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Problem Statement:

Analyzing Football Player Performance Data

You have been given a dataset containing performance data of football players from various matches. Your task is to use Python, specifically the NumPy and Pandas libraries, to perform intermediate data analysis on the dataset and extract valuable insights.

The dataset consists of the following columns:

Player Name, Age, Nationality, Club, Position, Goals Scored, Assists, Pass Completion (%), Shots on Target (%), Tackles Won (%)

Accomplish Following Tasks:

- 1.Load the dataset into a Pandas DataFrame and ensure the appropriate data types for each column.
- 2. How does a player's performance in terms of goals, assists, and key passes vary across different leagues?

- 3. Which players have the highest average rating in their respective positions?
- 4.Is there a correlation between a player's age and their performance metrics?
- 5. How does a player's performance change throughout the season?
- 6. Which players have the highest successful dribble rates?
- 7.Are there any notable differences in the performance of players from different nationalities?
- 8. What is the relationship between a player's market value and their performance metrics?
- 9. Which players have the highest number of interceptions and tackles per game?
- 10. Are there any patterns or trends in a player's performance against specific opponents?
- 11. How does a player's performance in terms of shots on target and accuracy vary based on their position?

Dataset:

Player Name, Age, Nationality, Club, Position, Goals Scored, Assists, Pass Completion (%), Shots on Target (%), Tackles Won (%)

Cristiano Ronaldo, 36, Portugal, Manchester United, Forward, 25, 12, 81, 62, 45

Lionel Messi, 34, Argentina, Paris Saint-Germain, Forward, 31, 20, 87, 68, 52

Robert Lewandowski, 33, Poland, Bayern Munich, Forward, 40, 8, 79, 70, 37

Kevin De Bruyne, 30, Belgium, Manchester City, Midfielder, 12, 25, 90, 73, 55

N'Golo Kanté, 30, France, Chelsea, Midfielder, 5, 15, 88, 65, 68

Virgil van Dijk, 30, Netherlands, Liverpool, Defender, 2, 3, 89, 78, 82