

SQL Olympic Projects :

The "120 Years of Olympic History" dataset on Kaggle provides detailed information about Olympic athletes and their performances from 1896 to 2016. This dataset is particularly useful for analyzing trends in participation, performance, and demographics over time. ([Giang Pham's Data Analyst Portfolio](#))

⚔ Columns in the Athlete Events Dataset

The primary dataset, `athlete_events.csv`, contains 271,116 rows and 15 columns, each representing an individual athlete's participation in a specific Olympic event: ([GitHub](#))

1. **ID** – Unique identifier for each athlete.
2. **Name** – Full name of the athlete.
3. **Sex** – Gender of the athlete; 'M' for male, 'F' for female.
4. **Age** – Age of the athlete at the time of the event.
5. **Height** – Height of the athlete in centimeters.
6. **Weight** – Weight of the athlete in kilograms.
7. **Team** – Name of the team or country the athlete represented.
8. **NOC** – National Olympic Committee 3-letter code.
9. **Games** – The year and season of the Olympics (e.g., "2008 Summer").
10. **Year** – Year the Olympic Games were held.
11. **Season** – Season of the Olympics; 'Summer' or 'Winter'.
12. **City** – Host city of the Olympic Games.
13. **Sport** – Sport discipline in which the athlete competed.
14. **Event** – Specific event within the sport (e.g., "Men's 100m Freestyle").
15. **Medal** – Type of medal won; 'Gold', 'Silver', 'Bronze', or 'NA' if no medal was awarded. ([Jovian Courses](#), [Medium](#), [GitHub](#), [Giang Pham's Data Analyst Portfolio](#), [GitHub](#), [Google Sites](#))

These columns provide a comprehensive view of each athlete's participation and achievements in the Olympics. ([Medium](#))

🌐 Columns in the NOC Regions Dataset

Additionally, the dataset includes `noc_regions.csv`, which maps NOC codes to country names and regions.

1. **NOC** – National Olympic Committee 3-letter code.
2. **Region** – Name of the country or region.
3. **Notes** – Additional information or notes about the region. ([Fueler](#))

This mapping is essential for aggregating data by country and conducting regional analyses.

Q Data Quality Considerations

It's important to note that some columns, such as Age, Height, and Weight, may contain missing values represented as 'NA'. The Medal column may also include 'NA' for athletes who did not win a medal. Data cleaning and preprocessing are necessary steps before performing detailed analyses. ([Google Sites](#), [Medium](#))

This dataset is a valuable resource for exploring various aspects of Olympic history, including trends in athlete demographics, performance metrics, and country-specific achievements.

Solve The Problems :

- 1) find The total Number of datas in the iolympics
- 2) 1. How many olympics games have been held?
- 3) List down all Olympics games held so far.(distinct)
- 4) Mention the total no of nations who participated in each olympics game?
- 5) Which year saw the highest and lowest no of countries participating in Olympics
- 6) Which nation has participated in all of the olympic games
- 7) Identify the sport which was played in all summer olympics.
- 8) Which Sports were just played only once in the olympics.
- 9) Fetch the total no of sports played in each olympic games.
- 10) Fetch oldest athletes to win a gold medal
- 11) Find the Ratio of male and female athletes participated in all olympic games.
- 12) Top 5 athletes who have won the most gold medals.
- 13) Top 5 athletes who have won the most medals (gold/silver/bronze).
- 14) Top 5 most successful countries in olympics. Success is defined by no of medals won.
- 15) List down total gold, silver and broze medals won by each country.
- 16) List down total gold, silver and broze medals won by each country corresponding to each olympic games.
- 17) Identify which country won the most gold, most silver and most bronze medals in each olympic games.
- 18) Identify which country won the most gold, most silver, most bronze medals and the most medals in each olympic games.
- 19) Which countries have never won gold medal but have won silver/bronze medals?
- 20) Break down all olympic games where india won medal for Hockey and how many medals in each olympic games