**Summary**

The analysis focused on evaluating IPL team performances over multiple seasons, considering match outcomes, win-loss ratios, total runs, and wickets. The dataset was cleaned, formatted, and visualized using Python libraries like Pandas, Matplotlib, and Seaborn.

**Objectives**

**Data Cleaning & Formatting** - Extract necessary columns, handle missing values, and preprocess data for meaningful insights.

**Visualization** – data is visualized using seaborn library.

**Activities and Tasks**

Venue performance

1. **Task 1**: Present venue-based performance using heatmaps or bar charts.

Description: create new variable called venue\_performance by grouping venue and winner the counting the number of occurrences (i.e., wins) for each combination. The result is a new DataFrame with columns venue, winner, and wins.

In order to make a heat map visual we use pivot function where the rows represent venues, the columns represent teams, and the values represent the number of wins. This will create matrix for the heatmap.

**Conclusion**

The heatmap reveals team performance across venues, highlighting strongholds, balanced venues, and challenging locations. It helps identify home-ground advantages, competitive grounds, and teams struggling at certain venues. These insights aid strategic decisions for teams and analysts.