ANALYSIS OF IPL DATA USING SQL

Objective

➢ The objective for IPL Analysis is to uncover trends and patterns in IPL data over time. Identifying factors influencing match outcomes (e.g., toss decisions, venue impact,winning team).

➢ Understand team and player performance metrics (e.g., batting strikerate,score,etc.)

Question 1.

- Write a sql query how many team played in ipl in each season ?

```sql
1
2 •  use cricket;
3 •  select season , count(distinct team1) as
4     total_team_played_INIPL_IN_each_season
5     from matches group by season ;
```

season	total_team_played_INIPL_IN_each_season
2007/08	8
2009	7
2009/10	8
2011	10
2012	9
2013	9
2014	8
2015	8
2016	8
2017	8
2018	8
2019	8
2020/21	8
2021	8
2022	10
2023	10

- Write a sql query that how many points a team got if they have won the match ?

```
1 • use cricket;
2 • select team1,team2,winner_team,
3   if(team1=winner_team,2,0)as
4   points_of_team1 from matches;
5
```

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

team1	team2	winner_team	points_of_team1
Royal Challengers Bangalore	Kolkata Knight Riders	Kolkata Knight Riders	0
Kings XI Punjab	Chennai Super Kings	Chennai Super Kings	0
Delhi Daredevils	Rajasthan Royals	Delhi Daredevils	2
Mumbai Indians	Royal Challengers Bangalore	Royal Challengers Bangalore	0
Kolkata Knight Riders	Deccan Chargers	Kolkata Knight Riders	2
Rajasthan Royals	Kings XI Punjab	Rajasthan Royals	2
Deccan Chargers	Delhi Daredevils	Delhi Daredevils	0
Chennai Super Kings	Mumbai Indians	Chennai Super Kings	2
Deccan Chargers	Rajasthan Royals	Rajasthan Royals	0
Kings XI Punjab	Mumbai Indians	Kings XI Punjab	2
Royal Challengers Bangalore	Rajasthan Royals	Rajasthan Royals	0
Chennai Super Kings	Kolkata Knight Riders	Chennai Super Kings	2
Mumbai Indians	Deccan Chargers	Deccan Chargers	0
Kings XI Punjab	Delhi Daredevils	Kings XI Punjab	2
Royal Challengers Bangalore	Chennai Super Kings	Chennai Super Kings	0
Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	0
Delhi Daredevils	Royal Challengers Bangalore	Delhi Daredevils	2
Deccan Chargers	Kings XI Punjab	Kings XI Punjab	0
Rajasthan Royals	Kolkata Knight Riders	Rajasthan Royals	2
Chennai Super Kings	Delhi Daredevils	Delhi Daredevils	0
Kings XI Punjab	Kolkata Knight Riders	Kings XI Punjab	2
Royal Challengers Bangalore	Deccan Chargers	Royal Challengers Bangalore	2

Result 19 ✕

TEAM STANDINGS

TEAM	MATCHES	WINS	LOSS	NET RR	POINTS
DELHI	1	1	0	+0.914	2
KOLKATA	1	1	0	+0.639	2
HYDERABAD	0	0	0	0.000	0
PUNJAB	0	0	0	0.000	0
RAJASTHAN	0	0	0	0.000	0
BANGALORE	0	0	0	0.000	0
GUJARAT	0	0	0	0.000	0
LUCKNOW	0	0	0	0.000	0
CHENNAI	1	0	1	-0.639	0
MUMBAI	1	0	1	-0.914	0

Question 3.

- Write a sql query that how many matches were won by each team in each season ?

```sql
2 · use cricket;
3 · select season,winner, count(*)
4   from matches group by season,winner;
5
```

season	winner	count(*)
2021	Sunrisers Hyderabad	3
2022	Kolkata Knight Riders	6
2022	Delhi Capitals	7
2022	Punjab Kings	7
2022	Gujarat Titans	12
2022	Rajasthan Royals	10
2022	Royal Challengers Bangalore	9
2022	Lucknow Super Giants	9
2022	Sunrisers Hyderabad	6
2022	Chennai Super Kings	4
2022	Mumbai Indians	4
2023	Gujarat Titans	11
2023	Punjab Kings	6
2023	Lucknow Super Giants	8
2023	Rajasthan Royals	7
2023	Royal Challengers Bangalore	7
2023	Chennai Super Kings	10
2023	Kolkata Knight Riders	6
2023	Sunrisers Hyderabad	4
2023	Mumbai Indians	9
2023	Delhi Capitals	5

POINTS TABLE
TATA IPL 2023

			P	W	L	PTS	NRR
Q		GUJARAT TITANS	13	9	4	18	0.83
2		CHENNAI SUPER KINGS	13	7	5	15	0.38
3		LUCKNOW SUPER GIANTS	13	7	5	15	0.30
4		ROYAL CHALLENGERS BANGALORE	13	7	6	14	0.18
5		MUMBAI INDIANS	13	7	6	14	-0.13
6		RAJASTHAN ROYALS	13	6	7	12	0.14
7		KOLKATA KNIGHT RIDERS	13	6	7	12	-0.26
8		PUNJAB KINGS	13	6	7	12	-0.31
9		DELHI CAPITALS	13	5	8	10	-0.57
10		SUNRISERS HYDERABAD	13	4	9	8	-0.56

TOP 4 TEAMS TO QUALIFY FOR PLAYOFFS

- Write a sql query that which team has won hightest league stage matches ?

```
1
2•  use cricket;
3•  select  winner ,count(*) as
4   winnig_game_by_each_team
5     from matches group by winner order by 2 desc;
```

winner	winnig_game_by_each_team
Mumbai Indians	138
Chennai Super Kings	131
Kolkata Knight Riders	119
Royal Challengers Bangalore	114
Rajasthan Royals	101
Kings XI Punjab	85
Sunrisers Hyderabad	78
Delhi Daredevils	67
Delhi Capitals	38
Deccan Chargers	29
Gujarat Titans	23
Punjab Kings	19
Lucknow Super Giants	17
Gujarat Lions	13
Pune Warriors	12
Rising Pune Supergiant	10
Kochi Tuskers Kerala	6
Rising Pune Supergiants	5

- Write a sql query that which player made highest score in IPL history ?

```
2
3·  use cricket;
4·  select batsman ,max(total_runs)
5      from most_runs_average_strikerate
6      group by batsman limit 10;
```

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

batsman	max(total_runs)
V Kohli	5426
SK Raina	5386
RG Sharma	4902
DA Warner	4717
S Dhawan	4601
CH Gayle	4525
MS Dhoni	4450
RV Uthappa	4420
AB de Villiers	4414
G Gambhir	4219

Question 6.

- Write a sql query that the player who got orange cap season by season?

```
1 • use cricket;
2 • select distinct(`Orange Cap`),
3   max(`Orange cap runs`)
4   as Top_scorer from `ipl - winners`
5     group by `Orange Cap` order by 2 desc;
```

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

Orange Cap	Top_scorer
Virat Kohli	973
Shubman Gill	890
Jos Buttler	863
Kane Williamson	735
Chris Gayle	733
Michael Hussey	733
David Warner	692
KL Rahul	670
Robin Uthappa	660
Ruturaj Gaikwad	635
Sachin Tendulkar	618
Shaun Marsh	616
Matthew Hayden	572

- Write a sql query that the player who got purple cap in more than one season?


```
1•  use cricket;
2•  select  distinct(`Purple Cap`)
3   |,count(`Purple cap wickets`)
4   as Most_pc_winner
5   from `ipl - winners` group by
6    `Purple Cap` order by 2 desc limit 5;
```

Purple Cap	Most_pc_winner
Dwayne Bravo	2
Bhuvaneshwar Kumar	2

Question 8.

- Write a sql query that the top 5 player with The most P.O.M award ?

```
2•  use cricket;
3•  select player_of_match,
4   count(player_of_match)
5   as most_POM_award
6   from matches group by player_of_match
```

	player_of_match	most_POM_award
▶	AB de Villiers	24

- Write a sql query that which top 5 batsman has the highest strike rate (minimum 1000 runs scored)?

```
2•  use cricket;
3•  select batsman,strikerate,max(strikerate)
4     from most_runs_average_strikerate
5     group by batsman,strikerate
6     having sum(total_runs>1000)
7     order by strikerate desc limit 5;
```

Result Grid			
batsman	strikerate	max(strikerate)
AD Russell	188.16489361702128	188.16489361702128
RR Pant	164.9859943977591	164.9859943977591
GJ Maxwell	162.15277777777777	162.15277777777777
HH Pandya	157.03918722786648	157.03918722786648
V Sehwag	156.24284077892327	156.24284077892327

- Write a sql query to find that how many times has each batsman been dismissed by the bowler 'J Bumrah'?

```sql
1 •  use cricket;
2 •  select batsman ,count(*)
3    as total_dismissal from
4    `deliveries (1)`
5    where bowler="JJ Bumrah"
6    group by batsman order by 2 desc;
```

batsman	total_dismissal
RA Jadeja	21
AB de Villiers	16
RA Tripathi	11
Jos Buttler	10
RD Gaikwad	10
N Rana	9
KL Rahul	9
Lalit Yadav	9
GJ Maxwell	8
Vijay Shankar	8
S Dubey	7
Dinesh Karthik	7
Shikhar Dha...	7
F du Plessis	7
AD Russell	6
Virat Kohli	6
VR Iyer	6
EJG Morgan	6
JM Bairstow	6
David Warner	6
AT Rayudu	6
Washington ...	5

Result 1 ×

Result Grid | Filter Rows: | Export: | Wrap Cell Content: $\mathbb{I}A$

- Write a sql query to find which bowler have best economy (minimum 300 over bowl) ?

```
1•  use ipl;
2•  select player,min(Econ) as economy
3   from `all-time-best-bowlers (1)`
4   group by player having
5   min(ov>300) order by 2 asc limit 10;
```

player	economy
Rashid Khan	6.67
Sunil Narine	6.73
Dale Steyn	6.92
Ravichandran Ashwin	7.01
Harbhajan Singh	7.08
Lasith Malinga	7.14
Axar Patel	7.24
Krunal Pandya	7.33
Amit Mishra	7.38
Bhuvneshwar Kumar	7.39

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

Question 12.

- Write a sql query to find which diffrent bowler has taken 5w haul more than one time ?

```
1 •  use ipl;
2 •  select player,max(5w) as 5w_haul from
3      `all-time-best-bowlers (1)`
4      group by player having
5      max(5w>1) order by 2 desc;
```

	player	5w_haul
▶	Bhuvneshwar Kumar	2
	Jaydev Unadkat	2
	James Faulkner	2

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

- Write a sql query that how many times has different team been runner-up in IPL ?

```
1•  use cricket;
2•  select `runners up`,count( `runners up`)
3    as most_time_runnerup from
4    `ipl - winners` group by `runners up`;
5
```

Result Grid		Filter Rows:		Export:	Wrap Cell Content:

runners up	most_time_runnerup
Chennai Super Kings	5
Royal Challengers Bangalore	3
Mumbai Indians	1
Kings XI Punjab	1
Rising Pune Supergiants	1
Sunrisers Hyderabad	1
Delhi Capitals	1
Kolkata Knight Riders	1
Rajasthan Royals	1
Gujarat Titans	1

- Write a sql query that which team has won hightest ipl – title ?

```
1 • use cricket;
2 • select distinct(`Winning team`),
3   count(`Winning team`) as Most_ipl_trophy
4   from `ipl - winners` group by
5     `Winning team` order by 2 desc ;
```

| Result Grid | 🔳 | 🔀 | Filter Rows: | | Export: 🔳 | Wrap Cell Content: 🔳A |

Winning team	Most_ipl_trophy
Chennai Super Kings	5
Mumbai Indians	5
Kolkata Knight Riders	2
Rajasthan Royals	1
Deccan Chargers	1
Sunrisers Hyderabad	1
Gujarat Titans	1