

Data Analysis

SQL PROJECT

OLYMPIC GAMES



Project Overview - :

The Olympics Data Analysis Project aims to explore and analyse historical data related to the Olympics Games.

Olympic Games data, from Athens 1896 to Rio 2016.

The file Athlete events contain 271116 rows and 15 columns.

The columns are -:

1. ID	Unique number
2. Name	Athlete's Name
3. Sex	M or F
4. Age	int
5. Height	in cm
6. Weight	in kg
7. Team	Team name
8. NOC	National Olympic Committee-code
9. Games	Game name
10. Year	int
11. Season	Summer or Winter
12. City	City name
13. Sport	Sport name
14. Event	Event name
15. Medal	Medal name

Now we will start our analysis :

1. Show how many medal counts present for entire data.

Query:

```
select count(medal) as Medal_Count, Medal from olympics  
group by medal;
```

Result:

Medal_Count	Medal
231333	NoMedal
13372	Gold
13295	Bronze
13116	Silver

2. Show count of unique sports present in Olympics.

Query :

```
Select count(distinct(Sport)) as Count_of_Sports from olympics;
```

Result:

Count_of_Sports
66

3. Show how many different medals won by team India.

Query:

```
select Team,Medal,count(Medal) from olympics
where (Team = 'India' and Medal!='NoMedal')
group by medal;
```

Result:

Team	Medal	count(Medal)
India	Gold	138
India	Silver	19
India	Bronze	40

4. Show event wise medals won by India show from highest to lowest medals won in order.

Query:

```
select Team, count(Medal) as MedalCount,Event from olympics
where (Team = 'India' and Medal<>'NoMedal')
group by Event
order by MedalCount desc;
```

Result:

Team	Medal Count	Event
India	173	Hockey Mens Hockey
India	7	Alpinism Mixed Alpinism
India	2	Shooting Mens Air Rifle 10 metres
India	2	Wrestling Mens Welterweight Freestyle
India	2	Badminton Womens Singles
India	1	Wrestling Mens Lightweight Freestyle
India	1	Wrestling Mens Bantamweight Freestyle
India	1	Boxing Womens Flyweight
India	1	Shooting Mens RapidFire Pistol 25 metres
India	1	Wrestling Womens Lightweight Freestyle
India	1	Weightlifting Womens Light Heavy weight
India	1	Tennis Mens Singles
India	1	Athletics Mens 200 metres
India	1	Athletics Mens 200 metres Hurdles
India	1	Shooting Mens Double Trap
India	1	Boxing Mens Middleweight

5. Show event wise medals won by India in order of year.

Query:

```
Select Team, Count(Medal) as MedalCount,Event,Year from olympics
where (Team = 'India' and Medal<>'NoMedal')
group by event,YEAR
order by Year asc;
```

Result:

Team	Medal Count	Event	Year
India	1	Athletics Mens 200 metres	1900
India	1	Athletics Mens 200 metres Hurdles	1900
India	7	Alpinism Mixed Alpinism	1924
India	14	Hockey Mens Hockey	1928
India	15	Hockey Mens Hockey	1932
India	19	Hockey Mens Hockey	1936
India	20	Hockey Mens Hockey	1948
India	14	Hockey Mens Hockey	1952
India	1	Wrestling Mens Bantamweight Freestyle	1952
India	17	Hockey Mens Hockey	1956
India	13	Hockey Mens Hockey	1960
India	15	Hockey Mens Hockey	1964
India	16	Hockey Mens Hockey	1968
India	14	Hockey Mens Hockey	1972
India	16	Hockey Mens Hockey	1980
India	1	Tennis Mens Singles	1996
India	1	Weightlifting Womens Light Heavy weight	2000
India	1	Shooting Mens Double Trap	2004
India	1	Shooting Mens Air Rifle 10 metres	2008
India	1	Wrestling Mens Welterweight Freestyle	2008
India	1	Boxing Mens Middleweight	2008
India	1	Wrestling Mens Lightweight Freestyle	2012
India	1	Boxing Womens Flyweight	2012
India	1	Wrestling Mens Welterweight Freestyle	2012
India	1	Shooting Mens RapidFire Pistol 25 metres	2012
India	1	Shooting Mens Air Rifle 10 metres	2012
India	1	Badminton Womens Singles	2012
India	1	Wrestling Womens Lightweight Freestyle	2016
India	1	Badminton Womens Singles	2016

6. Show country who won maximum medals.

Query:

```
Select Team,Count(Medal) as MedalCount from olympics  
where Medal<>"NoMedal"  
Group by Team  
order by MedalCount desc  
limit 1;
```

Result:

Team	MedalCount
United States	5219

7. Show top 10 countries who won Max medal.

Query:

```
Select Team,count(Medal) as MedalCount from olympics
where Medal<>"NoMedal"
group by Team
order by MedalCount desc
limit 10;
```

Result:

Team	Medal Count
United States	5219
Soviet Union	2451
Germany	1984
Great Britain	1673
France	1550
Italy	1527
Sweden	1434
Australia	1306
Canada	1243
Hungary	1127

8. Show in which year did United States won most gold medal.

Query:

```
Select Team,Count(Medal),Year from olympics
where (medal<>"NoMedal" and Team = 'United States')
Group by Year
order by count(Medal) desc
limit 1;
```

Result:

Team	Count(Medal)	Year
United States	359	1984

9. In which sports United States has most medals.

Query:

```
Select Team, Count(Medal) as MedalCount, Sport from olympics
where (Team = 'United States' and Medal<>'NoMedal')
group by Sport
order by MedalCount desc
limit 1;
```

Result:

Team	Medal Count	Sport
United States	1071	Athletics

10. Find top 3 players who won most medals along with their sports and country.

Query:

```
Select Name, Team, Sport, count(Medal) from olympics
where Medal<>'NoMedal'
GROUP BY Name,Sport,Team
order by count(Medal) desc
limit 3;
```

Result:

Name	Team	Sport	count(Medal)
Michael Fred Phelps II	United States	Swimming	28
Larysa Semenivna Latynina Diriy	Soviet Union	Gymnastics	18
Nikolay Yefimovich Andrianov	Soviet Union	Gymnastics	15

11. Find Top 7 players with most medals (Gold+Silver+Bronze) in Basketball also show their country.

Query:

```
Select Name,Team,Sport, count(Medal) from olympics
Where sport = 'Basketball' and Medal<>'NoMedal'
Group by Name,Team,Sport
order by count(Medal) desc
limit 7;
```

Result:

Name	Team	Sport	count(Medal)
Teresa Edwards	United States	Basketball	5
Carmelo Kyan Anthony	United States	Basketball	4
Lauren Elizabeth Jackson	Australia	Basketball	4
Kristi Lee Harrower	Australia	Basketball	4
Tamika Devonne Catchings	United States	Basketball	4
Sergey Aleksandrovich Belov	Soviet Union	Basketball	4
Suzanne Brigit Sue Bird	United States	Basketball	4

**12.Find out the count of different medals of the top basketball player
Teresa Edward.**

Query:

```
Select Name, Medal,count(Medal) as MedalCount from olympics  
where Name = 'Teresa Edwards' and Medal<>'NoMedal'  
group by Medal  
order by MedalCount desc;
```

Result:

Name	Medal	MedalCount
Teresa Edwards	Gold	4
Teresa Edwards	Bronze	1

13.Find out medals won by male, female each year.

Query:

```
Select Year,Sex,Count(Medal) As MedalCount from olympics
Where medal<>'NoMedal'
Group by sex,year
order by Year asc;
```

Result:

Year	Sex	Medal Count
1896	M	143
1900	M	591
1900	F	13
1904	M	476
1904	F	10
1906	F	6
1906	M	452
1908	M	815
1908	F	16
1912	M	911
1912	F	30
1920	M	1264
1920	F	44
1924	M	910
1924	F	52
1928	F	103
1928	M	720
1932	M	671
1932	F	68
1936	M	928
1936	F	97
1948	M	871
1948	F	116
1952	M	875

1952	F	158
1956	M	872
1956	F	171
1960	F	195
1960	M	863
1964	F	246
1964	M	969
1968	M	995
1968	F	261
1972	F	295
1972	M	1119
1976	F	440
1976	M	1091
1980	F	485
1980	M	1117
1984	F	548
1984	M	1150
1988	F	617
1988	M	1228
1992	F	691
1992	M	1339
1994	M	223
1994	F	108
1996	F	764
1996	M	1078
1998	F	189
1998	M	251
2000	F	880
2000	M	1124
2002	M	270
2002	F	208
2004	F	898
2004	M	1103
2006	M	295
2006	F	231
2008	F	932
2008	M	1116
2010	M	291
2010	F	229
2012	M	1023
2012	F	918
2014	F	265
2014	M	332
2016	M	1054
2016	F	969

The Analysis, I was able to gain a deeper understanding of the history of the Olympics and the performance of countries and athletes over the past 120 years . By using SQL, I was able to extract valuable insights from the data.

SUMMITTED BY:

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