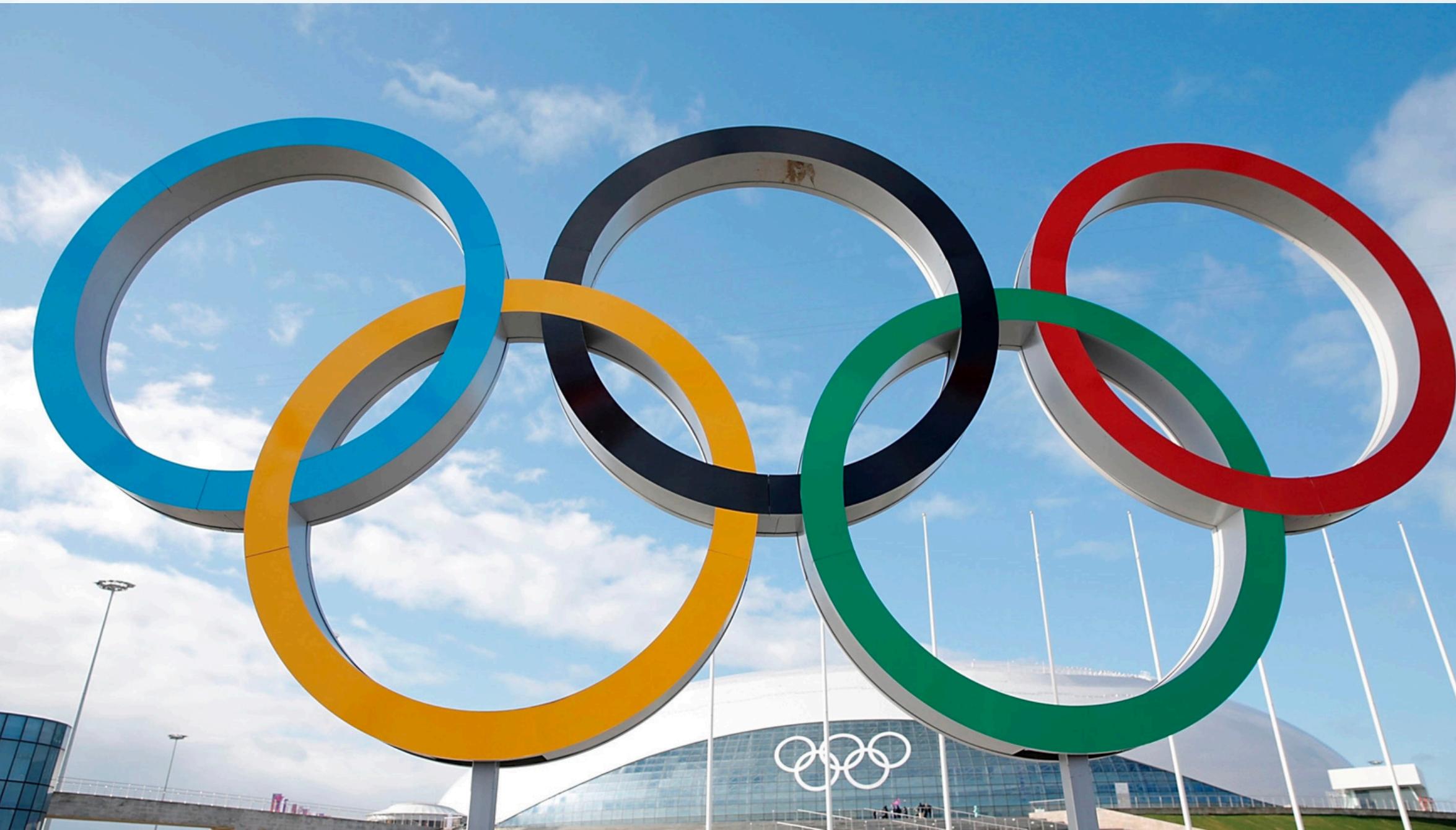


OLYMPIC GAMES



Overview

This analysis explores the Olympic Games dataset to uncover insights into historical trends and national performance.



Problem Statements

By combining data on athlete participation, medals won, and country demographics, the data aims to:

- **Medal distribution by country:** Analyze which countries have the most gold medals.
 - **Growth of sports:** Investigate how the number of participating sports has changed over time.
 - **Medals per capita:** Identify countries with the highest medal count relative to their population size.
- 

Goals

The data aims to achieve the following goals:

1. **Visualize medal distribution:** Create a choropleth map showing the number of gold medals earned by different countries.
2. **Analyze sports growth:** Utilize a line plot to visualize the increase in unique sports across years, categorized by season (summer vs. winter).
3. **Calculate medal efficiency:** Determine the countries with the highest number of medals per 10 million people in 2016.

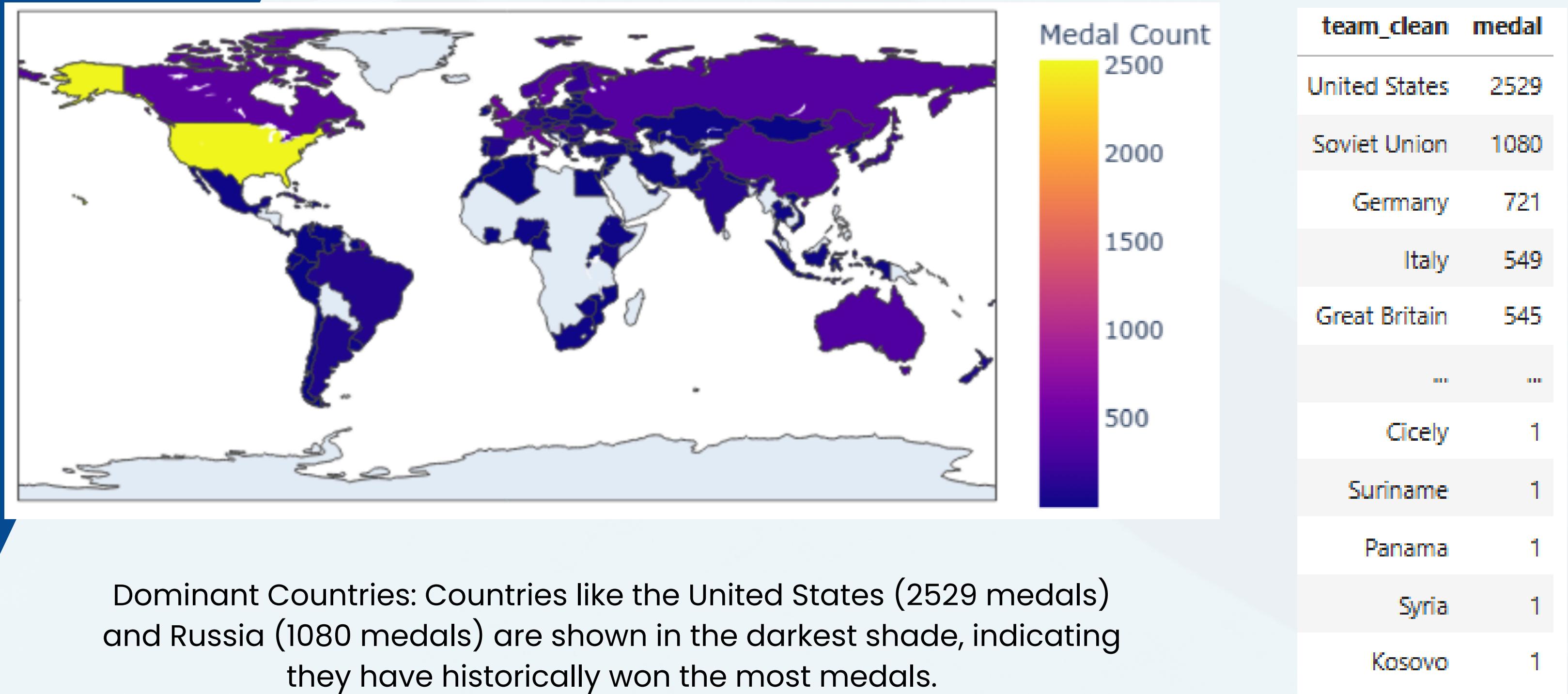
Dataset and Source

The project utilizes two datasets:

1. **athlete_events.csv**: This CSV file contains data on athletes participating in the Olympics, including their team, year, sport, and medal (if any).
2. **MariaDB database**: This database holds information about world nations, including country names, years, and population statistics. Data from this database is used to enrich the information from the athlete_events.csv file.

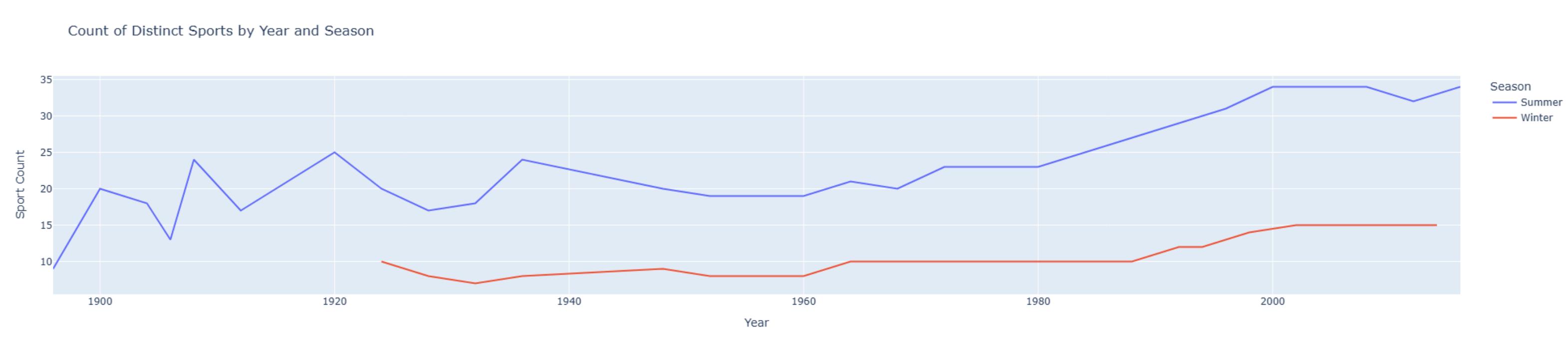
Data Findings

Which Countries Won the Most Gold Medals?



Data Findings

How has the number of sports grown over time?



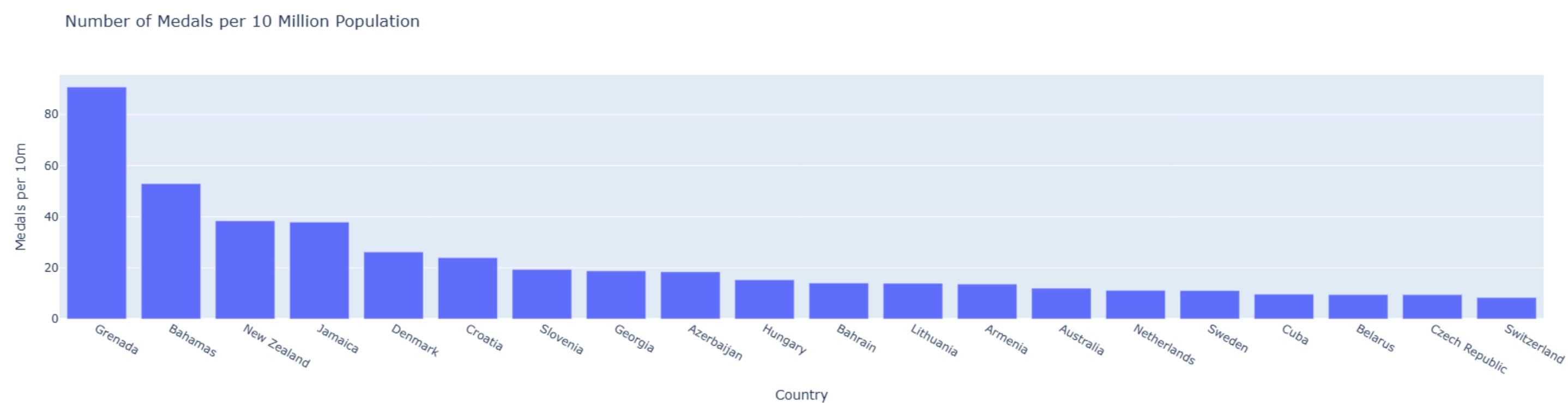
- **Overall Trend:** The number of sports has generally increased over the years, reflecting the growth and diversification of the Olympic Games.
- **Summer Olympics:** The Summer Olympics consistently have a higher number of sports compared to the Winter Olympics, with a significant increase in the later decades.
- **Winter Olympics:** While the number of Winter Olympic sports has also increased, the growth is less pronounced compared to the Summer Olympics.

	year	season	sport
0	1896	Summer	9
1	1900	Summer	20
2	1904	Summer	18
3	1906	Summer	13
4	1908	Summer	24
5	1912	Summer	17
6	1920	Summer	25
7	1924	Summer	20
8	1924	Winter	10
9	1928	Summer	17

42	2000	Summer	34
43	2002	Winter	15
44	2004	Summer	34
45	2006	Winter	15
46	2008	Summer	34
47	2010	Winter	15
48	2012	Summer	32
49	2014	Winter	15
50	2016	Summer	34

Data Findings

Which countries had the highest medal count per 10 million people in 2016?



- **Jamaica Dominance:** Jamaica stands out with the highest number of medals per 10 million people, indicating exceptional performance in the Olympics relative to its population size.
- **Nordic Countries:** Countries like Sweden, Norway, and Finland also show strong performance, suggesting a strong sports culture and investment in athletic development in these regions.
- **Smaller Nations:** Smaller countries like Grenada and Bahrain, despite their limited population, have a relatively high number of medals per capita, highlighting their success in specific sports.

team_clean	population	medal	per_10m
Grenada	110261.0	1	90.693899
Bahamas	377931.0	2	52.919713
New Zealand	4693200.0	18	38.353362
Jamaica	2906238.0	11	37.849619
Denmark	5728010.0	15	26.187105
Croatia	4174349.0	10	23.955831
Slovenia	2065042.0	4	19.370066
Georgia	3727505.0	7	18.779318
Azerbaijan	9757812.0	18	18.446758
Hungary	9814023.0	15	15.284252
Bahrain	1425791.0	2	14.027301
Lithuania	2868231.0	4	13.945878
Armenia	2936146.0	4	13.623301
Australia	24190907.0	29	11.987975
Netherlands	17030314.0	19	11.156576
Sweden	9923085.0	11	11.085262
Cuba	11335109.0	11	9.704362
Belarus	9501534.0	9	9.472155
Czech Republic	10566332.0	10	9.464022
Switzerland	8373338.0	7	8.359868

Insights

- The competitive landscape of the Olympics, highlighting top-performing countries.
- The evolution of the Olympics by analyzing the growth of participating sports.
- The efficiency of countries in converting national resources into Olympic success.