

A close-up photograph of a cricket player's hands and chest. He is wearing white Test-style cricket attire, including a helmet with a cage, white gloves with blue finger holes, and a white shirt with blue piping. He is holding a blue cricket bat with both hands, gripping it near the handle. The background is a blurred outdoor field.

IPL 2025 DATA ANALYSIS USING SQL

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Project Introduction

This project aims to explore key performance patterns in IPL-2025 cricket matches using SQL queries. The analysis focuses on team performance, scoring behavior, and venue dynamics. SQL Server Management Studio (SSMS) is used to store, query, and analyze the dataset efficiently. Key insights include most successful teams, average scores by venue, and high-pressure game patterns. The goal is to uncover actionable trends that can support strategic decisions in competitive cricket.

Declaration

I hereby declare that the data used in this project has been sourced from Kaggle and is intended solely for academic and analytical purposes. Any inconsistencies or inaccuracies in the dataset are inherent to the source, and I am not responsible for any such errors. The analysis presented is based entirely on the data as provided.

Link: <https://www.kaggle.com/datasets/krishd123/ipl-2025-records>



PROBLEM STATEMENT

1. Which team has won the most matches?
2. What is the average first innings score in each stadium?
3. Which match had the highest combined score (first + second innings)?
4. Who are the top 5 highest individual scorers in a match?
5. Compare the win ratio of teams batting first vs. bowling first.
6. What is the average score made by teams when they win the match?
7. Which venue has hosted the most matches?

1. Which team has won the most matches?

```
SELECT match_winner, COUNT(*) AS wins  
FROM Matches  
WHERE match_winner IS NOT NULL  
GROUP BY match_winner  
ORDER BY wins DESC;
```

match_winner	wins
PBKS	11
RCB	10
GT	9
DC	8
MI	8
LSG	6
SRH	6
KKR	5
CSK	4
RR	4

2. What is the average first innings score in each stadium?

```
SELECT venue, AVG(first_innings_score) AS  
avg_first_innings_score  
FROM Matches  
GROUP BY venue  
ORDER BY avg_first_innings_score DESC;
```

venue	avg_first_innings_s
HPCA Stadium, Dharamshala	236
Narendra Modi Stadium, Ahmedabad	215
Arun Jaitley Stadium, Delhi	203
Eden Gardens, Kolkata	199
Sawai Mansingh Stadium, Jaipur	198
Ekana Cricket Stadium, Lucknow	192
Rajiv Gandhi International Stadium, Hyderabad	191
ACA-VDCA Cricket Stadium, Vishakhapatnam	186
Wankhede Stadium, Mumbai	175
New PCA Cricket Stadium, Mullanpur	170
M. Chinnaswamy Stadium, Bangalore	169
Barsapara Stadium, Guwahati	166
MA Chidambaram Stadium, Chennai	163

3. Which match had the highest combined score (first + second innings)?

```
SELECT top 10 match_id, team1, team2, first_ings_score, second_ings_score,  
first_ings_score + second_ings_score AS total_score  
FROM Matches  
ORDER BY total_score DESC;
```

match_id	team1	team2	first_ings_score	second_ings_score	total_score
2	SRH	RR	286	242	528
27	SRH	PBKS	245	247	492
5	GT	PBKS	243	232	475
21	KKR	LSG	238	234	472
70	LSG	RCB	227	230	457
68	KKR	SRH	278	168	446
64	GT	LSG	235	202	437
72	GT	MI	228	208	436
54	PBKS	LSG	236	199	435
20	MI	RCB	221	209	430

4. Who are the top 5 highest individual scorers in a match?

```
SELECT TOP 5 top_scorer, highscore  
FROM Matches  
ORDER BY highscore DESC;
```

top_scorer	highscore
Abhishek Sharma	141
Rishabh Pant	118
Mitchell Marsh	117
Sai Sudarshan	108
Ishan Kishan	106

5. Compare the win ratio of teams batting first vs. bowling first.

```
SELECT toss_decision, COUNT(*) AS total_matches,  
       SUM(CASE WHEN toss_winner = match_winner THEN 1 ELSE 0 END) AS wins,  
       ROUND(  
           100.0 * SUM(CASE WHEN toss_winner = match_winner THEN 1 ELSE 0 END) /  
           COUNT(*), 2  
       ) AS win_percentage  
FROM Matches  
GROUP BY toss_decision;
```

toss_decision	total_matches	wins	win_percentage
Bat	13	9	69.23
Bowl	61	33	54.1

6. What is the average score made by teams when they win the match?

```
SELECT  
    ROUND(AVG(first_ings_score), 2) AS avg_score_batting_first,  
    ROUND(AVG(second_ings_score), 2) AS avg_score_batting_second  
FROM Matches  
WHERE match_winner IS NOT NULL;
```

avg_score_batting_first	avg_score_batting_second
190	176



7. Which venue has hosted the most matches?

```
SELECT venue, COUNT(*) AS match_count  
FROM matches  
GROUP BY venue  
ORDER BY match_count DESC;
```

venue	match_count
Narendra Modi Stadium, Ahmedabad	9
Ekana Cricket Stadium, Lucknow	8
Arun Jaitley Stadium, Delhi	7
Eden Gardens, Kolkata	7
Sawai Mansingh Stadium, Jaipur	7
Wankhede Stadium, Mumbai	7
New PCA Cricket Stadium, Mullanpur	6
Rajiv Gandhi International Stadium, Hyderabad	6
M. Chinnaswamy Stadium, Bangalore	6
MA Chidambaram Stadium, Chennai	6
ACA-VDCA Cricket Stadium, Vishakhapatnam	2
Barsapara Stadium, Guwahati	2
HPCA Stadium, Dharamshala	1

CONCLUSION



This project effectively utilized SQL to extract meaningful insights from T20 match data. By analyzing team performance, venue trends, and scoring behaviors, we discovered that PBKS emerged as the most successful team in terms of wins. The Narendra Modi Stadium hosted the highest number of matches, while HPCA Stadium in Dharamshala recorded the highest average first innings score. Matches featuring SRH vs RR and PBKS vs GT delivered the highest combined totals, showcasing high-scoring thrillers. The analysis also revealed that teams choosing to bat first had a slightly better win ratio (69.2%) compared to those choosing to bowl. Moreover, the average winning score was higher for teams batting first (190), suggesting a strategic edge. Overall, SQL Server Management Studio proved to be a powerful tool in uncovering actionable patterns from raw sports data, offering strategic insights into gameplay and venue dynamics.

Thank You