

IPL(2008-2024) DATA ANALYSIS THROUGH SQL

>Question:-

--Top 10 Players That best perform under last final overs.

>Query:-

```
SELECT TOP 10 batter,
COUNT(*)AS ball_faced,
SUM(batsman_runs) AS total_runs,
ROUND(SUM(batsman_runs)*1.0/COUNT(*),2)AS strike_rate,
SUM(CASE WHEN batsman_runs =4 THEN 1 ELSE 0 END) AS fours,
SUM(CASE WHEN batsman_runs =6 THEN 1 ELSE 0 END) AS sixes
FROM deliveries
WHERE [over] BETWEEN 17 AND 20
GROUP BY batter
HAVING COUNT(*)>=30
ORDER BY total_runs DESC;
```

>Outcomes:-

	batter	ball_faced	total_runs	strike_rate	fours	sixes
1	MS Dhoni	1139	2174	1.91	164	149
2	KA Pollard	699	1237	1.77	77	94
3	RA Jadeja	671	1105	1.65	76	62
4	KD Karthik	603	1078	1.79	100	65
5	AB de Vi...	425	1035	2.44	75	87
6	HH Pan...	496	904	1.82	56	74
7	RG Shar...	397	805	2.03	63	58
8	V Kohli	368	754	2.05	55	52
9	AD Russ...	382	745	1.95	47	71
10	DA Miller	397	727	1.83	48	50

>Question:-

--Most Valuable Pairs of Batsman Have the Highest Average Partnership Runs.

>Query:-

```
SELECT TOP 10
pair.batter AS batter1,
pair.non_striker AS batter2,
COUNT(DISTINCT pair.match_inning) AS partnership,
SUM(pair.total_runs) AS total_runs,
CAST(SUM(pair.total_runs)*1.0/
COUNT(DISTINCT pair.match_inning) AS
DECIMAL(6,2)) AS avg_Partnership_runs
FROM(
SELECT match_id,inning,batter,non_striker,
(CAST(match_id AS VARCHAR) + '-' +CAST(inning AS VARCHAR)) AS match_inning,
total_runs FROM deliveries) AS pair
GROUP BY pair.batter, pair.non_striker
HAVING COUNT(DISTINCT pair.match_inning)>=5
ORDER BY avg_Partnership_runs DESC;
```

>Outcomes:-

	batter1	batter2	partnership	total_runs	avg_Partnership_runs
1	J Fraser-McGurk	Abishek Porel	5	224	44.80
2	VR Iyer	Shubman Gill	6	257	42.83
3	JC Buttler	D Padikkal	9	381	42.33
4	TM Head	Abhishek S...	9	380	42.22
5	Shubman Gill	VR Iyer	6	251	41.83
6	LMP Simmons	MEK Hussey	5	209	41.80
7	GJ Maxwell	F du Plessis	10	391	39.10
8	Abhishek Shar...	TM Head	8	311	38.88
9	RD Gaikwad	DP Conway	17	648	38.12
10	DA Warner	WP Saha	6	226	37.67

>Question:-

--Bowlers That Consistently Take 1 Wicket Every Match Over Multiple Season.

>Query:-

```
SELECT TOP 10
bowler,
COUNT(DISTINCT match_id) AS match_played,
COUNT(*) AS total_wickets,
CAST(COUNT(*)*1.0/COUNT(DISTINCT match_id) AS DECIMAL(5,2)) AS
avg_wicket_per_match
FROM deliveries
WHERE is_wicket=1
AND dismissal_kind NOT IN('NA', 'caught', 'hit wicket', 'obstructing the field',
'retired hurt', 'run out')
GROUP BY bowler
HAVING COUNT(DISTINCT match_id)>=10
AND CAST(COUNT(*)*1.0/COUNT(DISTINCT match_id) AS DECIMAL(5,2))>=1.0
ORDER BY avg_wicket_per_match DESC;
```

>Outcomes:-

	bowler	match_played	total_wickets	avg_wicket_per_match
1	M Markande	12	19	1.58
2	MA Starc	16	25	1.56
3	Yuvraj Singh	12	17	1.42
4	HV Patel	20	28	1.40
5	PV Tambe	10	14	1.40
6	SB Jakati	15	21	1.40
7	YK Pathan	15	21	1.40
8	Kuldeep Y...	26	36	1.38
9	SL Malinga	58	80	1.38
10	JA Morkel	19	26	1.37

Question:-

--Teams that scores the most runs in the first half(10) overs of the match on avarage.

Query:-

```
SELECT TOP 10
deliveries.batting_team,
COUNT(DISTINCT deliveries.match_id)AS matches_played,
SUM(deliveries.total_runs)AS total_runs_in_first_10_overs,
CAST(SUM(deliveries.total_runs)*1.0/
COUNT(DISTINCT deliveries.match_id)AS
DECIMAL(5,2))AS avg_runs_in_first_10_overs
FROM deliveries
WHERE deliveries.[over] BETWEEN 1 AND 10
GROUP BY deliveries.batting_team
HAVING COUNT(DISTINCT deliveries.match_id)>=5
ORDER BY total_runs_in_first_10_overs DESC;
```

Outcomes:-

Results		Messages		
	batting_team	matches_played	total_runs_in_first_10_overs	avg_runs_in_first_10_overs
1	Mumbai Indians	261	20101	77.02
2	Kolkata Knigh...	251	19401	77.29
3	Chennai Supe...	237	18468	77.92
4	Royal Challen...	240	18145	75.60
5	Rajasthan Ro...	220	17074	77.61
6	Kings XI Punjab	190	14922	78.54
7	Sunrisers Hyd...	182	14372	78.97
8	Delhi Darede...	161	12238	76.01
9	Delhi Capitals	91	7498	82.40
10	Deccan Char...	75	5530	73.73