**Project: IPL Dataset analysis (Batting side)**

Introduction:

This project analyzes IPL batting data, focusing on top run scorers and strike rates across seasons. Key visualizations include bar charts for top run scorers, a pie chart for total runs per season. Insights highlight trends in player performance, revealing patterns in runs scored and strike rates. Future analyses could explore player comparisons and performance metrics to enhance team strategies.

Objectives:

* To perform operations on data to get consistent data.
* To Identify top-performing players based on runs and strike rates.
* To identify trends in how players perform at different scores.
* Focus on the top batsmen with the highest strike rates and their impact on matches.
* Creating visualizations for easy understandability.

Scope:

* Furthermore we may use it to predict the performance of a player.
* Based on the player’s performance stats we can predict the possible outcomes of the match.
* We may also predict how many runs a particular player can score .
* This data can be used by selectors to select best performing players.

Technologies used:

* IDLE shell :integrated python shell for writing python programs.
* Jupyter Notebook:online python runtime environment.
* Pandas library: Used for cleaning of data and table creation.
* Matplotlib: A python library used for creating visualizations.
* Seaborn: another python library for creating visualizations.

Methodology:

* Data collection:
* Retrieved data from a publicly available data source provider kaggle.
* Checked some of the details with online sources for accuracy.
* Data cleaning:
* After successfully retrieving data, I started the cleaning process.
* Firstly loaded raw data and then used pandas for cleaning purposes.
* Removed unnecessary columns, changed data types of some columns, removed null values and filled some null values with mean data.
* Finally created a new CSV file with cleaned data.
* Understanding Data:
* Created several tables to understand data better.
* Showing top run scores for each season.
* Showing most runs in a single match by players.
* Highest run scorers across all seasons.
* Players with highest strike rates.
* Creating Visuals:
* Created several charts for data visualizations.
* Highest Run Scorers in a single match for each Season.
* Top Run Scored in Each IPL Season.
* Pair Plot of Player Statistics.
* Total Runs Scored in Each IPL Season.

**Conclusion:**

This project will provide valuable insights into the factors that determine player performance, leveraging data analysis techniques. The results of this analysis could be beneficial for selectors and the investors in selecting the best players.