have been played. In those 10 matches 7 matches have been won by the team and the same team has won the toss in that respective matches too. And the least we can tell that is 14.29% that is in Rajogan International Stadium which is located in Hyderabad. In that 7 matches have been played and those 7 matches only one match have been won by same team which won the match and the toss.

Q4

Show the total bids along with the bid team and team name.

1. SELECT Team\_name, bid\_team, Total\_bids FROM

2. (SELECT bid\_team, COUNT(bidder\_id) as Total\_bids FROM ipl\_bidding\_details

3. GROUP BY bid\_team) AS t1

4. JOIN ipl\_team

5. ON ipl\_team.team\_id = t1.bid\_team;

**Insights:**

From the data we can tell that highest number of bids have been placed on Sunrisers Hyderabad team 32 bids have been placed on that team and the least has been placed on 3 teams i.e. Chennai Super Kings, Kolkata Knight Riders and Mumbai Indians On each team 22 bids have been placed From this data we can infer that people are pretty much confident enough on Sunrisers Hyderabad that the team may win or lose and people are very doubtful about the winning or losing on CSK, Kolkata Knight Riders and Mumbai Indians

Q5

Show the team ID who won the match as per the win details.

1. SELECT team\_id, team\_name, win\_details, match\_id FROM

2. (SELECT match\_id, IF(match\_winner = 1, team\_id1, team\_id2) AS team\_id, win\_details FROM ipl\_match) AS t1

3. JOIN ipl\_team

4. USING(team\_id);

**Insights:**

from the output given by the above query we can tell that if in windytales if it is mentioned that team won by 7 wickets then we can tell that that respective team has opted bowling first and later they did batting suppose if the team has like team won by 35 runs then we can tell that that respective team has opted batting first and later on they have did bowling and they won the match

Q6

Display the total matches played, total matches won and total matches lost by the team along with its team name.

1. CREATE VIEW v2 AS

2. (SELECT team\_id1 FROM ipl\_match

3. UNION ALL

4. SELECT team\_id2 FROM ipl\_match);

5.

6. SELECT \* FROM v2;

7.

8. SELECT \*, (Total\_matches\_palyed - Total\_matches\_won) AS Total\_matches\_lost FROM

9. (WITH t3 AS

10. (SELECT \*, COUNT(\*) AS Total\_matches\_won FROM

11. (SELECT IF(match\_winner = 1, team\_id1, team\_id2) AS team\_id FROM ipl\_match) AS t2

12. GROUP BY team\_id)

13.

14. SELECT team\_id,team\_name,

15. COUNT(team\_id1) AS Total\_matches\_palyed,

16. Total\_matches\_won FROM ipl\_team

17. JOIN v2

18. ON v2.team\_id1 = ipl\_team.team\_id

19. JOIN t3 USING(team\_id)

20. GROUP BY team\_id) AS t4;

**Insights:**

Highest number of matches has been played by Mumbai Indians and Rajasthan Royals and the least number of matches in this tournament has been played by Kolkata Knight Riders and the highest number of matches won is by Rajasthan Royals which is 20 and the least number of matches which has been won is by Delhi Daredevils, Kolkata Knight Riders and Royal Challengers Bangalore apart from these things one interesting finding is that Mumbai Indians which has played the highest matches in this tournament 32 but it has lost 17 matches in this tournament and won only 15 of the matches which have been played by Mumbai Indians

Q7

Display the bowlers for the Mumbai Indians team.

1. SELECT player\_id, player\_name, player\_role FROM ipl\_team\_players

2. JOIN ipl\_player USING(player\_id)

3. WHERE team\_id = 5 AND player\_role = "Bowler";

**Insights:**

There are total 9 bowlers in Mumbai Indians team.

Q8

How many all-rounders are there in each team, Display the teams with more than 4

all-rounders in descending order.

1. SELECT team\_id, team\_name, Count\_of\_allrounders FROM ipl\_team

2. JOIN

3. (SELECT team\_id, COUNT(\*) AS Count\_of\_allrounders FROM ipl\_team\_players

4. WHERE player\_role = "All-Rounder"

5. GROUP BY team\_id

6. HAVING Count\_of\_allrounders > 4

7. ORDER BY Count\_of\_allrounders DESC) AS T1

8. USING(team\_id);

**Insights:**

By executing the above query, we get the result, and the result tells that there are total 5 teams which have more than 4 all-rounders, and those teams are Delhi Daredevils, Kings XI Punjab, KKR, Rajasthan Royals, and Sunrisers. In these teams, there are 7 all-rounders in 2 teams i.e. Delhi Daredevils and Kings XI Punjab.

Q9

Write a query to get the total bidders' points for each bidding status of those bidders who bid on CSK when they won the match in M. Chinnaswamy Stadium bidding year-wise.

1. SELECT MIN(YEAR(bid\_date)), bid\_status, SUM(total\_points) FROM ipl\_match

2. JOIN ipl\_match\_schedule USING(match\_id)

3. JOIN ipl\_stadium USING(stadium\_id)

4. JOIN ipl\_bidding\_details USING(schedule\_id)

5. JOIN ipl\_bidder\_points USING(bidder\_id)

6. WHERE (team\_id1 = 1 OR team\_id2 = 1) AND match\_winner = 1 AND stadium\_name = "M. Chinnaswamy Stadium"

7. GROUP BY bid\_status

8. ORDER BY SUM(total\_points) DESC;

**Insights:**

By executing the above query we get the results which tells us that in 2017 the total points which has been scored by people who have bidded on CSK are 32 and who has just bidded scored 8 points.

Q10

Extract the Bowlers and All-Rounders that are in the 5 highest number of wickets.

1. SELECT player\_id, CONVERT(wickets\_took, DECIMAL) AS wickets\_took, player\_role FROM ipl\_team\_players

2. JOIN

3. (SELECT player\_id, wickets\_took FROM

4. ((SELECT \*, SUBSTRING(performance\_dtls, p1, p2-p1) AS Wickets\_took FROM

5. (SELECT Player\_id, performance\_dtls, POSITION("wkt" IN performance\_dtls) + 4 AS p1 FROM ipl\_player) AS t1

6. JOIN

7. (SELECT Player\_id, POSITION(" Dot" IN performance\_dtls) p2 FROM ipl\_player) AS t2

8. USING(player\_id))) AS t3) AS t4

9. USING(player\_id)

10. WHERE player\_role = "bowler" OR player\_role = "all-rounder"

11. ORDER BY player\_role, wickets\_took DESC;

**Insights:**

By executing the above query, we can get the details of top 5 wicket takers in all-rounder and bowler category, in that one player is from out of India and remaining 4 players are from India.

Q11

Show the percentage of toss wins of each bidder and display the results in descending order based on the percentage

1. CREATE VIEW v1 AS

2. SELECT bidder\_id, bid\_team, IF(toss\_winner = 1, team\_id1, team\_id2) AS toss\_won\_team FROM ipl\_bidder\_details

3. JOIN ipl\_bidding\_details USING(bidder\_id)

4. JOIN ipl\_match\_schedule USING(schedule\_id)

5. JOIN ipl\_match USING(match\_id);

6.

7. SELECT \* FROM v1;

8.

9. SELECT \*, ROUND(Count\_toss\_won/Count\_total \* 100, 2) AS Percentage FROM

10. (SELECT bidder\_id, COUNT(\*) AS Count\_toss\_won FROM v1

11. WHERE bid\_team = toss\_won\_team

12. GROUP BY bidder\_id

13. ORDER BY bidder\_id) AS t1

14. JOIN

15. (SELECT bidder\_id, COUNT(\*) AS Count\_total FROM v1

16. GROUP BY bidder\_id

17. ORDER BY bidder\_id) AS t2

18. USING(bidder\_id)

19. ORDER BY percentage DESC;

**Insights:**

the above query will return 29 rows and there are no specific insights which we can notice from the result

Q12

Find the IPL season which has a duration and max duration.

1. SELECT tournmt\_id, tournmt\_name, DATEDIFF(to\_date, from\_date) AS Duration FROM ipl\_tournament

2. GROUP BY tournmt\_id

3. ORDER BY duration DESC;

**Insights:**

From the above query we can tell that highest number of days has been played in 2012 and 2013 and least number of days has been played in 2009. From this output we can say that 2008, 9 and 10 these are the least top 3 matches as per the duration

Q13

Write a query to display to calculate the total points month-wise for the 2017 bid year. sort the results based on total points in descending order and month-wise in ascending order.

1. SELECT bidder\_id, bidder\_name, MIN(YEAR(bid\_date)) AS bid\_year, MONTH(bid\_date) AS bid\_month, SUM(Total\_points) AS total\_points FROM ipl\_bidder\_details

2. JOIN ipl\_bidding\_details USING(bidder\_id)

3. JOIN ipl\_bidder\_points USING(bidder\_id)

4. WHERE YEAR(bid\_date) = 2017

5. GROUP BY bidder\_id,bidder\_name, bid\_month

6. ORDER BY total\_points DESC, bid\_month;

**Insights:**

By running the above query, we can conclude that Aryabhatta Parichuri has topped the list consecutively for 2 months i.e., 4th month and 5th month. By this, we can tell that he has a good amount of experience in this field. In the list, total points has been scored by Ronaldo de Sousa and Ganga Pandey and Krishna Valimbi. Their total points is zero. There may be two reasons for this score. Either they have not bidded at all or else they have bidded but lost the bid.

Q14

Write a query for the above question using sub-queries by having the same constraints as the above question.

**Insights:**

Same as above question.

Q15

Write a query to get the top 3 and bottom 3 bidders based on the total bidding points for the 2018 bidding year.

1. SELECT \* FROM

2. (SELECT bidder\_id, bidder\_name, total\_points,

3. ROW\_NUMBER() OVER(ORDER BY total\_points) AS Least\_Ranking,

4. ROW\_NUMBER() OVER(ORDER BY total\_points DESC) AS Highest\_Ranking FROM ipl\_bidder\_points

5. JOIN ipl\_bidder\_details USING(bidder\_id)) As t1

6. WHERE Least\_Ranking <= 3

7. UNION

8. SELECT \* FROM

9. (SELECT bidder\_id, bidder\_name, total\_points,

10. ROW\_NUMBER() OVER(ORDER BY total\_points) AS Least\_Ranking,

11. ROW\_NUMBER() OVER(ORDER BY total\_points DESC) AS Highest\_Ranking FROM ipl\_bidder\_points

12. JOIN ipl\_bidder\_details USING(bidder\_id)) As t1

13. WHERE Highest\_Ranking <= 3;

**Insights:**

By running the above query, we get the result, it fetches 6 records and there are no any meaningful insights which we can draw from the above result.

Q16

You need not insert the records separately into both tables rather Create a trigger in such a way that it should insert the details into the student back table when you insert the student details into the student table automatically.

1. CREATE TABLE student\_details

2. (Student\_id INT,

3. Student\_name VARCHAR(50),

4. mail\_id VARCHAR(50),

5. mobile\_no INT);

6.

7. ALTER TABLE student\_details

8. MODIFY mobile\_no BIGINT;

9.

10. CREATE TABLE student\_details\_backup

11. (Student\_id INT,

12. Student\_name VARCHAR(50),

13. mail\_id VARCHAR(50),

14. mobile\_no INT);

15.

16. ALTER TABLE student\_details\_backup

17. MODIFY mobile\_no BIGINT;

18.

19. INSERT INTO student\_details

20. VALUES(152, "Dileep", "Dileep@student.com", 9676150614);

21.

22. SELECT \* FROM student\_details;

23.

24. DELETE FROM student\_details\_backup;

25.

26. DROP TRIGGER insert\_student\_backup4;

27.

28. DELIMITER $$

29. CREATE TRIGGER insert\_student\_backup4

30. AFTER UPDATE ON Student\_details

31. FOR EACH ROW

32. BEGIN

33. INSERT INTO student\_details\_backup

34. VALUES (OLD.student\_id, OLD.student\_name, OLD.mail\_id, OLD.mobile\_no);

35. END$$

36. DELIMITER ;

37.

38.

39. UPDATE student\_details

40. SET mobile\_no = 9676150611

41. WHERE student\_id = 152;

42.

43. SELECT \* FROM student\_details;

44. SELECT \* FROM student\_details\_backup;