Project Name: World Cup 2023 Data Analysis

The World Cup 2023 Data Analysis project aims to delve into the cricketing world, specifically focusing on the performance of teams and players during the prestigious tournament. The dataset provided encapsulates a comprehensive array of features, offering an opportunity for you to conduct a thorough exploratory data analysis (EDA) and extract valuable insights.

Problem Statement:

You are tasked with performing a detailed exploratory data analysis on the World Cup 2023 dataset. The goal is to uncover patterns, trends, and notable statistics that provide a delicate understanding of team and player performance. The analysis should encompass both batting and bowling aspects, considering key metrics such as runs, wickets, strike rate, economy rate, and other relevant factors.

Tasks to Perform:
1. Team Performance Analysis:
   - Explore team-wise performance metrics.
   - Analyze runs scored, wickets taken, and batting/bowling styles.
   - Identify top-performing teams and their strengths.

2. Player Performance Analysis:
   - Evaluate individual player statistics for both batting and bowling.
   - Identify leading run-scorers and wicket-takers.
   - Assess the impact of players on their team's performance.

3. Opposition and Ground Analysis:
   - Investigate how teams and players perform against different oppositions.
   - Examine performance variations across different playing grounds.
   - Identify if there are specific teams or players that excel in certain conditions.

4. Temporal Analysis:
   - Study performance trends over time, considering start dates and overs played.
   - Identify any temporal patterns or changes in team and player performance.

Dataset Overview:

The dataset comprises the following columns:
- team
- player
- bat_or_bowl
- bb_bf (balls bowled or balls faced)
- runs
- wkts (wickets)
- wicketball_prob
- runs_per_ball

- opposition
- ground
- start_date
- overs
- mdns (maidens)
- econ (economy rate)
- inns (innings)
- 4s (fours)
- 6s (sixes)
- sr (strike rate)
- not_out
- mins (minutes)

Conclusion:

The successful completion of this exploratory data analysis will provide valuable insights into the World Cup 2023, enabling a deeper understanding of team and player dynamics. You are expected to present your findings in a clear and concise manner, showcasing your analytical skills and the ability to draw meaningful conclusions from the dataset. This project not only hones your data analysis capabilities but also enhances your understanding of cricket statistics and performance metrics in a competitive sporting context.