Olympics Data Analysis Report

Problem Statement:

Analyse the dataset and review the following problem statements.

1. Medals Won by Gender %

2. Male and Female Ratios by Year

3. Top 10 Countries by Medals

4. Top Olympic Medallists by Total Medals

5. Total Number of Participating Countries

6. Total Number of Sports

Project Overview:

The goal of this project is to analyze an Olympic dataset and uncover key insights related to gender distribution, country performance, and sports participation over time. This report reviews metrics such as the percentage of medals won by gender, the male-to-female athlete ratio by year, top-performing countries, and the most decorated athletes in Olympic history.

Problem Statements and Analysis:

1. Medals Won by Gender %:

Filter the dataset by gender and count the total number of medals for each gender. Calculate the percentage by dividing the count for each gender by the total medals awarded.

2. Male and Female Ratios by Year:

Group the dataset by year and count the number of male and female athletes. Calculate the male female ratio for each year.

3. Top 10 Countries by Medals:

Aggregate the dataset by country, summing the total medals won by each country. Rank the countries and filter for the top 10.

4. Top Olympic Medallists by Total Medals:

The dataset by athlete name and count the total medals won by each athlete. Rank them based on their total medal count.

5. Total Number of Participating Countries:

Extract unique country names from the dataset to calculate the total count of participating countries.

6. Total Number of Sports:

Extract unique sport names from the dataset and calculate the total number.

Data Insights:

Gender Representation: The percentage of medals won by male and female athletes highlights the evolution of gender equity in the Olympics over time.

Country Performance: Identifying the top 10 countries by medal count reveals the nations with the most dominant Olympic performances.

Athletic Excellence: The analysis of top medallists showcases the athletes who have left an indelible mark on Olympic history.

Sports Diversity: The total number of sports indicates the range of competitions, while the number of participating countries reflects the global scale of the event.

Conclusion:

This analysis provides a comprehensive view of Olympic performance across gender, countries, and athletes. These insights are crucial for understanding trends in global sports participation and performance. The results will inform discussions around gender representation, country dominance, and the evolution of Olympic events.p