IPL 2025 AUCTION ANALYSIS USING SQL

IPL 2025 Teams Analysis

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SQL techniques

- Joins: Combining auction data with performance stats for insights (e.g., player value vs. performance).
- Aggregations: Summing or averaging sold prices, runs, or wickets for team and player analysis.
- Window Functions: Ranking top players by sold price or performance metrics.
- Subqueries: Identifying highest bid players or most economical buys.
- Filters: Selecting players based on role, base price, or team composition.
- Grouping: Analyzing team balance by role (batsmen, bowlers, all-rounders).

```sql
create database IPL;
use IPL;
CREATE TABLE IPLPlayers (
    Player VARCHAR(120)CHARACTER SET UTF8MB4,
    Price_in_cr DECIMAL(10 , 2 ),
    Type VARCHAR(50)CHARACTER SET UTF8MB4,
    Acquisition VARCHAR(50)CHARACTER SET UTF8MB4,
    Role VARCHAR(50)CHARACTER SET UTF8MB4,
    Team VARCHAR(100)CHARACTER SET UTF8MB4
);
```

Database Design

- Schema: Define tables and relationships to organize data efficiently.
- Key Tables:
  - Auction Table: Player ID, name, base price, sold price, team, role.

```sql
SELECT
    *
FROM
    iplplayers;
-- Find the total spending for each team.
SELECT
    Team, SUM(price_in_cr) AS TotalSpending
FROM
    IPLplayers
GROUP BY team
ORDER BY TotalSpending DESC;
```

Team	TotalSpending
Lucknow Super Giants	119.90
Gujarat Titans	119.85
Mumbai Indians	119.80
Sunrisers Hyderabad	119.80
Punjab Kings	119.65
Royal Challengers Bengaluru	119.25
Chennai Super Kings	119.20

LUCKNOW SUPER GIANTS

-- Find the top 3 highest-paid 'All=rounders' across all teams

```sql
SELECT
    player, Team, Price_in_cr
FROM
    IPLPlayers
WHERE
    Role = 'All-rounder'
ORDER BY Price_in_cr DESC
LIMIT 3;
```

	player	Team	Price_in_cr
▶	Ravindra Jadeja	Chennai Super Kings	18.00
	Hardik Pandya	Mumbai Indians	16.35
	Abhishek Sharma	Sunrisers Hyderabad	14.00

-- Find the Highest-priced player in each team

Result Grid | Filter Rows: | Export: | W

	Player	Team	MaxPrice
▶	Ruturaj Gaikwad	Chennai Super Kings	18.00
	Ravindra Jadeja	Chennai Super Kings	18.00
	Axar Patel	Delhi Capitals	16.50
	Rashid Khan (Afghanistan)	Gujarat Titans	18.00
	Venkatesh Iyer	Kolkata Knight Riders	23.75

```sql
WITH CTE_HP AS(
select Team, max(Price_in_cr) as MaxPrice
From IPLplayers
group by team
)
select i.Player , i.Team ,hp.MaxPrice
from IPLplayers i
join CTE_HP hp on i.Team = hp.team
where i.Price_in_cr =hp.Maxprice
```

🏏 -- Rank players by their price within each team and list the top 2 of every team.

```sql
WITH RankedPlayer AS(
select Player , team ,Price_in_cr,
row_number() OVER(partition by TEAM order by Price_in_cr desc) as Rankwithinteam
from IPLplayers
)
select Player,Team,Price_in_cr ,Rankwithinteam
From RankedPlayer
where Rankwithinteam <=2
```

Player	Team	Price_in_cr	Rankwithinteam
Ruturaj Gaikwad	Chennai Super Kings	18.00	1
Ravindra Jadeja	Chennai Super Kings	18.00	2
Axar Patel	Delhi Capitals	16.50	1
KL Rahul	Delhi Capitals	14.00	2
Rashid Khan (Afghanistan)	Gujarat Titans	18.00	1
Shubman Gill	Gujarat Titans	16.50	2
Venkatesh Iyer	Kolkata Knight Riders	23.75	1
Rinku Singh	Kolkata Knight Riders	13.00	2

🏏 -- Find the most expensive player from each team, along with the second-most expensive players

```sql
WITH RankedPlayer As(
select Player , team ,Price_in_cr,
row_number() OVER(partition by TEAM order by Price_in_cr desc) as Rankwithinteam
from IPLplayers
)
select Team,
MIN(CASE WHEN Rankwithinteam = 1 THEN player ELSE NULL END) AS MostExpensivePlayer,
MAX(CASE WHEN Rankwithinteam = 1 THEN Price_in_cr ELSE NULL END) AS highestPrice,
MAX(CASE WHEN Rankwithinteam = 2 THEN player ELSE NULL END) AS Secondmostexpensiveplayer,
MAX(CASE WHEN Rankwithinteam = 2 THEN Price_in_cr ELSE NULL END) ASSecondHighestprice
FROM RankedPlayer
group by Team
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Team	MostExpensivePlayer	highestPrice	Secondmostexpensiveplayer	ASSecondHighestprice
Chennai Super Kings	Ruturaj Gaikwad	18.00	Ravindra Jadeja	18.00
Delhi Capitals	Axar Patel	16.50	KL Rahul	14.00
Gujarat Titans	Rashid Khan (Afghanistan)	18.00	Shubman Gill	16.50
Kolkata Knight Riders	Venkatesh Iyer	23.75	Rinku Singh	13.00
Lucknow Super Giants	Rishabh Pant	27.00	Nicholas Pooran (West Indies)	21.00
Mumbai Indians	Jasprit Bumrah	18.00	Suryakumar Yadav	16.35
Punjab Kings	Shreyas Iyer	26.75	Yuzvendra Chahal	18.00
Rajasthan Royals	Sanju Samson	18.00	Yashasvi Jaiswal	18.00
Royal Challengers Bengaluru	Virat Kohli	21.00	Josh Hazlewood (Australia)	12.50
Sunrisers Hyderabad	Heinrich Klaasen (South Africa)	23.00	Pat Cummins (Australia)	18.00

🏏 -- Calculate the percentage contribution of each player's price
to their team's total spending

```sql
SELECT Player, Team, Price_in_cr,
cast(price_in_cr/(sum(Price_in_cr) over (PARTITION BY Team)) as decimal(10,2))
as contributionpercentage
from IPLplayers
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: 𝐈𝐀

Player	Team	Price_in_cr	contributionpercentage
Ruturaj Gaikwad	Chennai Super Kings	18.00	0.15
Ravindra Jadeja	Chennai Super Kings	18.00	0.15
Matheesha Pathirana (Sri Lanka)	Chennai Super Kings	13.00	0.11
Shivam Dube	Chennai Super Kings	12.00	0.10
MS Dhoni	Chennai Super Kings	4.00	0.03
Devon Conway (New Zealand)	Chennai Super Kings	6.25	0.05
Rahul Tripathi	Chennai Super Kings	3.40	0.03
Rachin Ravindra (New Zealand)	Chennai Super Kings	4.00	0.03
Ravichandran Ashwin	Chennai Super Kings	9.75	0.08
Syed Khaleel Ahmed	Chennai Super Kings	4.80	0.04
Noor Ahmad (Afghanistan)	Chennai Super Kings	10.00	0.08
Vijay Shankar	Chennai Super Kings	1.20	0.01

-- Classify players as 'High', 'Medium', or 'Low' priced based on the following rules;
-- high: price >15 crore
-- Medium : Price between 5 crore and 15 crore
-- Low: Price<5 crore and find out the players in each bracket

```sql
WITH CTE_PC AS(
SELECT Team, Player, Price_in_cr,
CASE
WHEN Price_in_cr >15 THEN 'High'
WHEN Price_in_cr BETWEEN 5 AND 15 THEN 'Medium'
ELSE 'Low'
END AS PriceCategory
FROM IPLPlayers
)
SELECT Team,Pricecategory ,COUNT(*) AS NoOFPlayers
from CTE_PC
GROUP BY Team , Pricecategory
Order By Team, Pricecategory
```

Team	PriceCategory	NoOFPlayers
Chennai Sup Chennai Super Kings		2
Chennai Super Kings	Low	18
Chennai Super Kings	Medium	5
Delhi Capitals	High	1
Delhi Capitals	Low	14
Delhi Capitals	Medium	8
Gujarat Titans	High	3
Gujarat Titans	Low	18
Gujarat Titans	Medium	4
Kolkata Knight Riders	High	1
Kolkata Knight Riders	Low	15
Kolkata Knight Riders	Medium	5

-- Find the average price of indian players and compare it with overseas player

```sql
SELECT
    'Indian' AS PlayerType,
    (SELECT
            AVG(price_in_cr)
        FROM
            iplplayers
        WHERE
            type LIKE 'Indian%') AS AvgPrice


UNION SELECT
    'overseas' AS PlayerType,
    (SELECT
            AVG(price_in_cr)
        FROM
            Iplplayers
        WHERE
            type LIKE 'overseas%') AS AvgPrice
```

Result Grid | Filter Rows:

PlayerType	AvgPrice
Indian	5.161074
overseas	5.642361

🏏 -- Identify players who earn more than the average price in their team

```sql
SELECT
    player, Team, Price_in_cr
FROM
    IPLplayers AS p
WHERE
    Price_in_cr > (SELECT
            AVG(price_in_cr)
        FROM
            iplplayers
        WHERE
            team = p.team)
```

player	Team	Price_in_cr
Ruturaj Gaikwad	Chennai Super Kings	18.00
Ravindra Jadeja	Chennai Super Kings	18.00
Matheesha Pathirana (Sri Lanka)	Chennai Super Kings	13.00
Shivam Dube	Chennai Super Kings	12.00
Devon Conway (New Zealand)	Chennai Super Kings	6.25
Ravichandran Ashwin	Chennai Super Kings	9.75
Syed Khaleel Ahmed	Chennai Super Kings	4.80
Noor Ahmad (Afghanistan)	Chennai Super Kings	10.00
Axar Patel	Delhi Capitals	16.50
Kuldeep Yadav	Delhi Capitals	13.25
Tristan Stubbs (South Africa)	Delhi Capitals	10.00
Mitchell Starc (Australia)	Delhi Capitals	11.75

🏏 For each role , Find the most expensive player and their price using correlated subquery

```sql
SELECT
    Player, Team, Role, Price_in_cr
FROM
    iplplayers p1
WHERE
    Price_in_cr = (SELECT
            MAX(price_in_cr)
        FROM
            iplplayers
        WHERE
            role = p1.Role)
```

Player	Team	Role	Price_in_cr
Ravindra Jadeja	Chennai Super Kings	All-rounder	18.00
Rashid Khan (Afghanistan)	Gujarat Titans	Bowler	18.00
Venkatesh Iyer	Kolkata Knight Riders	Batter	23.75
Rishabh Pant	Lucknow Super Giants	Batter/Wicketkeeper	27.00
Jasprit Bumrah	Mumbai Indians	Bowler	18.00
Arshdeep Singh	Punjab Kings	Bowler	18.00
Yuzvendra Chahal	Punjab Kings	Bowler	18.00
Pat Cummins (Australia)	Sunrisers Hyderabad	Bowler	18.00