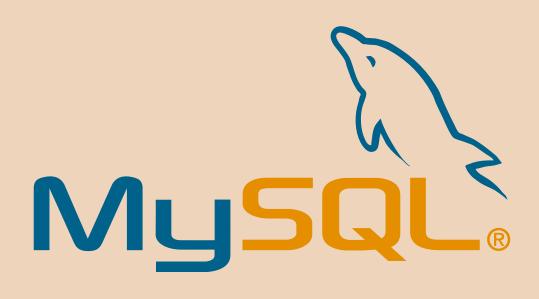
120 Years of Olympic History Analysis Using SQL Queries





Questions which were to be Answered in this Project are as:

- 1. How many olympics games have been held?
- 2. List down all Olympics games held so far.
- 3. Mention the total no of nations who participated in each olympics game?
- 4. Which year saw the highest and lowest no of countries participating in olympics?
- 5. Identify the sport which was played in all summer olympics.
- 6. Fetch details of the oldest athletes to win a gold medal.
- 7. Find the Ratio of male and female athletes participated in all olympic games.
- 8. Fetch the top 5 athletes who have won the most medals (gold/silver/bronze).
- 9. Fetch the top 5 most successful countries in olympics. Success is defined by no of medals won.
- 10. List down total gold, silver and broze medals won by each country corresponding to each olympic games.
- 11. Identify which country won the most gold, silver, bronze medals and the most medals in each olympic games.
- 12. Which countries have never won gold medal but have won silver/bronze medals?
- 13. Break down all olympic games where india won medal for Hockey and how many medals in each olympic games.

1. HOW MANY OLYMPICS GAMES HAVE BEEN HELD??

Query

1 • select year, season, city from athletes

	year	season	city
•	1992	Summer	Barcelona
	2012	Summer	London
	1920	Summer	Antwerpen
	1900	Summer	Paris
	1988	Winter	Calgary
	1988	Winter	Calgary

2. MENTION THE TOTAL NO OF NATIONS WHO PARTICIPATED IN EACH OLYMPICS GAME?

Query

```
1 select games, count(distinct team) as total_nations from athletes
```

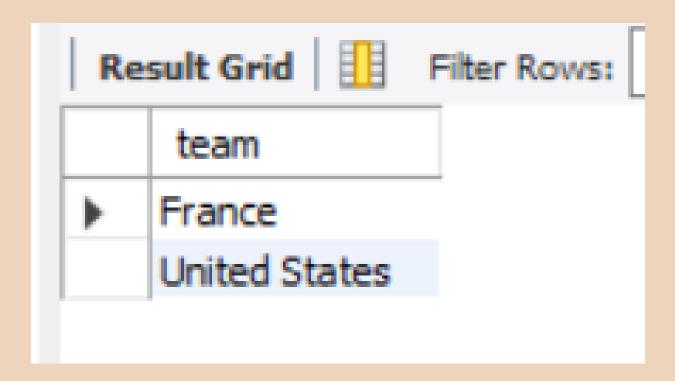
- 2 group by games
- order by games

	games	total_nations
•	1896 Summer	8
	1900 Summer	53
	1904 Summer	28
	1906 Summer	33
	1908 Summer	40
	1912 Summer	57
	1920 Summer	45

3. WHICH NATION HAS PARTICIPATED IN ALL OF THE OLYMPIC GAMES?

Query

```
1 • • WITH t AS (
2    SELECT team, COUNT(DISTINCT games) AS total_games
3    FROM athletes
4    GROUP BY team
5    )
6   SELECT team
7   FROM t
8   WHERE total_games = (SELECT MAX(total_games) FROM t)
9
```



4. IDENTIFY THE SPORT WHICH WAS PLAYED IN ALL SUMMER OLYMPICS.

Query

```
1  with t as
2  (select sport,count(distinct(games)) as total_summer_games from athletes
3  where season = 'summer'
4  group by sport
5  )
6  select sport,total_summer_games from t
7  where total_summer_games = (select max(total_summer_games) from t)
```

Re	sult Grid	Filter Rows:	E
	sport	total_summer_games	
Þ	Athletics	29	
	Cycling	29	
	Gymnastics	29	
	Swimming	29	

5. Which year saw the highest and lowest no of countries participating in olympics?

Query

```
select
         games,
        count(distinct team) as total_teams,
        rank() over (order by count(distinct team)) as rank_lowest_participation,
        rank() over (order by count(distinct team) desc) as rank_highest_participation
       from athletes
       group by games
    select min(total_teams)
        from (select count(distinct team) as total_teams from athletes group by games) as t
10
11

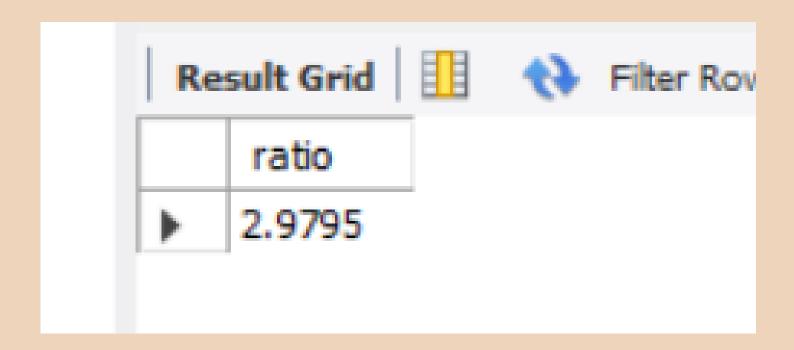
    or count(distinct team) in (
12
        select max(total_teams)
13
        from (select count(distinct team) as total_teams from athletes group by games) as t
14
     - );
15
```

	lowest_participation	highest_participation
•	1896 Summer	2008 Summer

6. Find the Ratio of male and female athletes participated in all olympic games.

Query

```
1  select
2  distinct(select count(sex) from athletes
3  where sex = 'm')/(select count(sex) from athletes where sex = 'f')
4  as ratio
5  from athletes
```



7. Fetch details of the oldest athletes to win a gold medal.

Query

```
1 select * from athletes
2 where medal = 'gold'
3 order by year asc
4 limit 1
```



8. Fetch the top 5 athletes who have won the most medals (gold/silver/bronze).

Query

```
select name,team,count(medal) as gold_medals from athletes
where medal ='gold'
group by name,team
order by gold_medals desc
limit 5
```

	name	team	gold_medals
Þ	Usain St. Leo Bolt	Jamaica	8
	Matthew Nicholas "Matt" "Biondi"	United States	8
	Ole Einar Bjrndalen	Norway	8
	Nikolay Yefimovich Andrianov	Soviet Union	7
	Marit Bjrgen	Norway	6

9. List down total gold, silver and broze medals won by each country.

Query

```
1  select team, count(case when medal = 'gold' then 1 end) as gold_medals,
2  count(case when medal = 'silver' then 1 end) as silver_medals,
3  count(case when medal = 'bronze' then 1 end) as bronze_medals
4  from athletes
5  group by team
```

	team	gold_medals	silver_medals	bronze_medals
•	China	4	8	5
	Denmark	26	23	15
	Denmark/Sweden	1	0	0
	Netherlands	25	49	44
	United States	317	180	132
	Finland	7	10	15

10.Identify which country won the most gold, most silver, most bronze medals and the most medals in each olympic games.

Query

```
with t as
       select games, team,
              count(case when medal = 'Gold' then 1 end) as gold,
4
              count(case when medal = 'Silver' then 1 end) as silver,
5
              count(case when medal = 'Bronze' then 1 end) as bronze
6
7
8
       from athletes
9
       where medal in ('Gold', 'Silver', 'Bronze')
10
       group by games, team
11
       order by games
12
13
       select distinct games, max_gold, max_silver, max_bronze
14

⊖ from (
15
           select games,
                  first_value(team) over(partition by games order by gold) as max_gold,
16
17
                  first_value(team) over(partition by games order by silver) as max_silver,
                  first_value(team) over(partition by games order by bronze) as max_bronze
18
19
           from t
20
       ) x
21
```

Result Grid Filter Rows: Export: Wrap Cell Content: 🚻					
Games max_gold max_silver max_bronze max_medals					max_medals
•	1896 Summer	France	Great Britain	Great Britain/Germany	Great Britain/Germany
	1900 Summer	Netherlands	Netherlands	Union des Socits Franais de Sports Athletiques	Racing Club de France
	1904 Summer	Boston Archers	Boston Archers	Trans-Mississippi Golf Association-2	Trans-Mississippi Golf Association-2
	1906 Summer	Australia	Australia	Italy	Thessalonki-1
	1908 Summer	Amstel Amsterdam	Amstel Amsterdam	England-1	England-1

11. Fetch the top 5 most successful countries in olympics. Success is defined by no of medals won.

Query

```
1 • with t as
2 • (select team,count(medal) as medals_won from athletes
3 where medal in ('gold','silver','bronze')
4 group by team
5 )
6 select team,medals_won, dense_rank() over(order by medals_won desc) as rnk
7 from t
8 limit 5
```

I	,		
	team	medals_won	rnk
•	United States	629	1
	Soviet Union	330	2
	Italy	284	3
	France	263	4
	Germany	233	5

12. Which countries have never won gold medal but have won silver/bronze medals?

Query

```
select team from
  count(case when medal = 'gold' then 1 end) as gold,
3
     count(case when medal = 'silver' then 1 end) as silver,
4
     count(case when medal = 'bronze' then 1 end) as bronze
5
    from athletes
6
     where medal in ('gold', 'silver', 'bronze')
7
     group by team
8
    -) t
9
     where gold=0 and silver !=0 or bronze !=0
10
```



13. Break down all Olympic games where India won medal for Hockey and how many medals in each olympic games.

Query

```
1 • select team, sport, games, count(medal) as total_medals from athletes
2 where team = 'India' and sport like 'hockey'
3 group by team, sport, games
4
```

Re	Result Grid					
	team	sport	games	total_medals		
•	India	Hockey	1992 Summer	2		
	India	Hockey	1996 Summer	2		
	India	Hockey	1928 Summer	2		
	India	Hockey	1976 Summer	3		
	India	Hockey	1964 Summer	1		
	India	Hockey	1932 Summer	4		

Thank You