

- State the region and the domain category that your data sets are about (e.g., Chaohu, China and sports or athletics).

India Cricket (Sports)

- Create a research question about the domain category and region that you identified.

How ranks of 7 major teams in Indian Premier League (IPL) change from its commencement in 2008 till 2019?

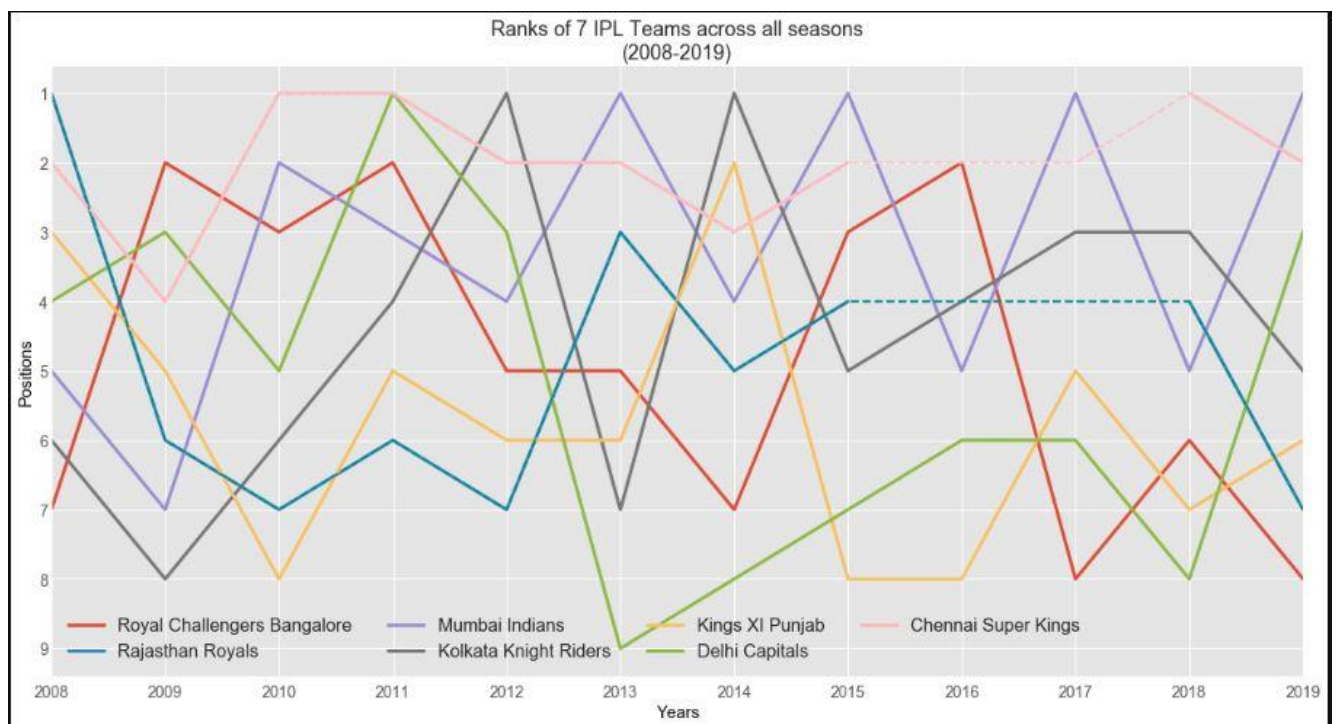
- Provide at least two links to publicly accessible datasets. These could be links to files such as CSV or Excel files, or links to websites which might have data in tabular form, such as Wikipedia pages.

[https://en.wikipedia.org/wiki/List\\_of\\_Indian\\_Premier\\_League\\_seasons\\_and\\_results#cite\\_note-IPL\\_2019\\_points\\_table-34](https://en.wikipedia.org/wiki/List_of_Indian_Premier_League_seasons_and_results#cite_note-IPL_2019_points_table-34)

- Upload an image which addresses your research question.

In addition to addressing your research question, this visual should address Cairo's principles of truthfulness, functionality, beauty, and insightfulness.

### IPL Team Ranks Correlation



- Provide a short (1-2 paragraphs) justification of how your visual addresses your research question.

In this visualization, the correlation among ranks is shown for different IPL Teams. The data from Wikipedia was used for this analysis and comparison. The original data consist of 13 teams but some of them didn't play for most of the seasons, either they started playing late or got suspended after few years of playing. Therefore, data for 7 major teams, who were not absent for more than 2 seasons, is taken into consideration, namely, Royal Challengers Bangalore, Rajasthan Royals, Mumbai Indians, Kolkata Knight Riders, Kings XI Punjab, Delhi Capitals, Chennai Super Kings. Among these, Rajasthan Royals and Chennai Super Kings, were the 2 teams who were not there for 2 seasons (2016 and 2017).

The plot is a line graph whose x-axis depicts season's years and y-axis give position values for all teams. For Visualization, matplotlib and ggplot style is used. The graph reveals that Chennai Super Kings have dominated almost all other teams in the years that they played. Whereas, for Kolkata Knight Riders and Delhi Capitals we can observe too much range in their ranks. Mumbai Indians started low in 2008 but went on to win the competition 4 times (in 2013, 2015, 2017, 2019). Kings XI Punjab always remained in between other teams with a lot of ups and downs.

- As this assignment is for the whole course, you must incorporate and defend the principles discussed in the first week, specifically, Cairo's principles of truth, beauty, function, and insight.

For each of the following prompts, please provide a response that links each principle to one or more elements of your visual.

- Describe your design choices for your visual in regards to Cairo's principle of **truthfulness**.
- Describe your design choices for your visual in regards to Cairo's principle of **beauty**.
- Describe your design choices for your visual in regards to Cairo's principle of **functionality**.
- Describe your design choices for your visual in regards to Cairo's principle of **insightfulness**.

To implement Cairo's principle of truthfulness excess data with missing data was removed. To implement Cairo's principle of beauty ggplot style of matplotlib was used. Pandas and numpy libraries were used to generate functional insights from data.