

Exploratory Data Analysis Report on Olympic Dataset

This report presents key insights derived from an exploratory data analysis (EDA) of the Olympic Games dataset. The visualizations aim to uncover historical trends, nation-wise performances, athlete participation, and sports-wise dominance. The questions below guide the reader through a deeper understanding of the data and highlight findings observed in the dashboard.

1. Which country has won the most Olympic medals overall?

The United States leads with the highest number of Olympic medals overall, across both Summer and Winter Games. Their consistent dominance is seen across a range of sports including athletics, swimming, and gymnastics.

2. How has the number of participating nations changed over time?

There is a clear upward trend in the number of participating countries, reflecting global inclusion and recognition of the Olympics. This trend has been impacted during periods of war and political boycotts but has generally shown steady growth.

3. Which sports contribute most to medal counts?

Athletics and Swimming are among the top sports contributing the most medals. These sports include a large number of events, providing more medal opportunities.

4. Which gender has had more representation in the Olympics historically?

Historically, male athletes have had significantly higher representation. However, in recent decades, female participation has surged, reflecting growing gender inclusivity and equal opportunity in sports.

5. What is the trend of total medals over the years?

The total number of medals awarded has increased over time, due to the expansion of sports and events in both Summer and Winter editions.

6. Which athletes have won the most Olympic medals?

Athletes like Michael Phelps, Larisa Latynina, and Usain Bolt are among the most decorated Olympians, particularly in swimming and athletics.

7. Which countries dominate the Winter Olympics?

Countries such as Norway, Germany, and Canada dominate the Winter Olympics, largely due to favorable climates and sports infrastructure.

8. How do host countries perform in the Olympics?

Host countries typically perform better in the year they host, benefiting from home advantage, crowd support, and increased investment in training facilities.

9. How have the Olympic Games evolved in terms of sports variety?

The Olympics have evolved with the addition of new sports such as skateboarding and surfing, reflecting changing global interests and youth engagement.

10. Which continent has the highest average medal tally per country?

Europe leads in average medal tally per country, largely due to strong sporting infrastructure and funding across several nations.