PROJECT-2(MySQL)

Project Title: Tokyo Olympics 2021 Data Analysis and Insights

Project Overview: This project involves comprehensive analysis and exploration of data from the Tokyo 2021 Olympics. The dataset includes information on athletes, coaches, medals won, team performances, and continental representation. The primary objectives are to derive insights into participant demographics, team performances, coach-player dynamics, and continental contributions to the games.

Data Sources:

- **Athletes_tokyo**: Contains details about athletes including their names, national Olympic Committee (NOC), and respective disciplines.
- **Coaches_tokyo**: Provides information on coaches participating in the Olympics, including their names, NOC, disciplines, and events.
- **EntriesGender_tokyo**: Includes data on the gender distribution across different disciplines.
- **Medals_tokyo**: Lists the medals won by each country along with the breakdown by gold, silver, and bronze.
- **Teams_tokyo**: Specifies the teams participating in various disciplines along with their NOCs.
- **Continent List**: Maps countries to their respective continents.

Queries and Analysis:

1. **Participants Analysis**:
   - Querying and summarizing the average number of participants across all disciplines.
   - Analyzing gender distribution in each discipline to understand female and male participation levels.
2. **Medals Analysis**:
   - Identifying the countries with the highest medal counts, focusing on the top 3 ranks.
   - Displaying teams that have won the most gold, silver, and bronze medals respectively.

3. **Team Performance**:
   - Evaluating country-wise performance based on total medals won, number of players, and coaches produced by each country.
   - Comparing continental contributions in terms of total countries participating and medals won.
4. **Coach-Player Dynamics**:
   - Investigating the ratio of players to coaches across different countries and disciplines.
   - Mapping players to their respective coaches to understand coaching dynamics and performance correlations.
5. **Continental Analysis**:
   - Breaking down participant countries by continent and analyzing continental performance in terms of medals won and representation.

Conclusion: Through SQL queries and data analysis techniques, this project aims to provide a comprehensive overview of the Tokyo 2021 Olympics. Insights derived from the data can help stakeholders understand athlete demographics, team dynamics, coaching effectiveness, and regional contributions to the overall success of the games. By leveraging these insights, organizations and sports bodies can make informed decisions to enhance future Olympic preparations and strategies.

This project not only highlights the achievements of individual athletes and teams but also underscores the global and regional dimensions of the Olympics as a significant international sporting event.