

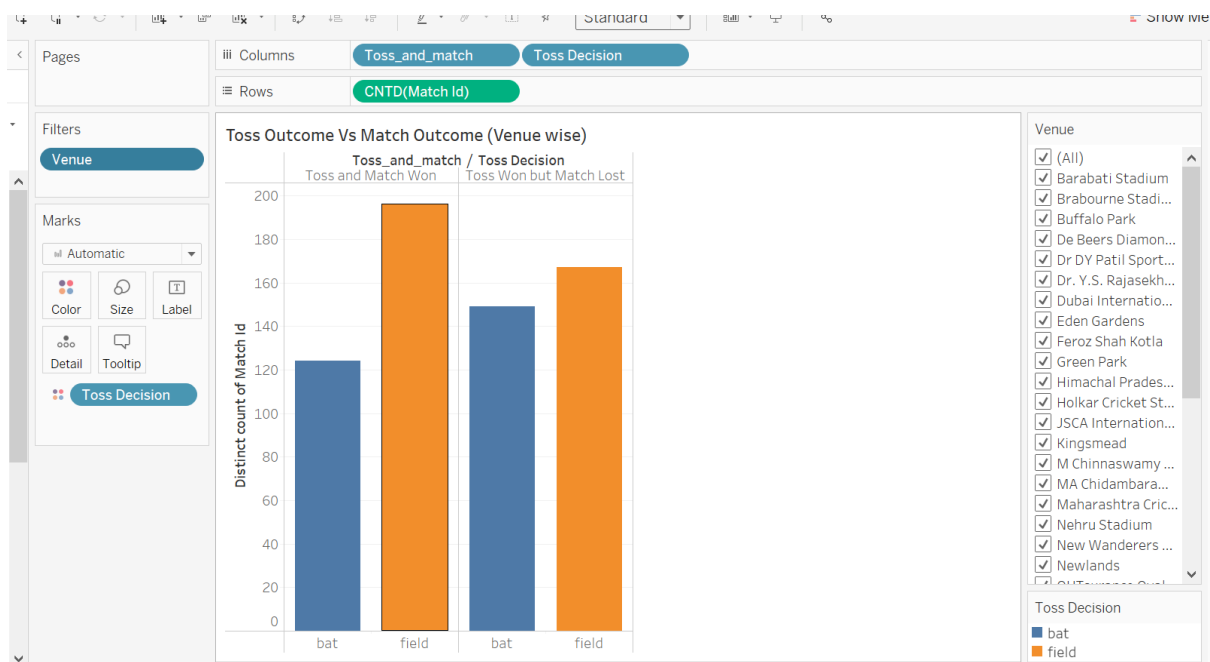
IPL Assignment – Harshit Phulwani

Firstly, we need to create an inner join between the two files matches.csv and deliveries.csv based on the ID column in matches files and Match ID in deliveries file.

1. Toss Outcome Vs Match Outcome (Venue wise)

For this we need to create a calculated field (Toss_and_match) to create two categories i.e. Winner of Toss wins the match and Winner of Toss loses the match.

Based on the above calculated field we will create the visualization by putting Toss Decision and Toss_and_match in Columns, match ID in rows with distinct count. Venue goes in filter shelf and we can put Toss Decision in color to differentiate.

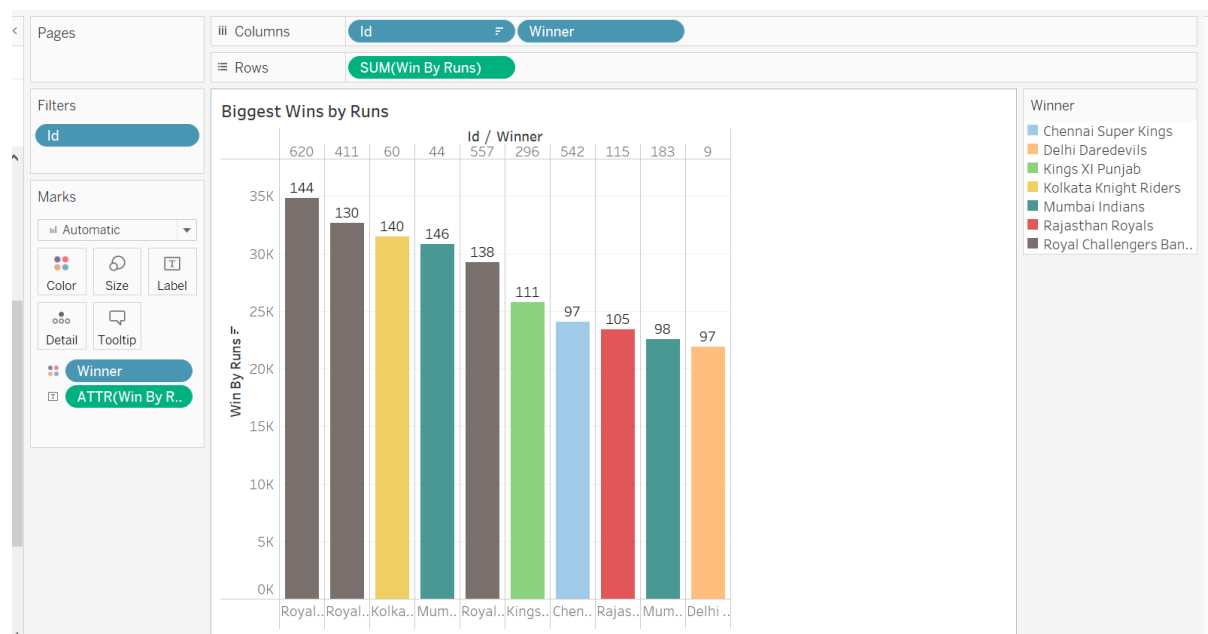


2. Biggest Wins by Runs

For this we will be putting Id and Winner in the Columns so that we can see winner for all the matches and in the rows we will put Win by Runs with sum (we can also keep it as attribute to avoid confusion later).

We will put id in the filter shelf to filter the matches by sum of Win by runs field and this will show top 10 matches with biggest wins by runs.

Now we put Winner in color to distinguish and Win by runs (will keep it as attribute instead of sum measure) in label to show in tooltip if hovered. Finally, We will sort it in descending order by Win by runs.



3. Biggest Wins by Wickets

For this, we will put the id in columns to see all matches and then put win by wickets in rows and will keep it as attribute and not make it a measure because we do not want it to aggregate but rather distinguish different values in that column and then visualize based on the max number of wickets which match is won.

We will also put the Win by wickets in filter shelf to filter and after the filter is created, we will use the slider to set the slider to 10 as max number of wickets are 10.

This will give us the desired visualization and further we can put Winner in color to distinguish, Winner, Team1, Team2, Venue, Season (in attribute) in labels to see the details in tooltip.

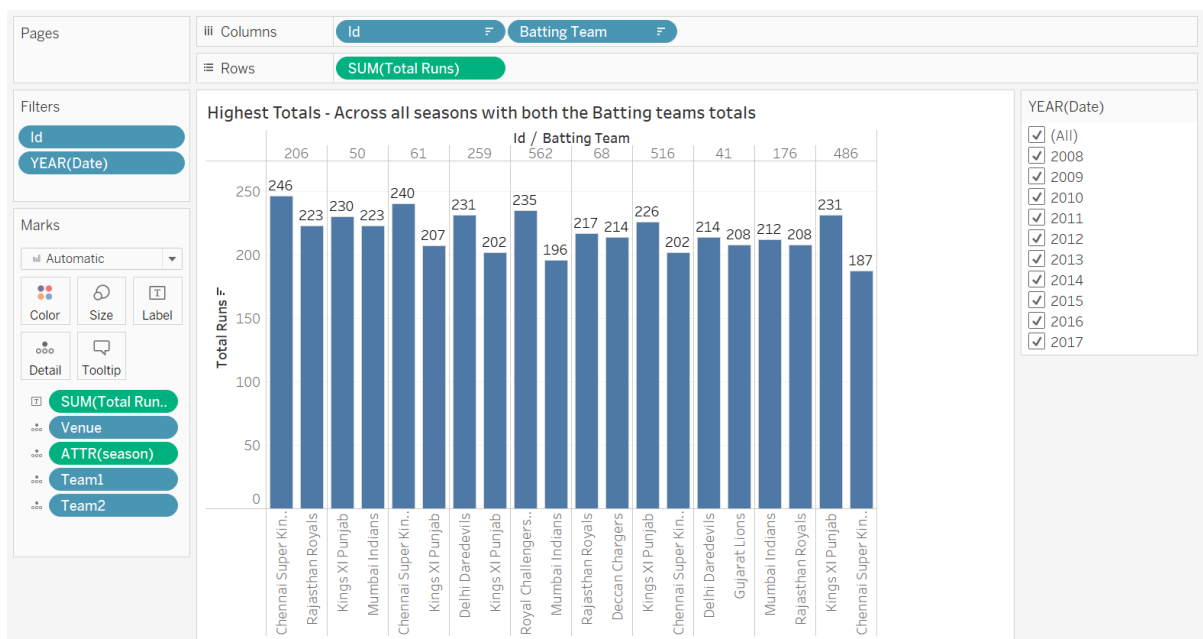
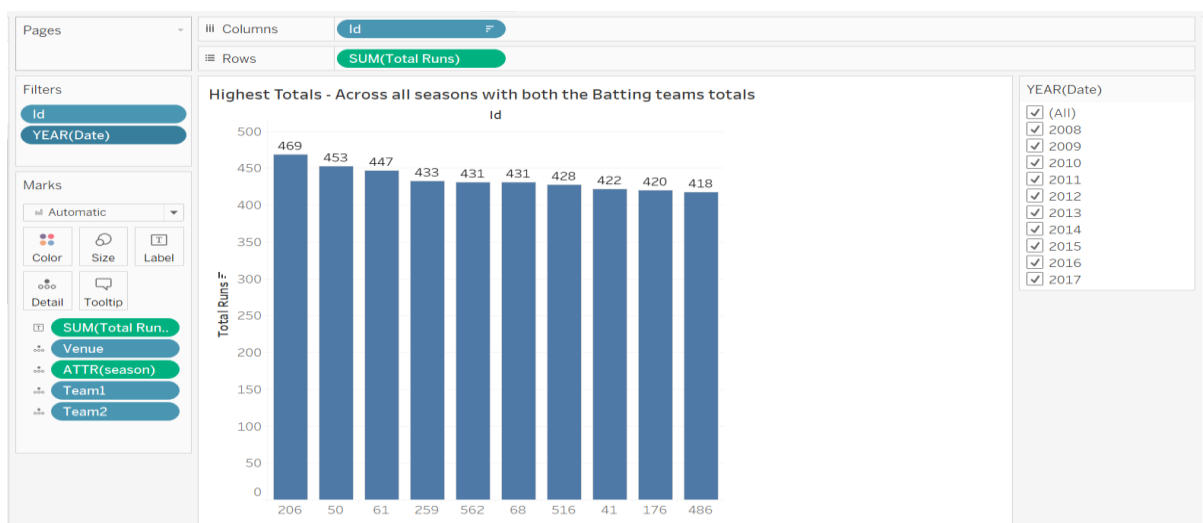


4. Highest Totals (Season wise)

This means that the batting totals for both the teams for the particular match. The highest totals season wise have to be shown.

For this, we will put id in columns and will put Total Runs in rows by doing their sum (can also put Batting team with ID to see both the batting teams with totals). This will give us all the matches with their totals by both teams but we need highest so will put the id in filter shelf and filter it by top 10 field of Total runs sum and this way we will get the highest totals of the teams. Now we want to see season wise, so we will put the date in filter and select year and will select all the years.

This way we will get the highest totals by teams season wise and further we can put some fields like team1, team2, Venue, in detail with sum of total runs to view info in tooltip.

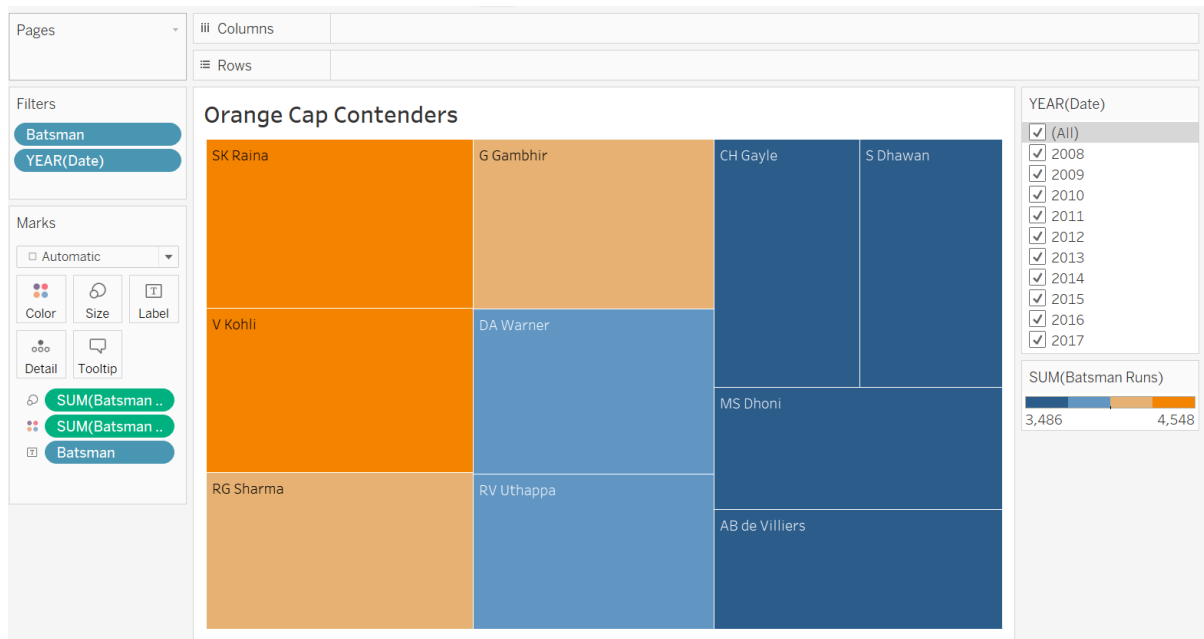


5. Orange Cap contenders (Batsman with max runs in a particular season)

For this, we simply put batsman in rows and batsman_runs in columns. We use batsman in the filter by using the top condition and using top 10 by sum of batsman runs.

We also use Date in the filter by selecting years and further we can select all and show filter to make selections further.

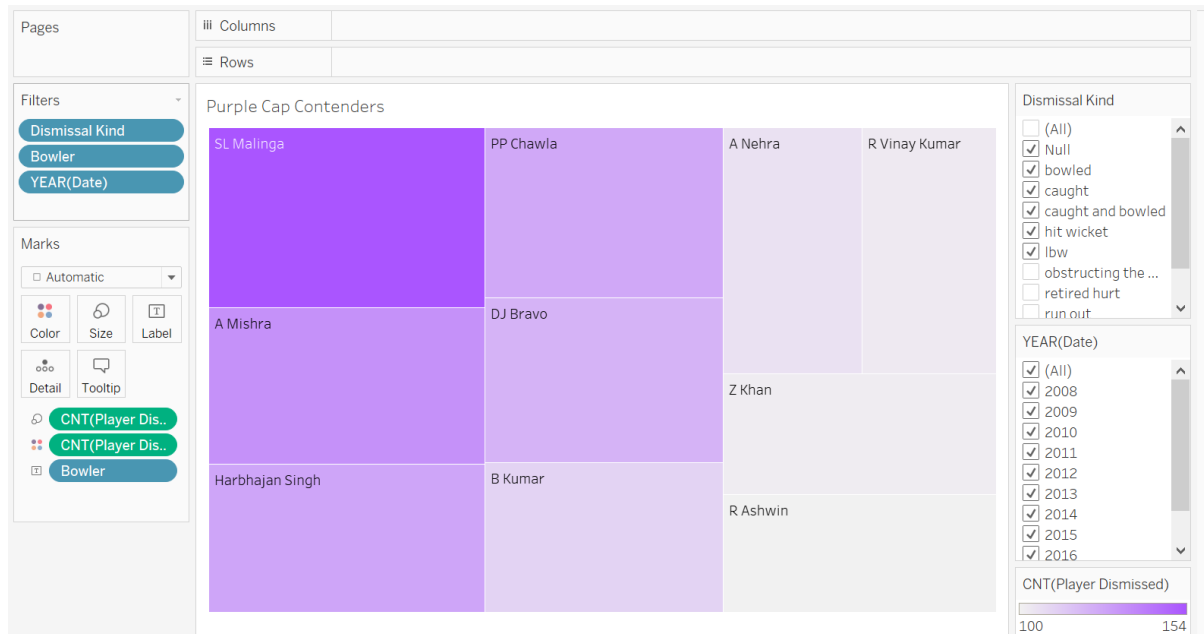
Finally, we go to show me and choose treemaps to show the orange cap contenders. We can also change the color to orange by clicking on Color and selecting the color of palette manually.



6. Purple Cap Contenders (B bowlers with maximum wickets in a particular season)

For this, we will put bowler in rows and players dismissed in columns with count of them. After that, we will put the dismissal kind in filter shelf to filter and uncheck obstructing the field, retired hurt, run out. We will put the bowler in the filter shelf and select the top 10 by players dismissed count. We will also put the date in filter and select years and then select the years accordingly.

After that, we will click on Show me button and select the tree map and we can see the tree map visualization. We can also change the color by clicking on the Color and selecting the purple color.



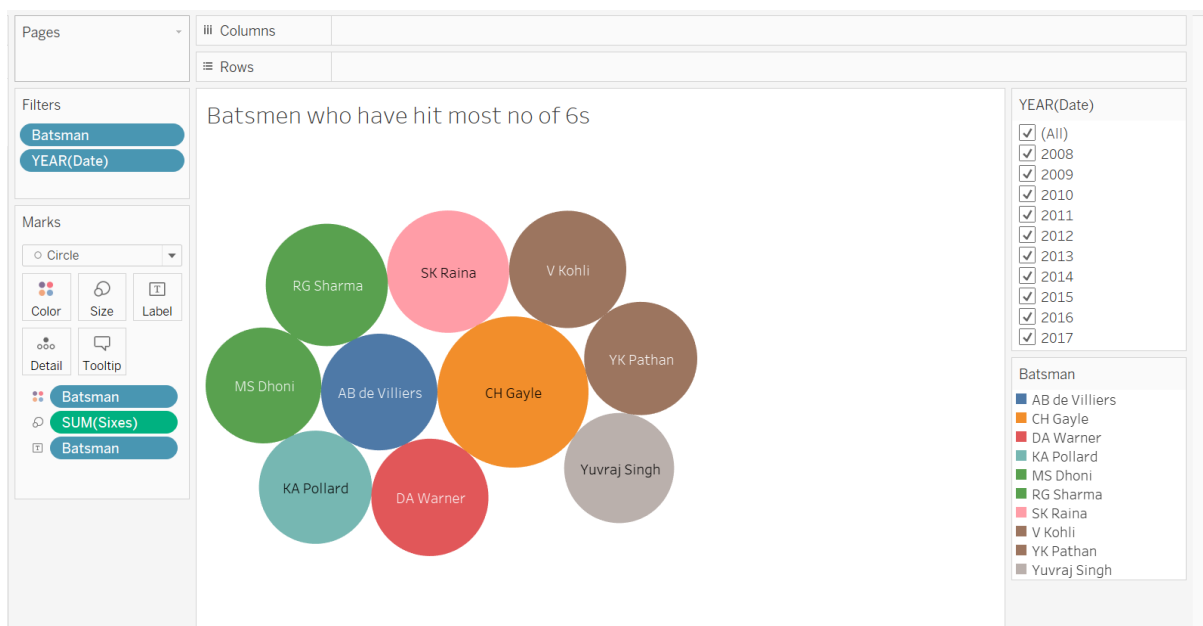
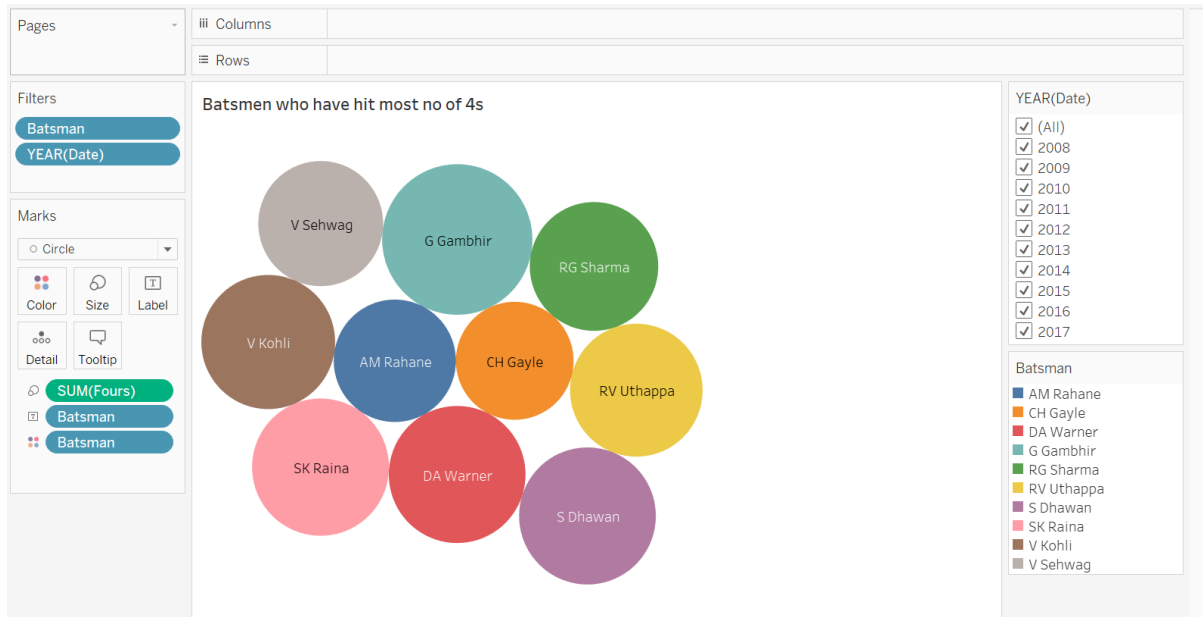
7. Batsmen who have hit most number of 4s and 6s (Season wise and overall)

For this, first we will create calculated field for both Fours and Sixes count.

Fours -> IF [Batsman Runs] = 4 THEN 1 ELSE 0 END

Sixes -> IF [Batsman Runs] = 6 THEN 1 ELSE 0 END

We will put Batsman in rows and Fours and Sixes in Columns with sum. After that we will put Batsman in filter shelf and then select top 10 by Fours sum and top 10 by Sixes sum. After that, we will put Date in filter shelf and select years and select years accordingly in the show filter.



8. Season wise Team Performance (Wins Vs Losses)

To see the Season wise team performance for all teams i.e. Wins and Losses then First creating Parameter called Teams that will consist of the unique teams and then create calculated fields WinFlag.

WinFlag -> IF [Teams] = [Winner] THEN 1

ELSEIF [Teams] = [Team1] or [Teams] = [Team2] then -1

END

Putting sum of WinFlag in rows and date (year) in columns. We will put the date in filter shelf and select year to filter by season year. We will put WinFlag in Color to distinguish between Win and Loss with different color and putting Teams in detail.

Therefore, we will be able to see Win Vs Loss performance and we can select the Season Year from the checkboxes and Team from the dropdown parameter.



9. Win %age (Home Vs Away)

We will first create the two calculated fields Win% and HomeVsAway.

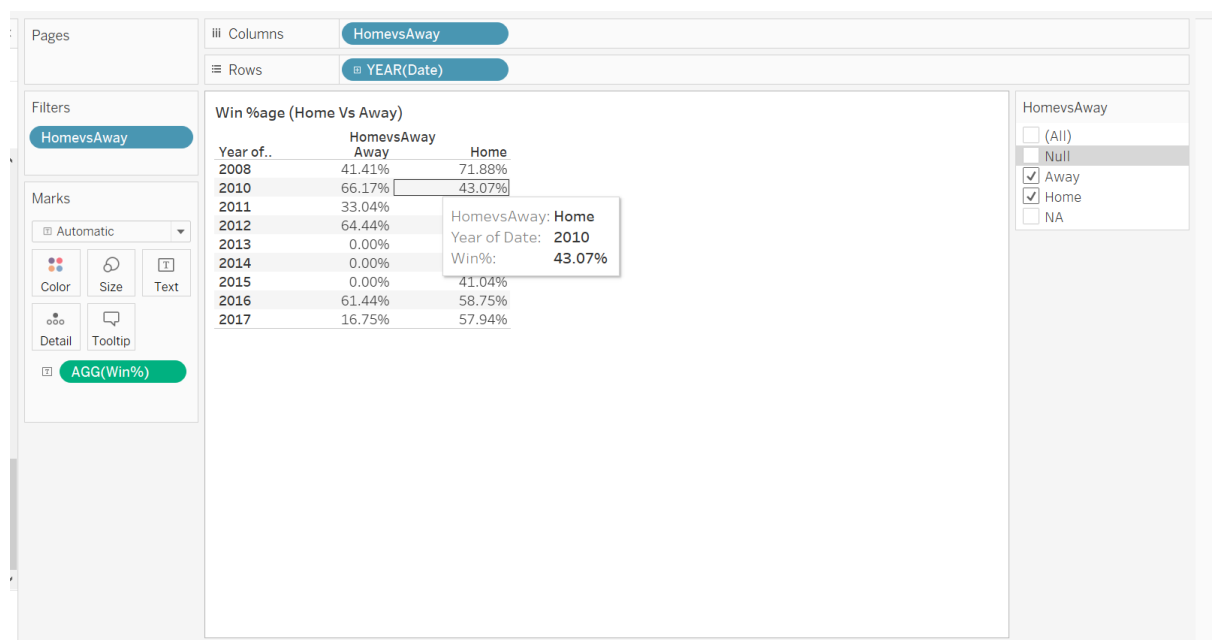
Win% -> $\text{COUNT}(\text{IF} [\text{WinFlag}] = 1 \text{ THEN } [\text{Id}] \text{ END}) /$
 $\text{COUNT}(\text{IF} [\text{WinFlag}] = 1 \text{ OR } [\text{WinFlag}] = -1 \text{ THEN } [\text{Id}] \text{ END})$

HomeVsAway ->

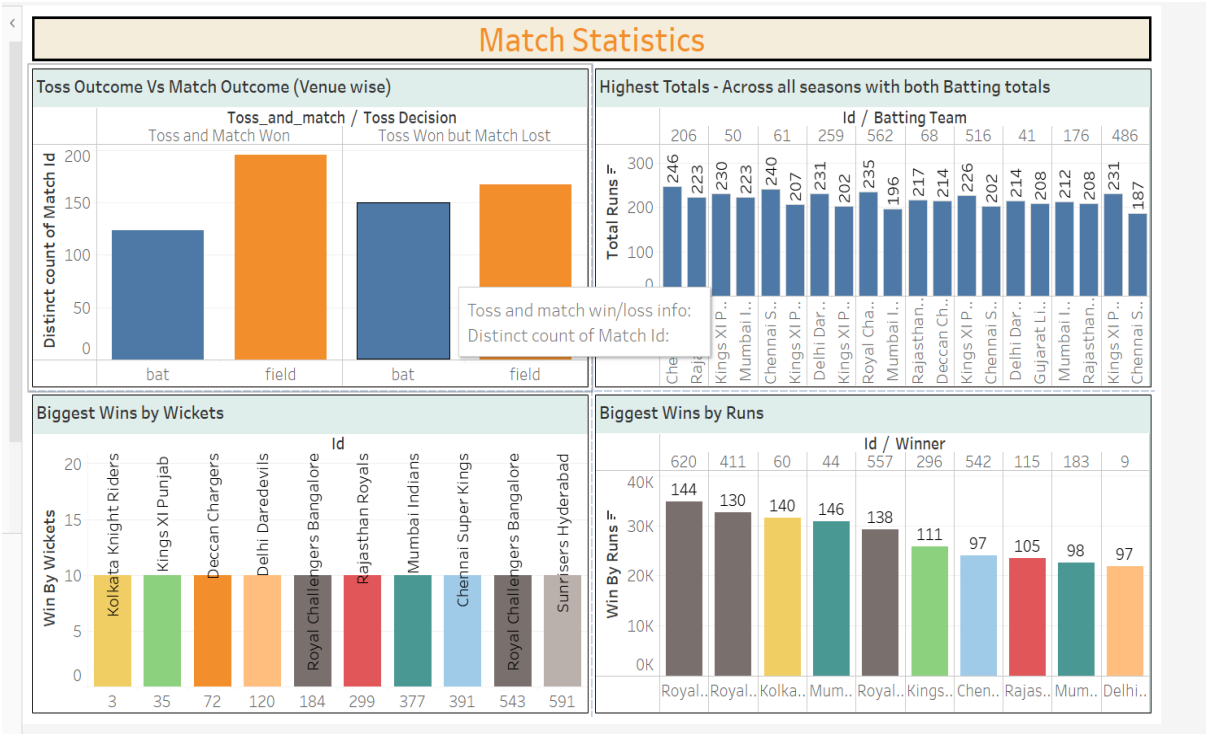
IF [Home Team] = "team1" AND [Teams] = [Team1] THEN "Home"
ELSE IF [Home Team] = "team1" AND [Teams] = [Team2] THEN "Away"
ELSE IF [Home Team] = "NA" THEN "NA"
ELSE IF [Home Team] = "team2" AND [Teams] = [Team1] THEN "Away"
ELSE IF [Home Team] = "team2" AND [Teams] = [Team2] THEN "Home"
END END END END END

We will first put HomeVsAway in Columns and date(year) in rows and put HomeVsAway in filter shelf and by selecting all and showing filter we can select the option we want.

We will then put the Win% in the table and it will be added as aggregate of Win% as Text.



Dashboard 1 : Match Statistics



Dashboard 3 : Team Statistics

