

# IPL DATA VISUALISATION USING TABLEAU

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## **OBJECTIVE**

 To create an interactive dashboards that highlights some of the important statistics of the IPL over the year 2008-2017.

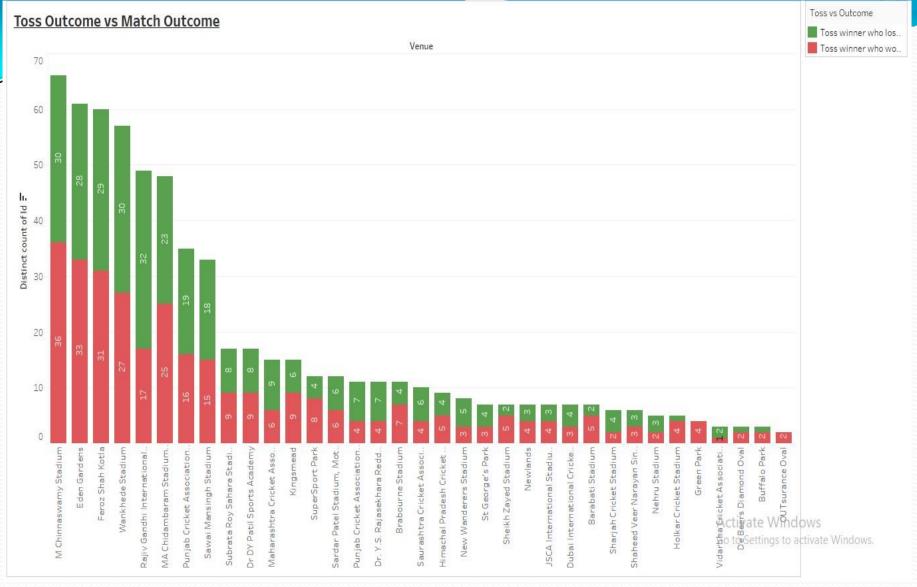
## PROBLEM STATEMENT

- The Indian Premier League, or IPL, is a T20 cricket league, which was founded in 2008 and is held every year. It sees participation from both national and international players, and eight teams representing eight Indian cities compete with each other in a double round-robin format in the league stages, which are followed by playoffs. Over the years, IPL has become one of the most-watched and most attended live sporting events all over the world.
- You work as a data analyst at IFP, a nationally recognised news agency, which is based out of New Delhi, and provides news reports and feeds to magazines, newspapers and TV broadcasters all over the country. The Sports Editor of the agency has approached you to build a Tableau dashboard of IPL statistics over the years since its inception in order to create an infographic for a newsletter that their team is working on. For this newsletter, in some cases, they will use the visual representations as you have created in Tableau directly for their infographic, and in a few other cases, they will use important statistics after trying out the different filters and customisations that you have provided for interactivity. Therefore, you are expected to build an interactive dashboard in Tableau for this purpose.

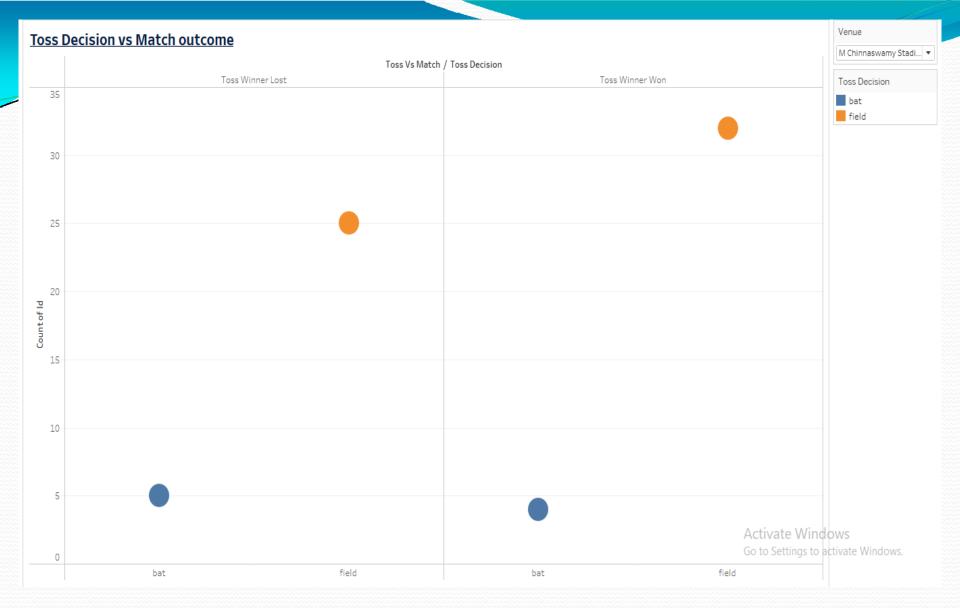
## DATASET PROVIDED

- matches.csv It contains match-level information for each and every match held in IPL from 2008 to 2017.
- deliveries.csv It contains ball-by-ball information for each of the matches.
- Each row in deliveries.csv data contains :
- ✓ Match related information (batting team vs bowling team)
- ✓ Player information (Bowler, Batsman, Non-striker)
- Delivery information (Runs scored, Wickets, Extras, etc.)
- Each row in deliveries.csv data contains:
- ✓ Match specifics (umpires, ground, etc.)
- ✓ Results (which team won, win type, player of the match, etc.)

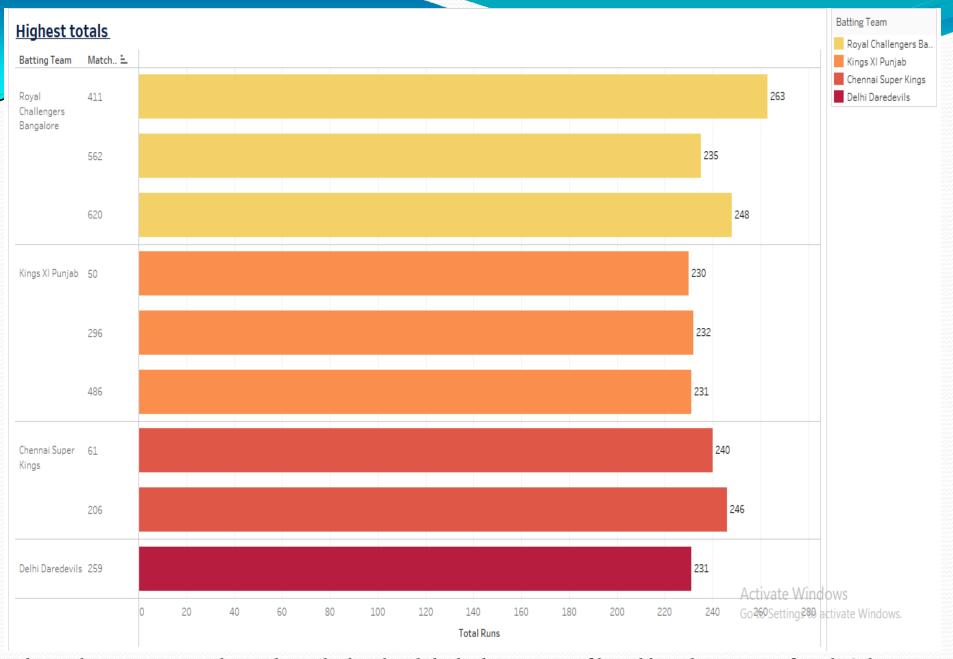
# MATCH STATISTICS



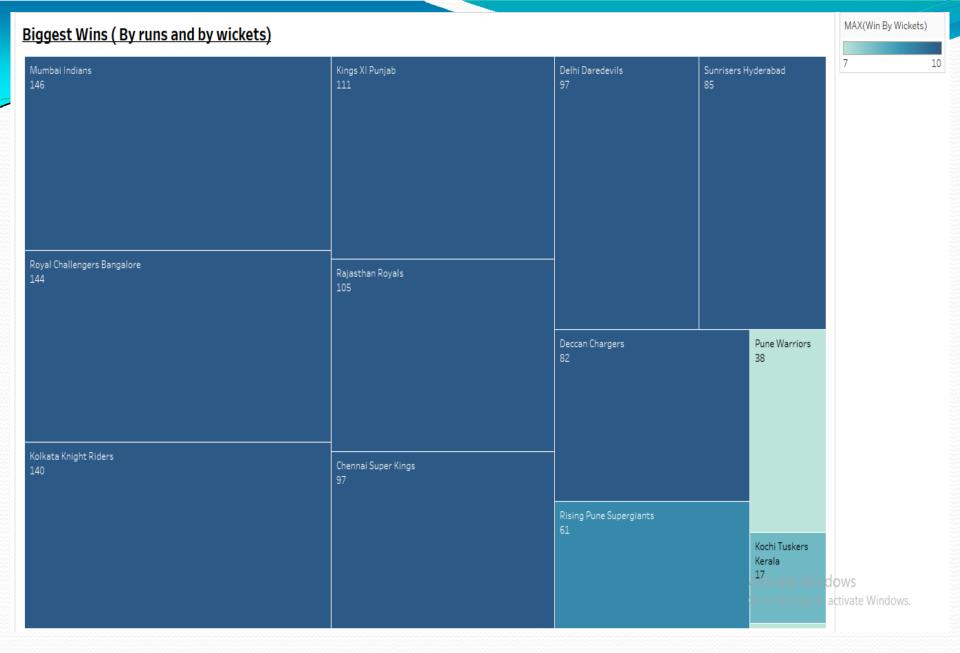
The above graph indicates the number of matches the toss winner won and lost the matches for each venue. Toss winner is derived from the data. The green color indicates the number of matches the toss winner won and red color indicates the number of matches the toss winner lost against each venue. Maximum number of matches were played at M Chinnaswamy, Eden gardens and at feroz Shah Kotla stadiums. Maximum number of matches were won at M Chinnaswamy stadium and maximum matches were lost at Rajiv Gandhi International stadium.



The graph indicates the toss winners who close to bat and field respectively and the corresponding number of matches they lost won. Toss winner is derived from the data. The color shows the details of the toss decision and the data is filtered on venue. Toss winners at M Chinnaswamy stadium choose to field first according to the above graph.

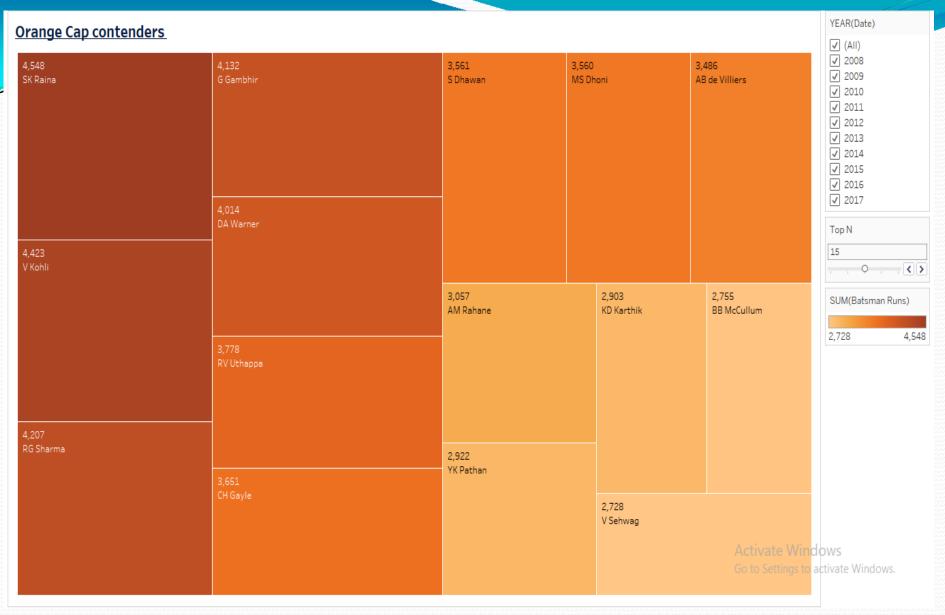


The total runs score in each match is calculated and the highest runs are filtered based on ranges of total. Color indicates the different batting teams. RCB has the highest scores of 263 and 248 across all seasons.

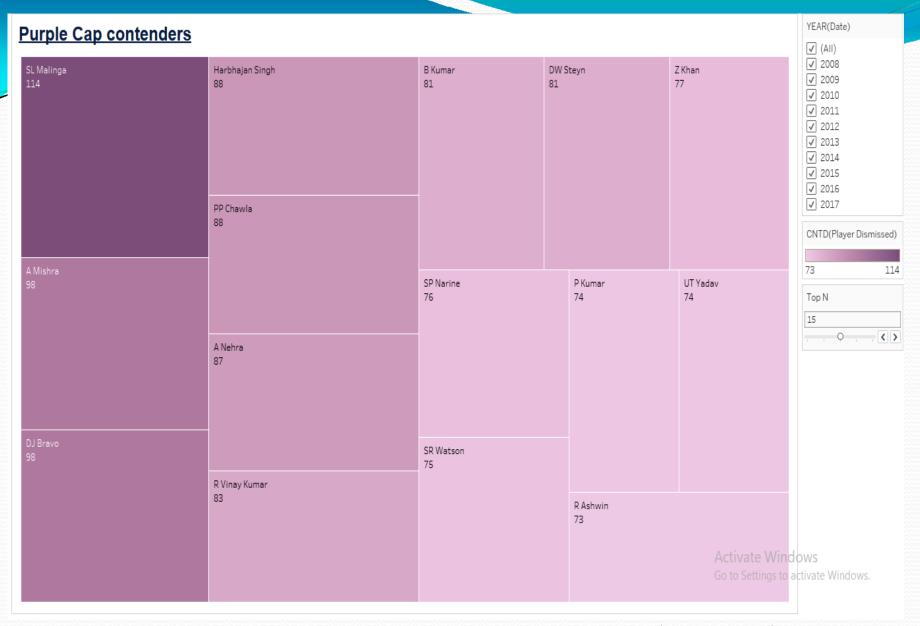


In the above graph, maximum Win by Wickets is indicated by color intensity. The size of each tile indicates the maximum Wins by Runs. The maximum win by wickets is 10 and the maximum runs is by Mumbai Indians.

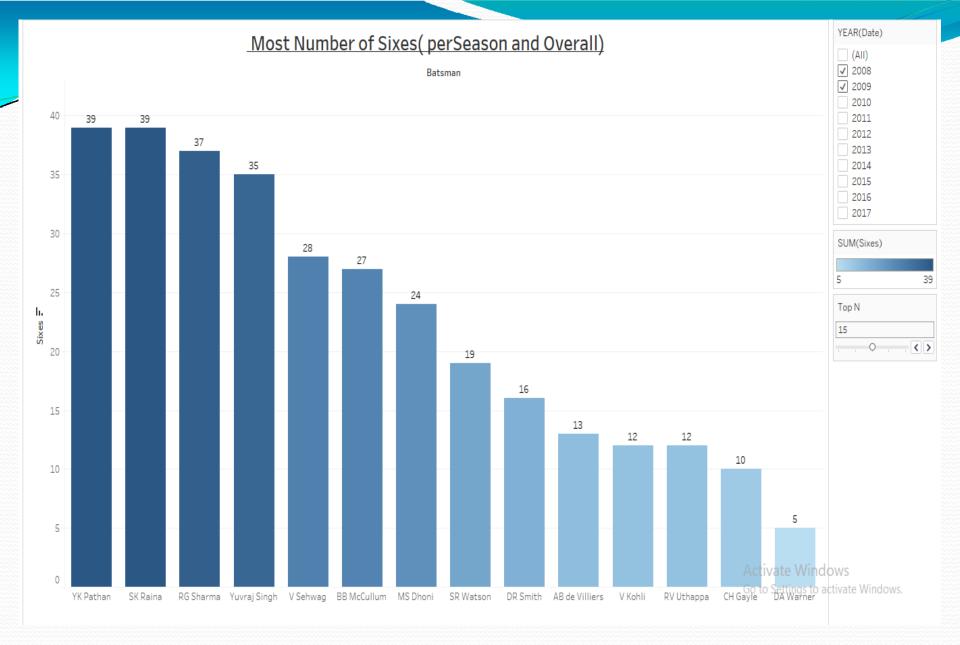
## PLAYER STATISTICS



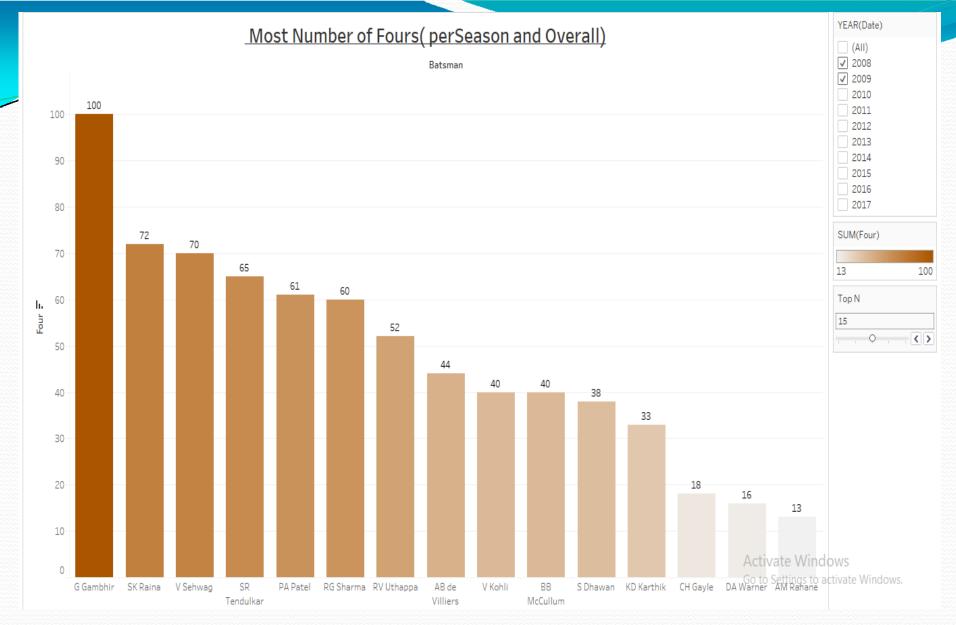
Color and intensity of the graph indicates the total runs scored by a batsman for a corresponding year. The context is filtered using Year and "Top N" orange cap contenders are displayed. In entire season SK Raina had amassed 4548 runs in all seasons followed by V kohli who has scored 4423 runs in the entire seasons. Although, treemaps is not the best fit for the above visualizations, it is visually appealing for purple cap and orange cap contenders.



Color and intensity of the graph indicates the total number of players dismissed (wickets taken) for a corresponding year. The context is filtered using Year and "Top N" purple cap contenders are displayed. In entire year SL Malinga has taken 114 wickets followed by A Mishra who has taken 98 wickets in that season.

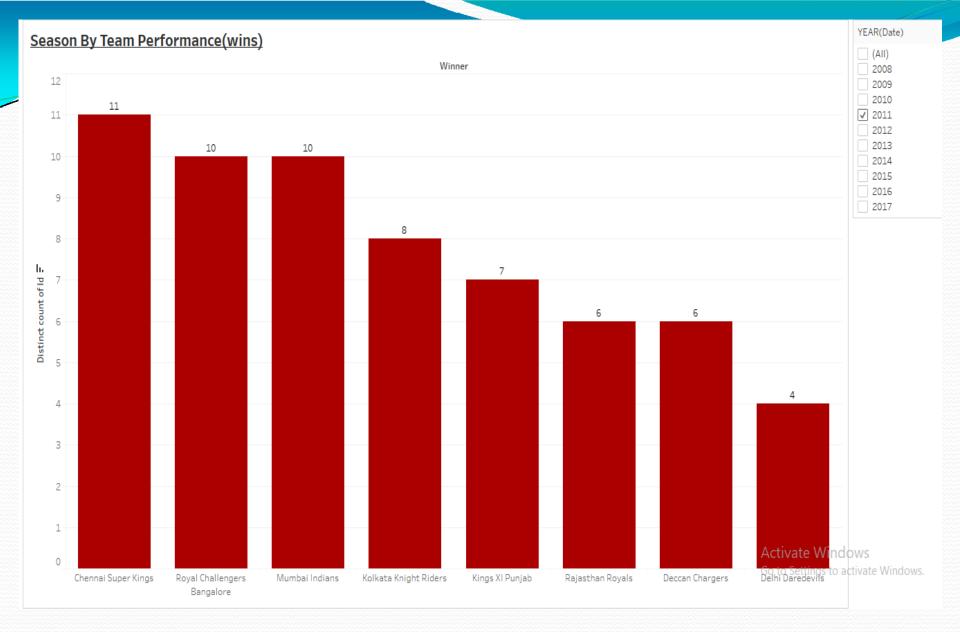


The graph displays the number of sixes that each batsman has hit. The data is filtered on year and "top N" numbers of batsman are displayed. In the graph, a cumulative sum of numbers of sixes in 2008 and 2009 is displayed. CH Gayle has hit a total of 266 sixes across all IPL seasons.

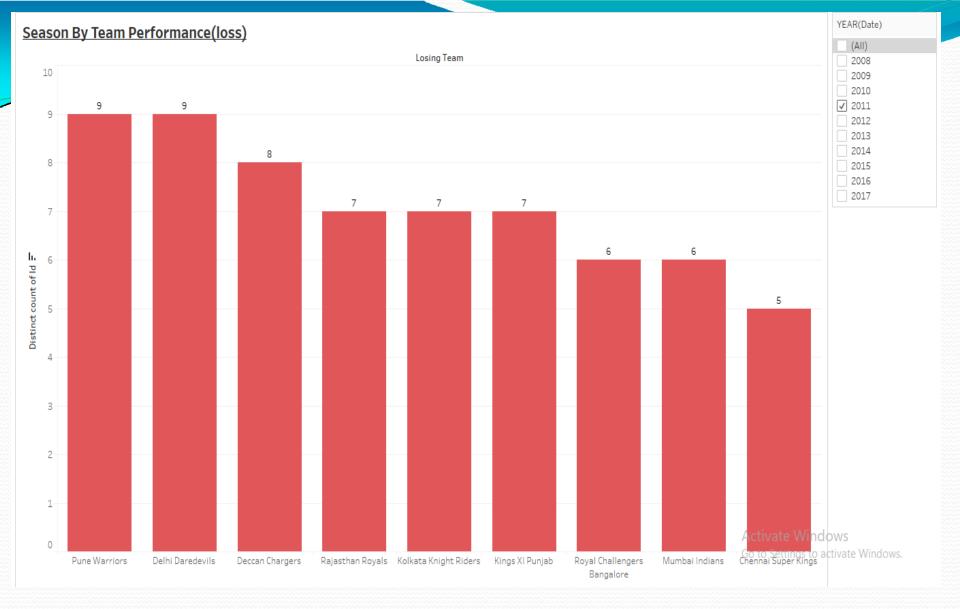


The graph displays the number of Fours that each batsman has hit. The data is filtered on year and "top N" numbers of batsman are displayed. In the graph, a cumulative sum of numbers of sixes in 2008 and 2009 is displayed. G. Gambhir has hit a total of 484 forus across all IPL seasons.

# TEAM STATISTICS



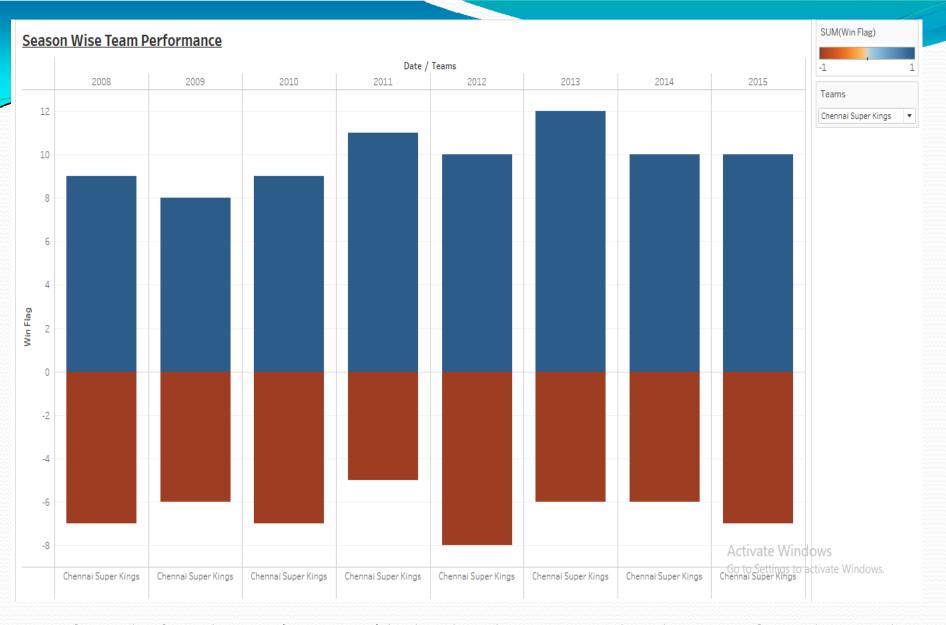
The above graph displays the total number of matches won by each team participating in a particular season. The data is filtered on date. In 2011, CSK had won 11 matches. Mumbai Indians has won 92 matches in total across all seasons and were the team with who won the highest number of matches.



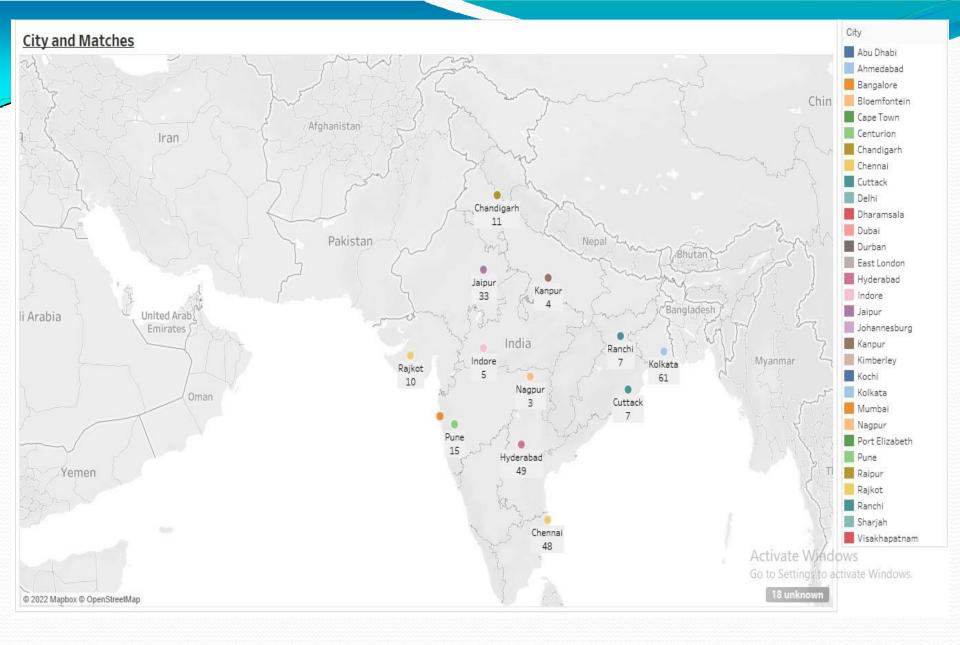
The above graph displays the total number of matches lost by each team participating in a particular season. The data is filtered on date. In 2011, Pune Warriors and Delhi Daredevils had lost 9 matches. Delhi Daredevils had lost 83 matches in total across all seasons and were the team with who lost the highest number of matches.



The above graph displays the percentage of matches that CSK has won and lost in Home and Away games. In 2011, CSK won all the games played at Chennai.



Sum of Win Flag for each Teams (Parameters) broken down by Date Year. Colour shows sum of Win Flag. Details are shown for Match Id. The data is filtered on Win Flag and Seasons, the Win Flag filters ranges from 1. Seasons Filter ranges from 2008 and 2017. The view is filtered on Date Year, which keeps multiple members.

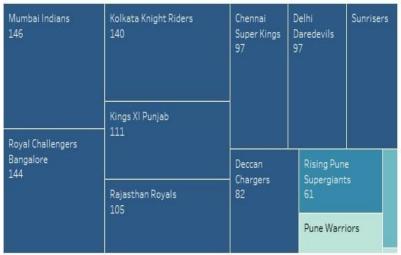


The graph represents cities and the number of matches played by them. Kolkata had conducted highest number of matches with a total of 61, followed by Hyderabad with 49 and Chennai with 48.

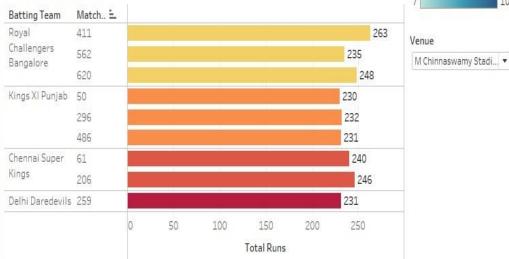
# DASHBOARDS

## **Match Statistics**

### Biggest Wins (By runs and by wickets)



### **Highest Totals**



Toss vs Outcome

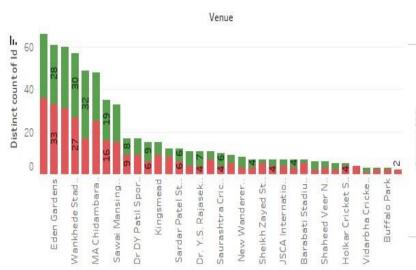
Toss winner who los..

Toss winner who wo...

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Max. Win By Wickets

#### Toss Outcome vs Match Outcome



#### Toss Decision vs Match outcome

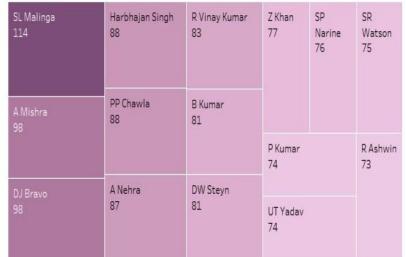


## **Player Statistics**

### Orange Cap contenders

4,548 SK Raina	4,132 G Gambhir	3,651 CH Gayle	3,486 AB de Villiers	3,057 AM Rahane	2,922 YK Pathan
4,423 V Kohli	4,014 DA Warner	3,561 S Dhawan			
			2,903 KD Karthik		2,728 V
4,207	3,778	3,560	Sehw		Sehwag
RG Sharma	RV Uthappa	MS Dhoni	2,755 BB McCullum		

## **Purple Cap contenders**



Year of Date

✓ (AII) ✓ 2008 ✓ 2009

✓ 2010 ✓ 2011

✓ 2012

✓ 2013

✓ 2014 ✓ 2015 ✓ 2016

- naa-

Year of Date

✓ (AII)

✓ 2008✓ 2009

✓ 2010

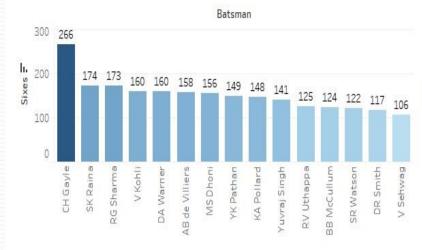
✓ 2011

✓ 2012 ✓ 2013 ✓ 2014

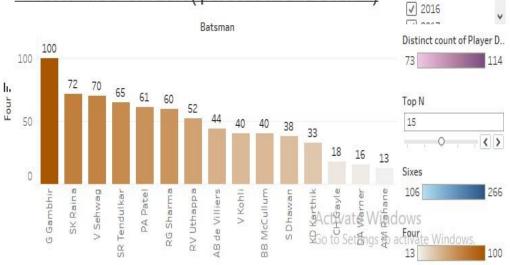
✓ 2015

VO

## Most Number of Sixes (perSeason and Overall)

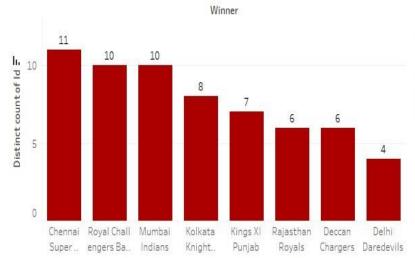


## Most Number of Fours (perSeason and Overall)



## **Team Satistics**

### Season By Team Performance(wins)



## Season By Team Performance(loss)



Year of Date

Year of Date

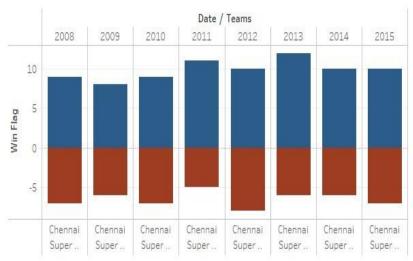
\*

\*

2011

2011

#### Season Wise Team Performance



## Win % (Home vs Away)



## SUMHARY

- The highest number of matches were played in Mumbai, Kolkata, Bangalore and delhi.
- Maximum number of matches were played at M Chinnaswamy stadium. Toss winners who chose to field have won the matches the most.
- Maximum number of matches were won at M Chinnaswamy stadium and maximum matches were lost at Rajiv Gandhi International Stadium.
- RCB holds the highest score in the IPL history of 263 and 248 in the year 2013 and 2016.
- The maximum win by wickets is 10 and the maximum wins by runs is by Mumbai Indians. Overall, 10 teams have won the matches by 10 wickets.
- V Kohli holds the records for highest runs in a single season of IPL.
- SL Malinga holds the record for taking highest number of wickets in a single season of IPL.
- Gautam Gambhir has hit maximum number of fours across all IPL seasons.
- Chris Gayle has hit most number of sixes across all IPL seasons.
- Mumbai Indians and Chennai Super Kings are the most successful teams in the IPL history followed by Kolkata Night Riders.
- CSK is the most successful team in IPL history. Despite a two-year suspension, they are among the top 2 teams who have won the maximum number of matches.