

IPL 2022 DATA ANALYSIS BY KETUL

IPL study of data to extract
information and insights from data
and apply knowledge to get
actionable insights



1. USEFUL IMPORTANT STEPS

- Step-01 := Import useful library
 - Step-02:= connect file to python
 - Step-03:= removing unwanted values from the data
 - Step-04:= understand basics of our data, EDA (i.e. data shape,data info,describe data,total columns name)
 - Step-05:= Extract useful details from main column (i.e date column extract year and month, Address column extract city)
-

CLEANING DATA

- Cleaning data is most useful teams in data analysis removing unwanted stuff is helps us to improve data information accuracy
 - So, finding first is there any NULL or NAN values in column or rows
 - I have two main table for Analise our data
 - (1) Match information data (2) ball to ball data
 - Importing a useful library for analyze our data easily , in here I am using important libraries:
 - Numpy
 - Pandas
 - Matplotlib
 - Seaborn
-

1. HOW MANY MATCHES PLAYED IN SEASON 2022?

2. HOW MANY MATCHES PLAYED IN EACH STADIUM?

- Total **59** matches were played in this season

Dr DY Patil Sports Academy, Mumbai -----→ 18

Wankhede Stadium, Mumbai -----→ 16

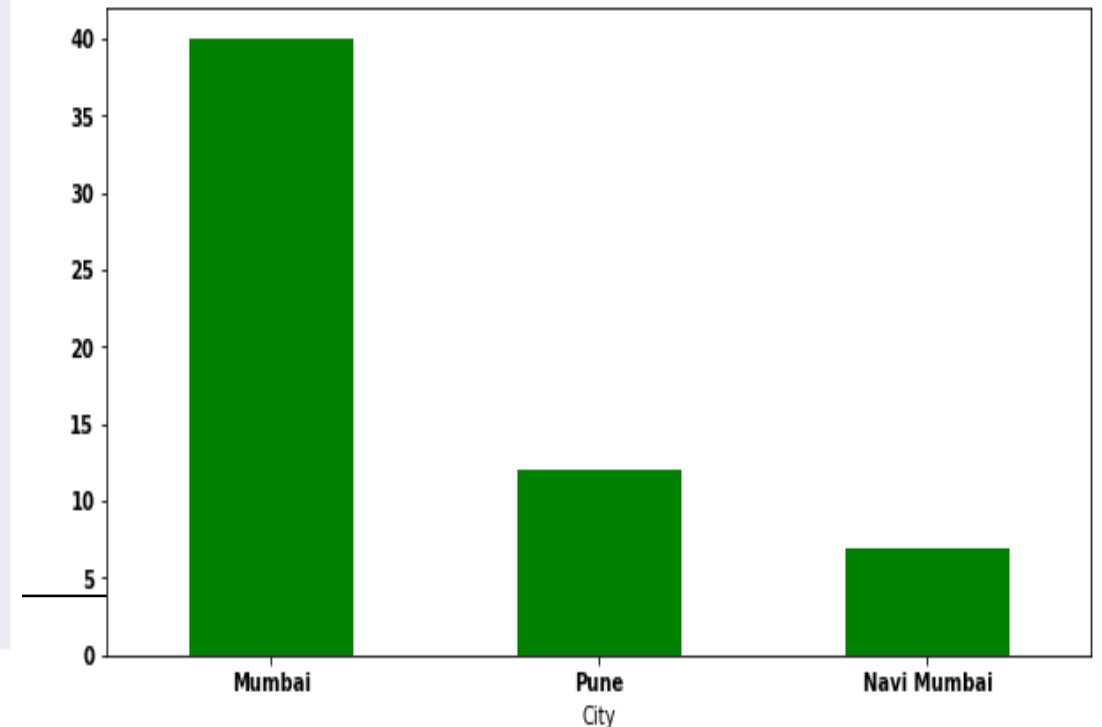
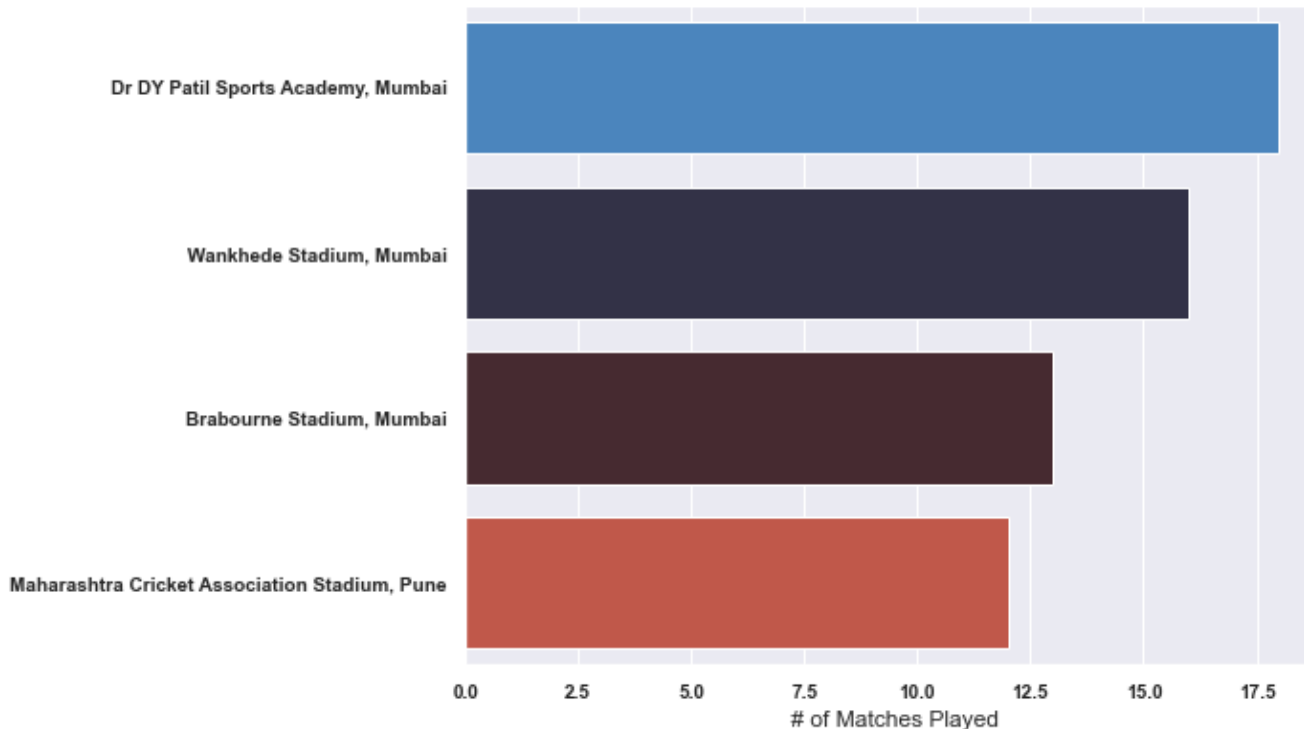
Brabourne Stadium, Mumbai -----→ 13

Maharashtra Cricket Association Stadium, Pune → 12

Most of the matches were played in **Mumbai**

Top Most matches played in **Dy patil sports stadium**

Total Matches played in each Stadium

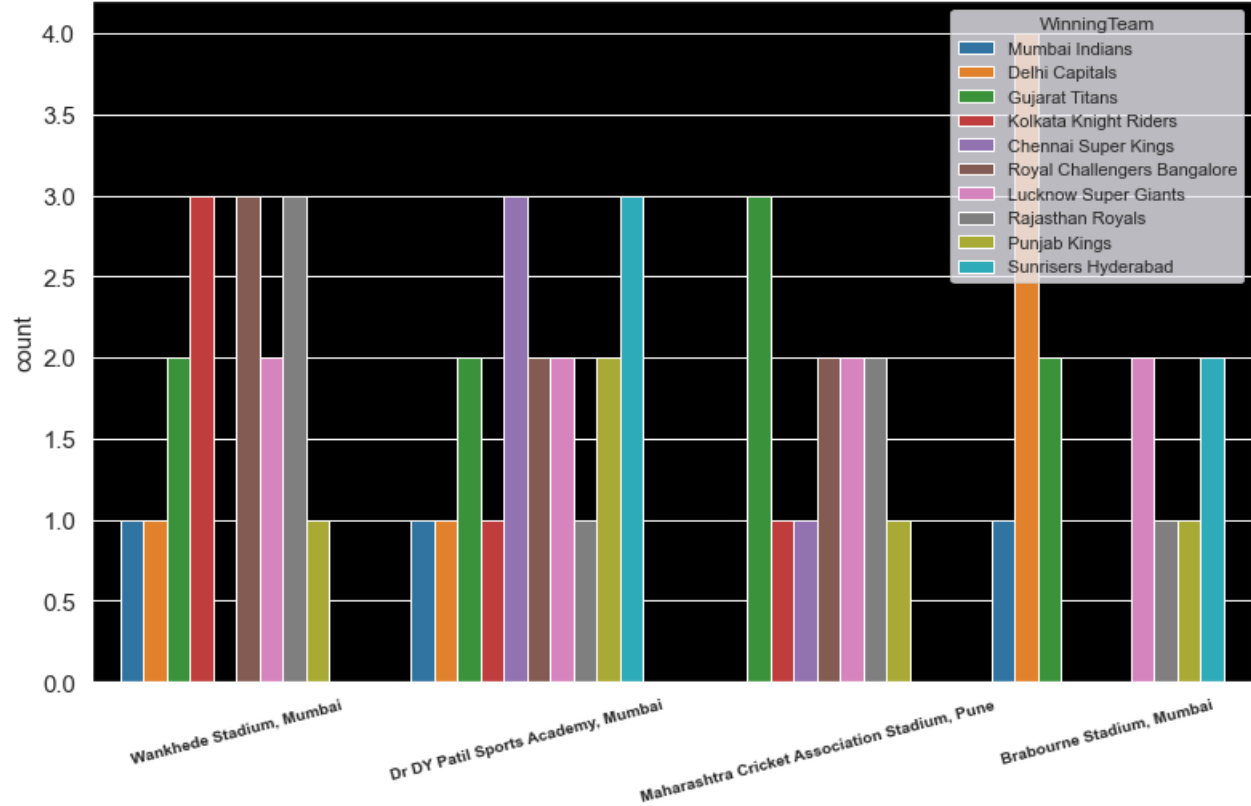


3. IN WHICH STADIUM ,WHICH TEAM MOST OF THE MATCHES HAD WON

Delhi capitals most of times won in Brabourne stadium

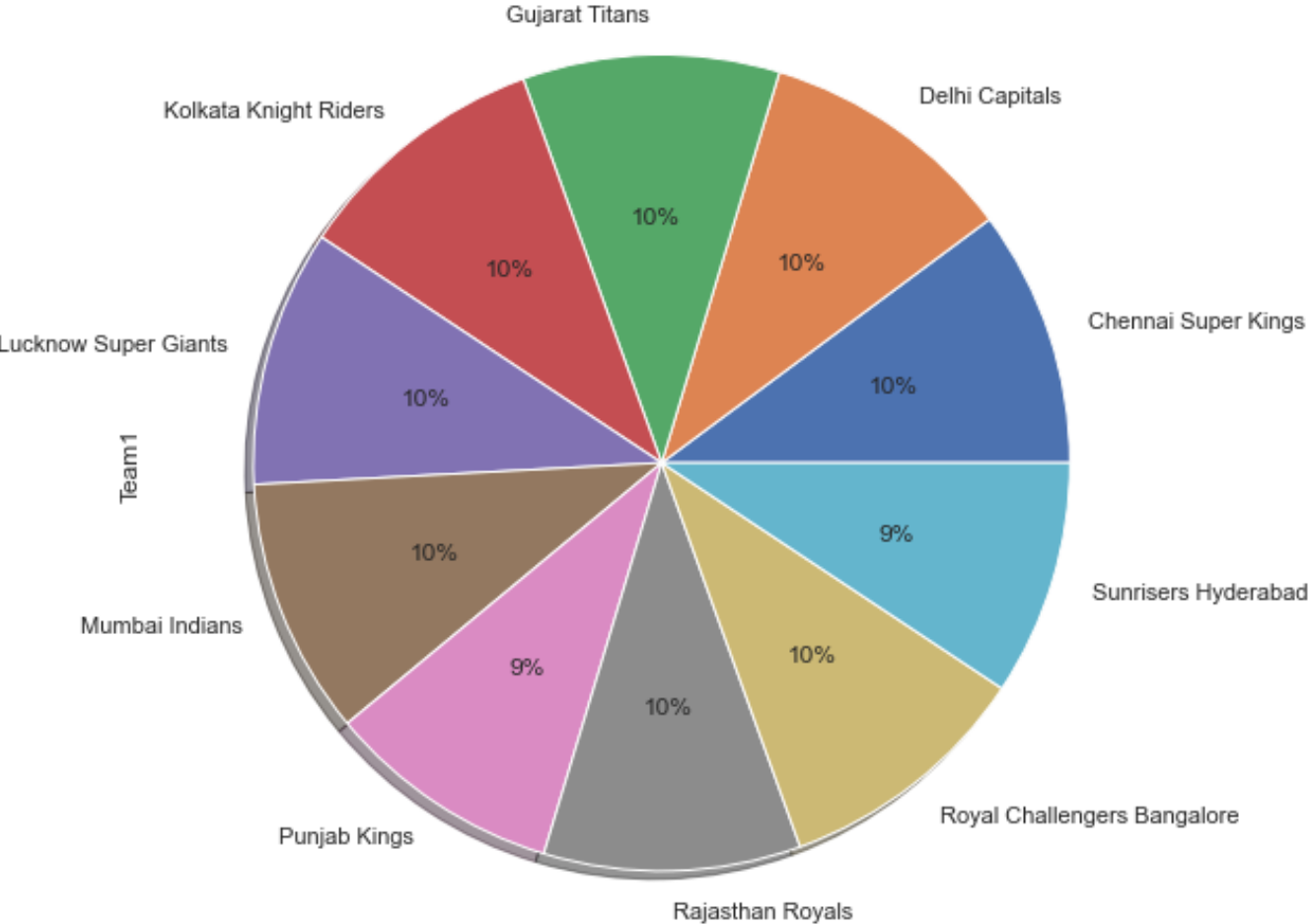
in Wankhede, 3 team had perform well (kkr,rcb,rr) compared to other stadiums

Team Won the matches in Stadium



	Venue	WinningTeam	Won_Match
0	Brabourne Stadium, Mumbai	Delhi Capitals	4
1	Brabourne Stadium, Mumbai	Gujarat Titans	2
2	Brabourne Stadium, Mumbai	Lucknow Super Giants	2
3	Brabourne Stadium, Mumbai	Mumbai Indians	1
4	Brabourne Stadium, Mumbai	Punjab Kings	1
5	Brabourne Stadium, Mumbai	Rajasthan Royals	1
6	Brabourne Stadium, Mumbai	Sunrisers Hyderabad	2
7	Dr DY Patil Sports Academy, Mumbai	Chennai Super Kings	3
8	Dr DY Patil Sports Academy, Mumbai	Delhi Capitals	1
9	Dr DY Patil Sports Academy, Mumbai	Gujarat Titans	2
10	Dr DY Patil Sports Academy, Mumbai	Kolkata Knight Riders	1
11	Dr DY Patil Sports Academy, Mumbai	Lucknow Super Giants	2
12	Dr DY Patil Sports Academy, Mumbai	Mumbai Indians	1
13	Dr DY Patil Sports Academy, Mumbai	Punjab Kings	2
14	Dr DY Patil Sports Academy, Mumbai	Rajasthan Royals	1
15	Dr DY Patil Sports Academy, Mumbai	Royal Challengers Bangalore	2
16	Dr DY Patil Sports Academy, Mumbai	Sunrisers Hyderabad	3
17	Maharashtra Cricket Association Stadium, Pune	Chennai Super Kings	1
18	Maharashtra Cricket Association Stadium, Pune	Gujarat Titans	3
19	Maharashtra Cricket Association Stadium, Pune	Kolkata Knight Riders	1
20	Maharashtra Cricket Association Stadium, Pune	Lucknow Super Giants	2
21	Maharashtra Cricket Association Stadium, Pune	Punjab Kings	1
22	Maharashtra Cricket Association Stadium, Pune	Rajasthan Royals	2
23	Maharashtra Cricket Association Stadium, Pune	Royal Challengers Bangalore	2
24	Wankhede Stadium, Mumbai	Delhi Capitals	1
25	Wankhede Stadium, Mumbai	Gujarat Titans	2
26	Wankhede Stadium, Mumbai	Kolkata Knight Riders	3
27	Wankhede Stadium, Mumbai	Lucknow Super Giants	2
28	Wankhede Stadium, Mumbai	Mumbai Indians	1
29	Wankhede Stadium, Mumbai	Punjab Kings	1
30	Wankhede Stadium, Mumbai	Rajasthan Royals	3
31	Wankhede Stadium, Mumbai	Royal Challengers Bangalore	3

4. HOW MANY MATCHES WERE PLAYED BY EACH TEAM?

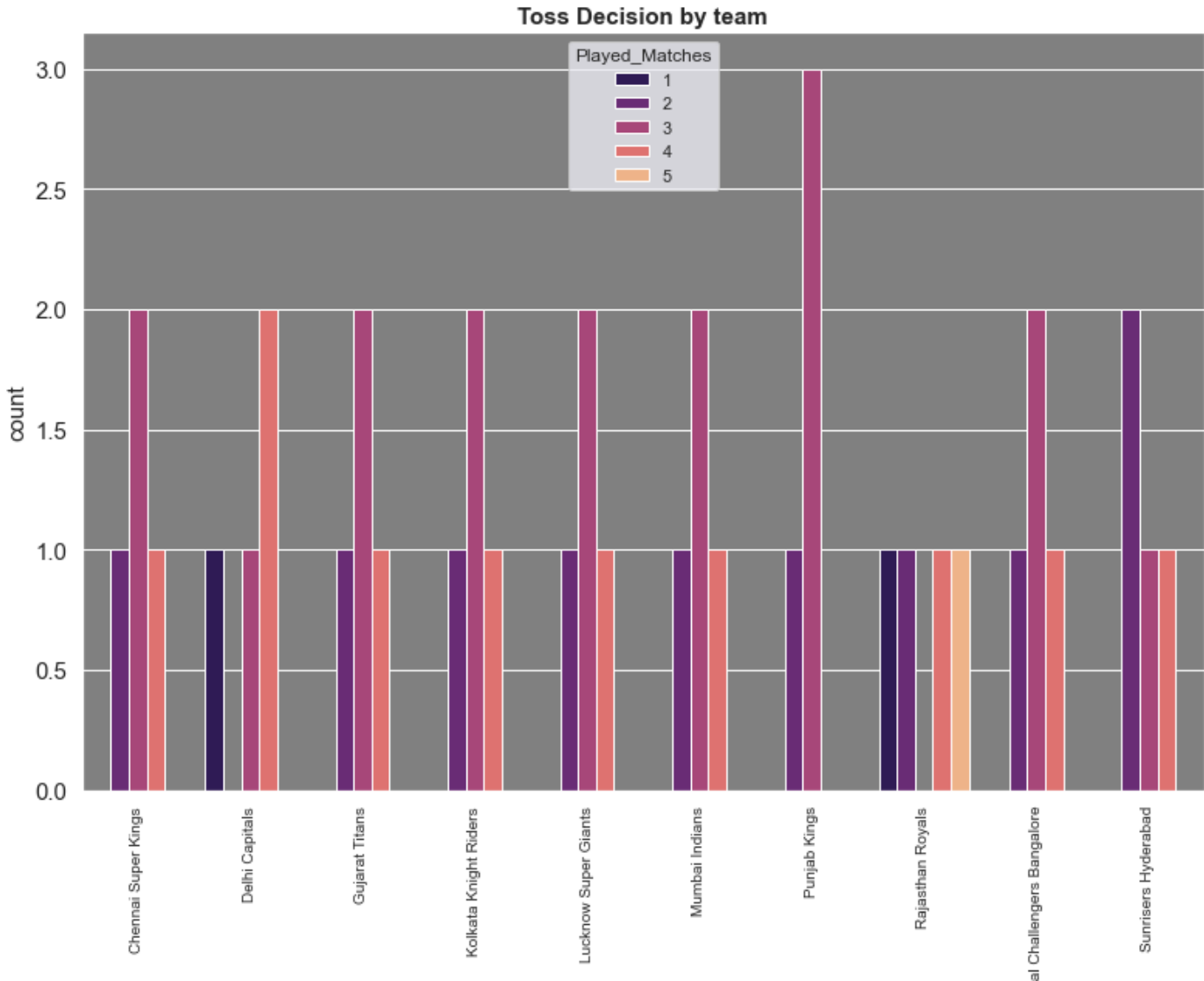


Overall all team played around equal matches

Team1	
Chennai Super Kings	12
Delhi Capitals	12
Gujarat Titans	12
Kolkata Knight Riders	12
Lucknow Super Giants	12
Mumbai Indians	12
Punjab Kings	11
Rajasthan Royals	12
Royal Challengers Bangalore	12
Sunrisers Hyderabad	11

5. IN WHICH STADIUM HOW MANY MATCHES WERE PLAYED BY EACH TEAM ?

Punjab 3 times played match in same stadium

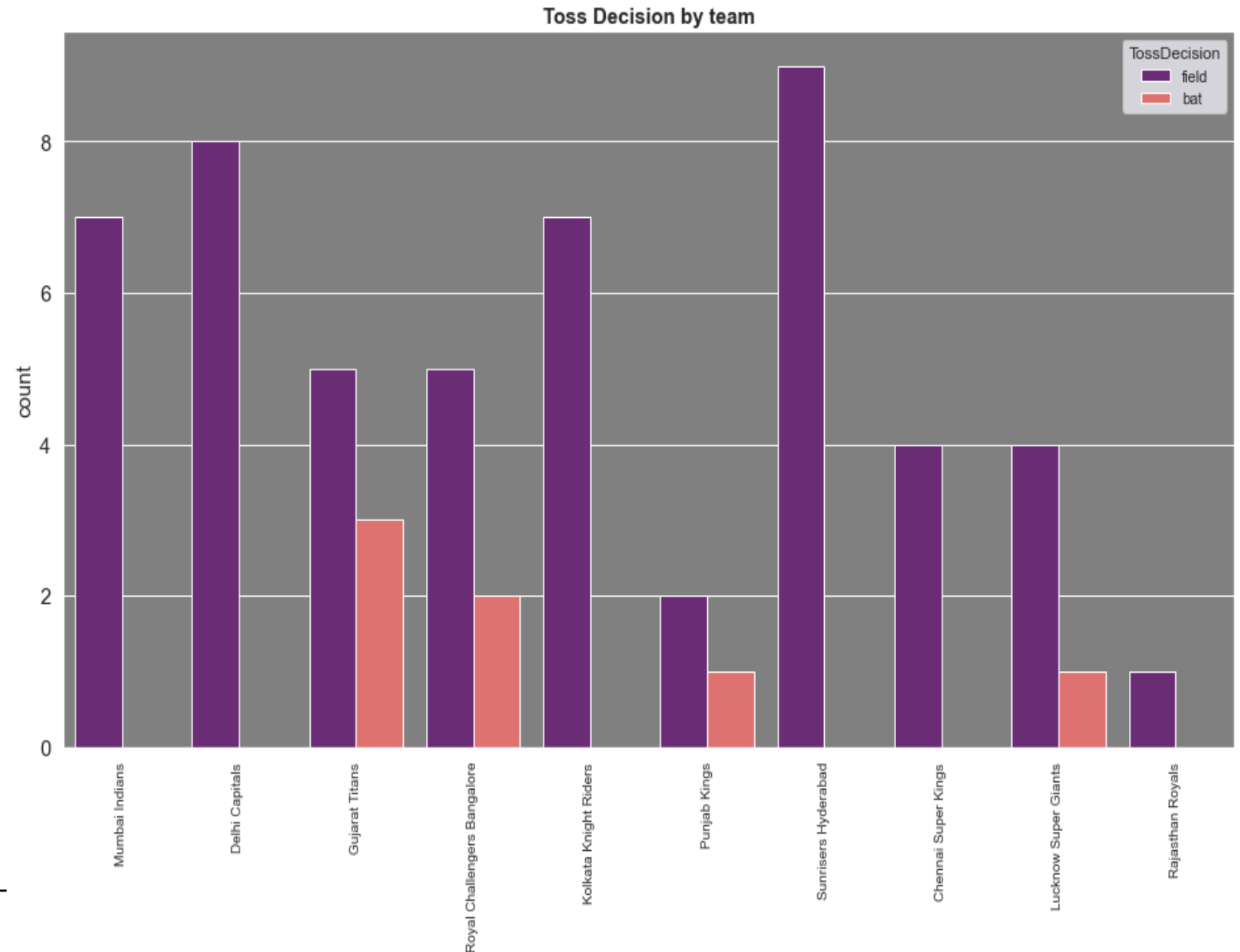


	Venue	Team1	Played_Matches
0	Brabourne Stadium, Mumbai	Chennai Super Kings	2
1	Brabourne Stadium, Mumbai	Delhi Capitals	4
2	Brabourne Stadium, Mumbai	Gujarat Titans	3
3	Brabourne Stadium, Mumbai	Kolkata Knight Riders	3
4	Brabourne Stadium, Mumbai	Lucknow Super Giants	2
5	Brabourne Stadium, Mumbai	Mumbai Indians	3
6	Brabourne Stadium, Mumbai	Punjab Kings	3
7	Brabourne Stadium, Mumbai	Rajasthan Royals	1
8	Brabourne Stadium, Mumbai	Royal Challengers Bangalore	2
9	Brabourne Stadium, Mumbai	Sunrisers Hyderabad	3
10	Dr DY Patil Sports Academy, Mumbai	Chennai Super Kings	4
11	Dr DY Patil Sports Academy, Mumbai	Delhi Capitals	3
12	Dr DY Patil Sports Academy, Mumbai	Gujarat Titans	4
13	Dr DY Patil Sports Academy, Mumbai	Kolkata Knight Riders	3
14	Dr DY Patil Sports Academy, Mumbai	Lucknow Super Giants	3
15	Dr DY Patil Sports Academy, Mumbai	Mumbai Indians	4
16	Dr DY Patil Sports Academy, Mumbai	Punjab Kings	3
17	Dr DY Patil Sports Academy, Mumbai	Rajasthan Royals	4
18	Dr DY Patil Sports Academy, Mumbai	Royal Challengers Bangalore	4
19	Dr DY Patil Sports Academy, Mumbai	Sunrisers Hyderabad	4
20	Maharashtra Cricket Association Stadium, Pune	Chennai Super Kings	3
21	Maharashtra Cricket Association Stadium, Pune	Delhi Capitals	1
22	Maharashtra Cricket Association Stadium, Pune	Gujarat Titans	3
23	Maharashtra Cricket Association Stadium, Pune	Kolkata Knight Riders	2
24	Maharashtra Cricket Association Stadium, Pune	Lucknow Super Giants	3
25	Maharashtra Cricket Association Stadium, Pune	Mumbai Indians	3
26	Maharashtra Cricket Association Stadium, Pune	Punjab Kings	2
27	Maharashtra Cricket Association Stadium, Pune	Rajasthan Royals	2
28	Maharashtra Cricket Association Stadium, Pune	Royal Challengers Bangalore	3
29	Maharashtra Cricket Association Stadium, Pune	Sunrisers Hyderabad	2
30	Wankhede Stadium, Mumbai	Chennai Super Kings	3
31	Wankhede Stadium, Mumbai	Delhi Capitals	4
32	Wankhede Stadium, Mumbai	Gujarat Titans	2
33	Wankhede Stadium, Mumbai	Kolkata Knight Riders	4
34	Wankhede Stadium, Mumbai	Lucknow Super Giants	4
35	Wankhede Stadium, Mumbai	Mumbai Indians	2
36	Wankhede Stadium, Mumbai	Punjab Kings	3
37	Wankhede Stadium, Mumbai	Rajasthan Royals	5
38	Wankhede Stadium, Mumbai	Royal Challengers Bangalore	3
39	Wankhede Stadium, Mumbai	Sunrisers Hyderabad	2

Q6. TOSS DECISION BY TEAM

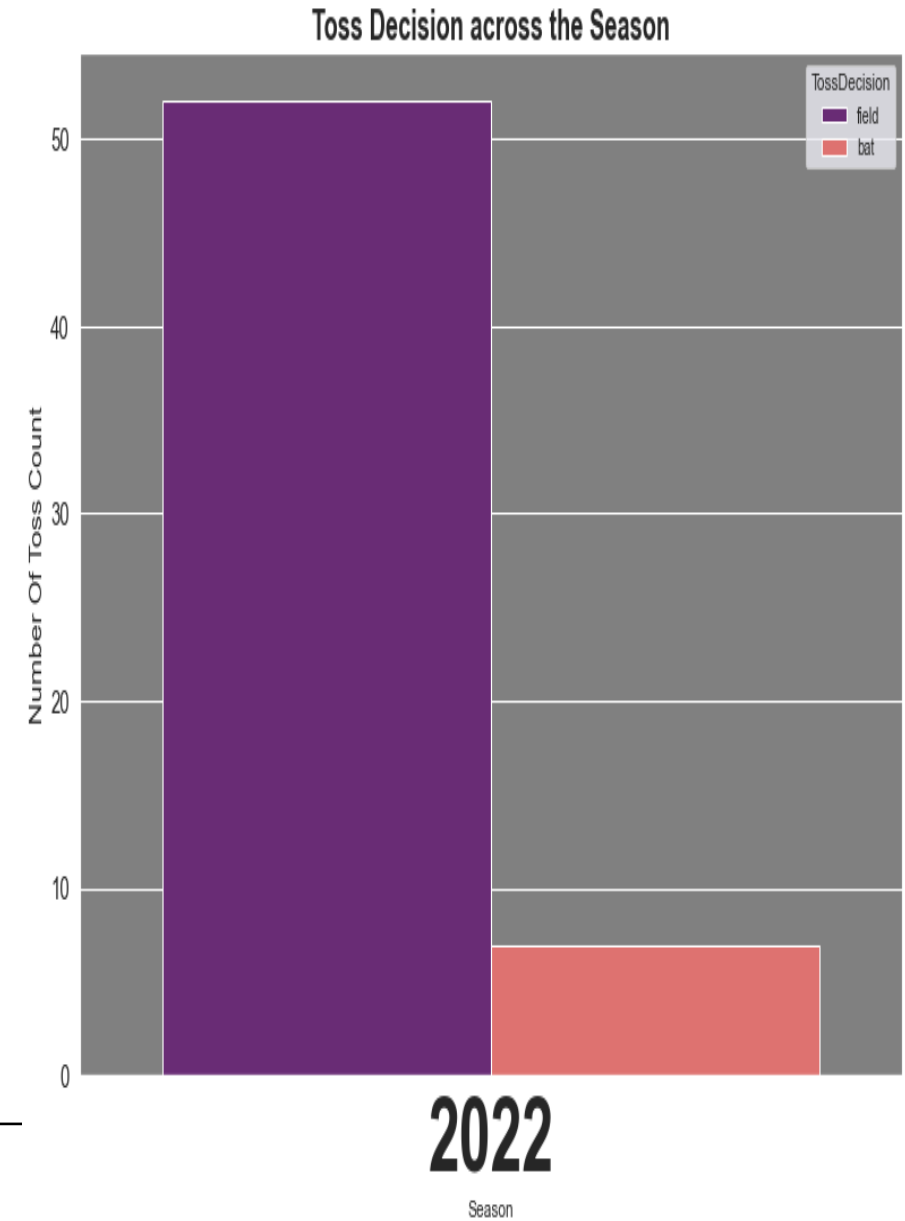
In the Most of cases team chose field first
Hyderabad won the toss most

	TossWinner	TossDecision	count
0	Chennai Super Kings	field	4
1	Delhi Capitals	field	8
2	Gujarat Titans	bat	3
3	Gujarat Titans	field	5
4	Kolkata Knight Riders	field	7
5	Lucknow Super Giants	bat	1
6	Lucknow Super Giants	field	4
7	Mumbai Indians	field	7
8	Punjab Kings	bat	1
9	Punjab Kings	field	2
10	Rajasthan Royals	field	1
11	Royal Challengers Bangalore	bat	2
12	Royal Challengers Bangalore	field	5
13	Sunrisers Hyderabad	field	9



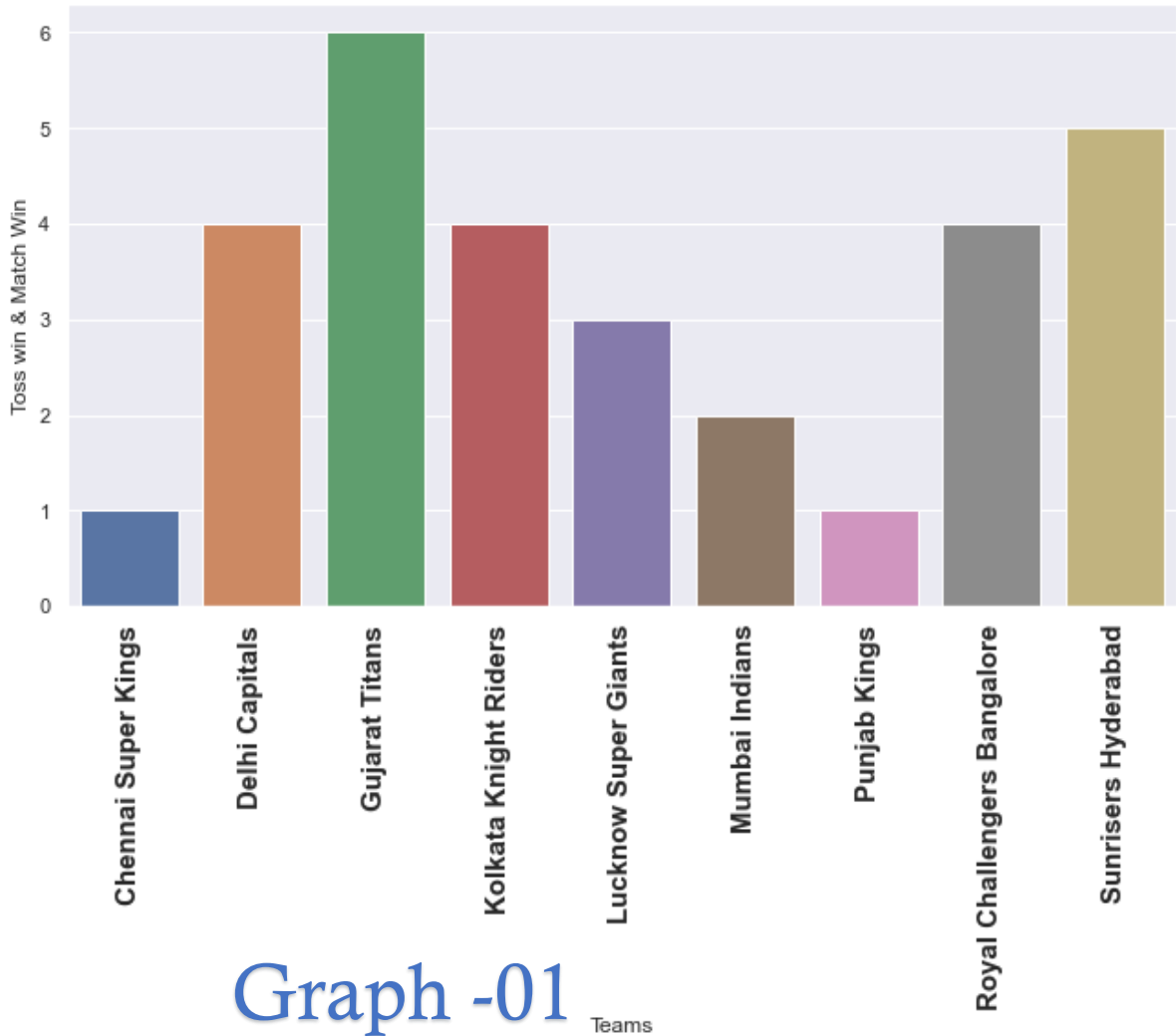
Q7. WHAT IS THE TOSS DECISION IN THIS SEASON?

**In season 2022, Most of the team
chose ball first**

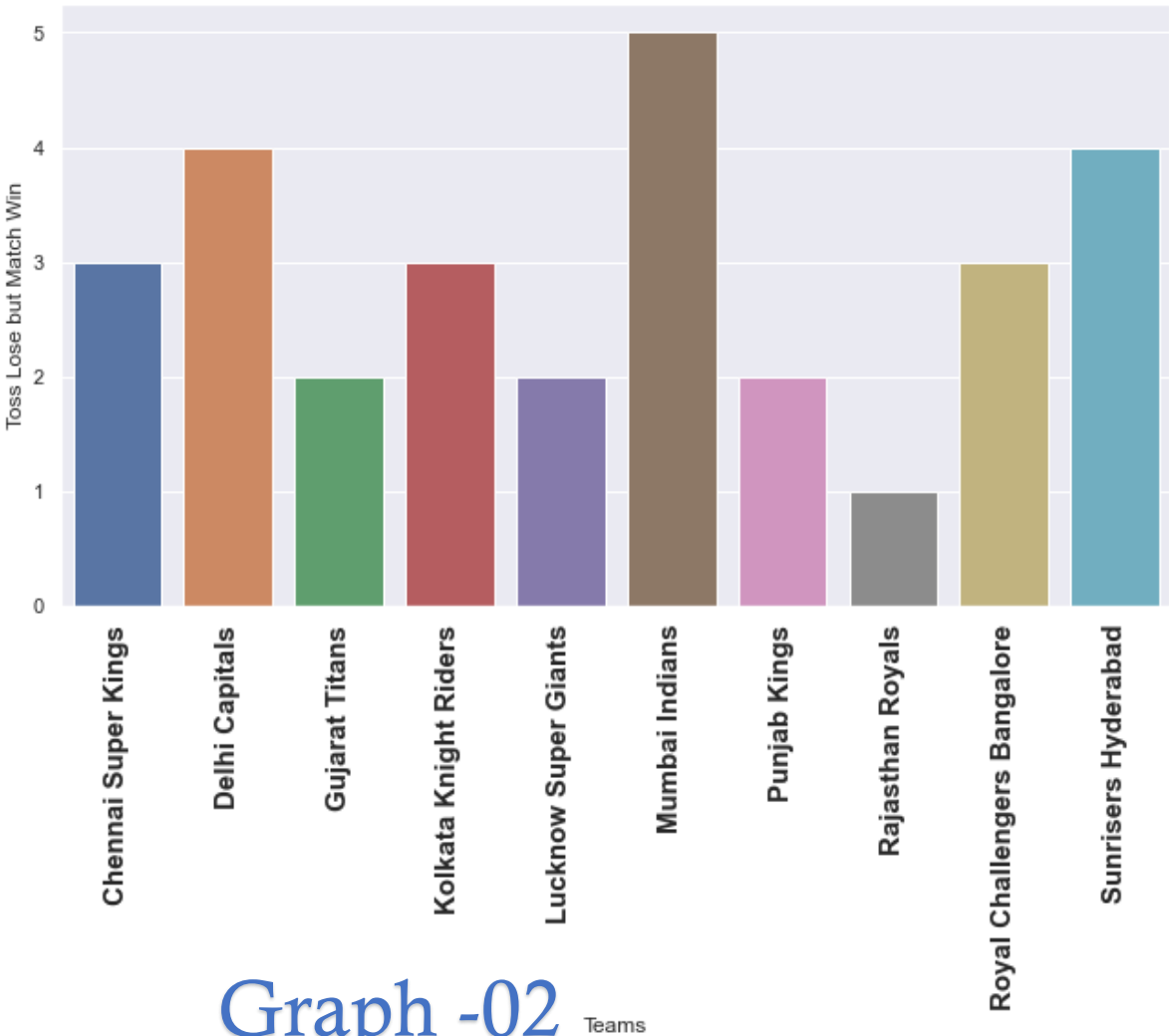


Q8. WINNING THE MATCH AFTER TOSS

Graph-01 represents, Team win the match after won the toss
We can predict that if GT won the toss,50% chances to win the match compared to other team

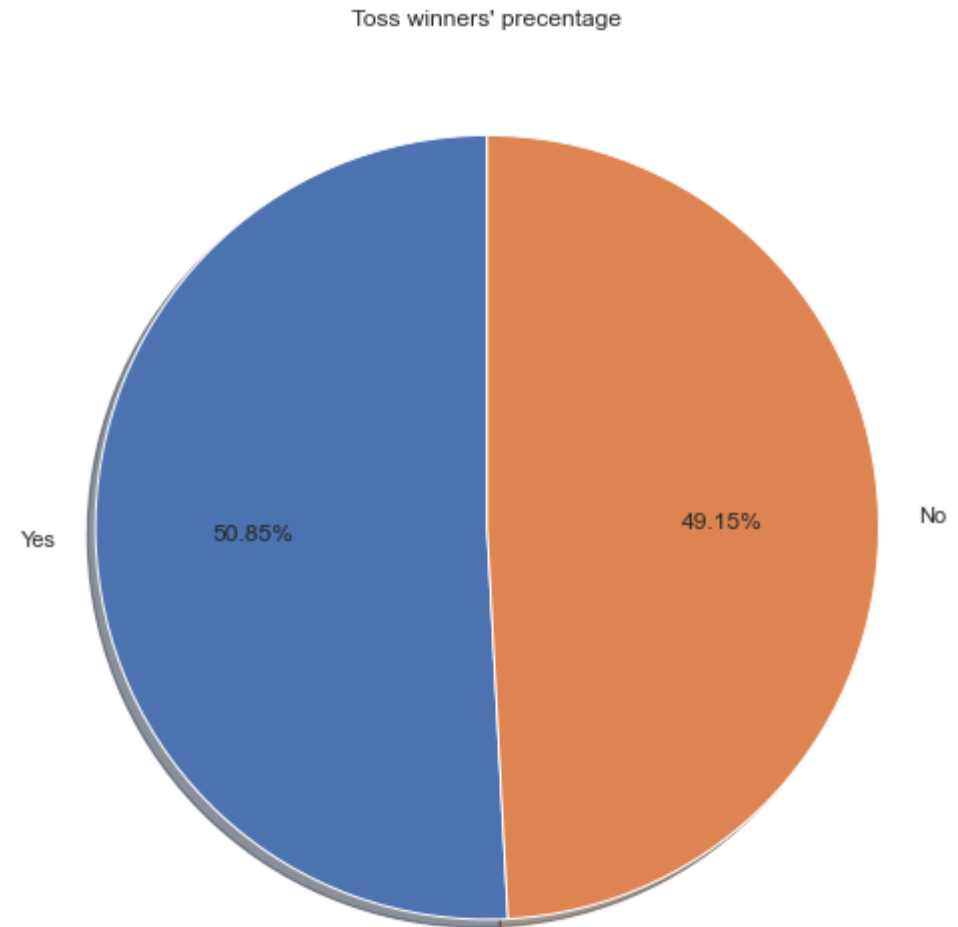


Graph-02 represents, Team win the match after lose the toss
Most of cases ,MI won the matches 5 times even they lost the toss



Q9. WIN - LOSE RATIO AFTER WIN THE TOSS

Avg 50%-50% ratio, if any team won or lost the toss



Q10. (I) WON THE MATCH WITH BIGGEST MARGIN
(II) WON THE MATCH WITH BIGGEST WICKETS

Chennai Super King has won the match with biggest margin

	WinningTeam	Margin
2	Chennai Super Kings	91

Out of the 10 team only 2 team has won the match without drop any wicket

	WinningTeam	Margin
9	Sunrisers Hyderabad	9
11	Delhi Capitals	9

Q11. HOW MANY SUPER-OVER PLAYED IN THIS SEASON?
IF ANY SUPER OVER THAN WHO HAD WON?

In this season, between two
innings one team won the match

There is no such a case for match
tie

Super-over = 0

Q12. WHICH PLAYER MOST OF TIMES MAN OF MATCH IN THIS SEASON?

**Most of the times Kuldeep Yadav
won the man of the match**

```
Player_of_Match  
Kuldeep Yadav    4  
Name: Player_of_Match, dtype: int64
```

Q13. THE LOWEST TOTAL DEFENDED AND HIGHEST TOTAL CHASED BY EACH TEAM

Lucknow Team won the match for chasing big score in the Brabourne stadium

match_id	date	venue	team1	team2	stage	toss_winner	toss_decision	first_ings_score	first_ings_wkts	second_ings_score	second_ings_wkts	match_winner	won_by	margin	player_of_the_match	top_scorer	highscore	best_bowling	best_bowling_figure	
6	7	March 31,2022	Brabourne Stadium, Mumbai	Chennai	Lucknow	Group	Lucknow	Field	210	7	211	4	Lucknow	Wickets	6	Evin Lewis	Quinton de Kock	61	Ravi Bishnoi	2–24

Lucknow Team has not chased minimum score in the tournament

match_id	date	venue	team1	team2	stage	toss_winner	toss_decision	first_ings_score	first_ings_wkts	second_ings_score	second_ings_wkts	match_winner	won_by	margin	player_of_the_match	top_scorer	highscore	best_bowling	best_bowling_figure	
56	57	May 10,2022	Maharashtra Cricket Association Stadium,Pune	Lucknow	Gujarat	Group	Gujarat	Bat	144	4	82	10	Gujarat	Runs	62	Shubman Gill	Shubman Gill	63	Rashid Khan	4--24

QN-14 MOST RUNS SCORED IN 20TH AND 19TH OVERS

	overs	total_run
0	18	1122
1	19	1060

Q15. MOST SIXES AND MOST FOUR BY INDIVIDUAL AND TEAMS

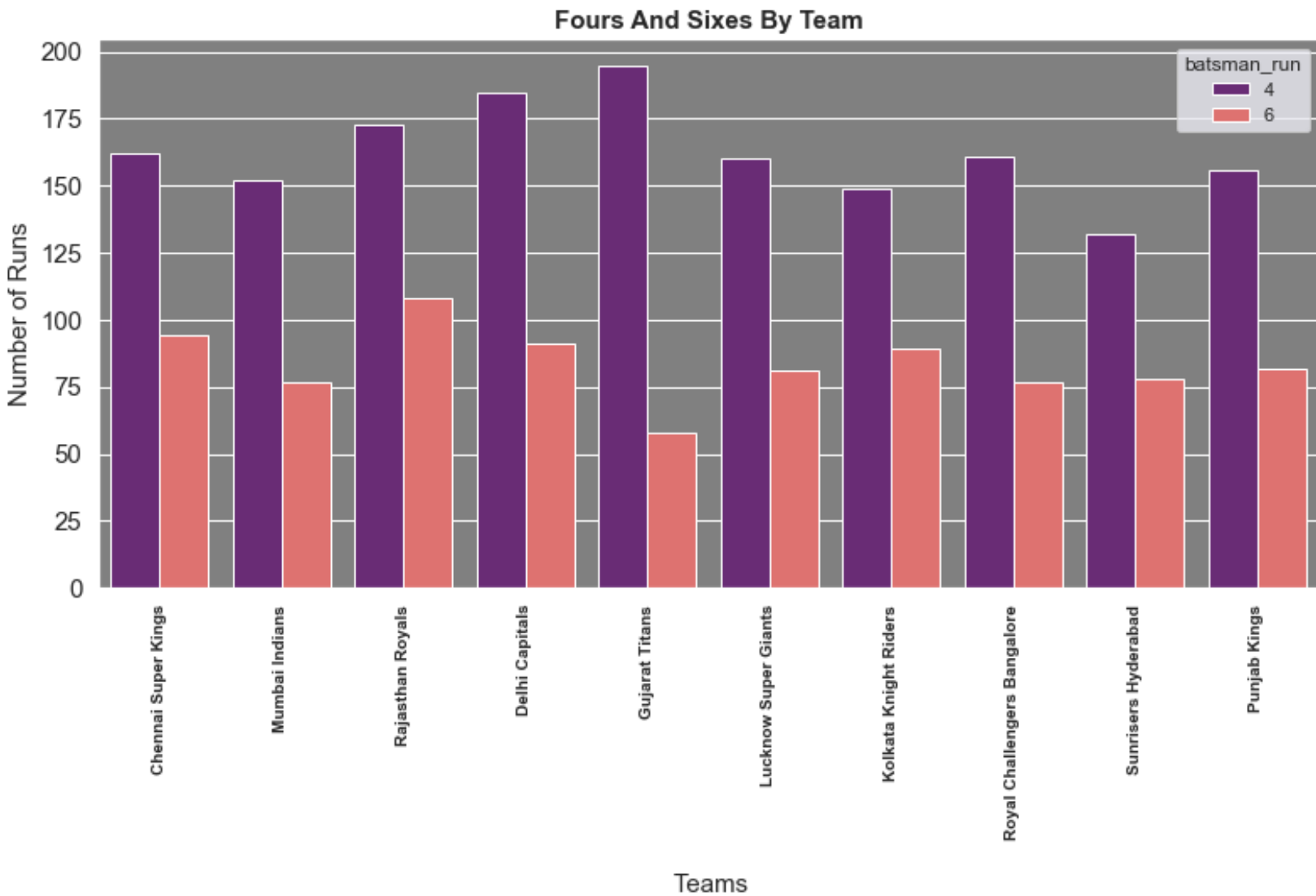
Buttler hits many sixe and fours in this tournament

	batter	count	sum	batter	count	sum
0	JC Buttler	57	228	JC Buttler	37	222

Total sixes in tournament = 835

Total Fours in tournament = 1625

Almost double fours smashed in this tournament



Q16. > 50 SCORE BY PLAYER AND > 100 SCORE BY PLAYER

	batter	MatchNumber	total_run
0	JC Buttler	34	117
1	KL Rahul	37	111
2	JC Buttler	30	108
3	KL Rahul	26	108
4	JC Buttler	9	103
...
95	VR Iyer	14	52
96	DJ Hooda	12	51
97	S Dube	7	51
98	MS Dhoni	1	51
99	AD Russell	25	51

100 rows × 3 columns

Score > 50

	batter	MatchNumber	total_run
0	JC Buttler	34	117
1	KL Rahul	37	111
2	JC Buttler	30	108
3	KL Rahul	26	108
4	JC Buttler	9	103
5	S Dube	22	102
6	F du Plessis	3	102
7	DA Warner	50	101
8	RD Gaikwad	46	101

Score > 100

Q17. HIGHEST RUN SCORER IN POWER PLAY AND DEATH OVERS

	MatchNumber	innings	total_run
0	32	2	81

Power Play score

	MatchNumber	innings	total_run
0	40	2	25

Last Over score

THANK YOU
