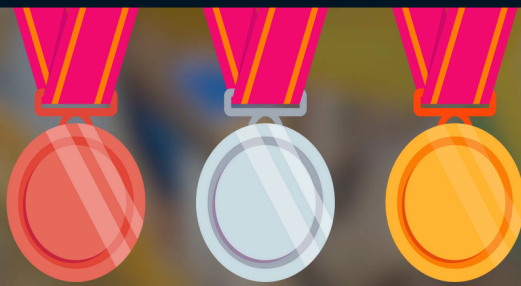# Olympic Insights

SQL Project By
Rahul Mahapatra

Diagrammatic Representation :
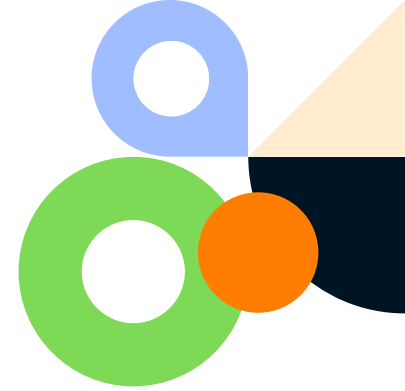
Table Name	Medal_Details	Games_Held	Athlete_Bio	Oly_Results	Country_details
Column 1	edition	edition	athlete_id	result_id	country_noc
Column 2	edition_id	edition_id	athlete_name	event_title	country
Column 3	year	year	sex	edition	
Column 4	country	city	country	edition_id	
Column 5	country_noc	country_noc	country_noc	sport	
Column 6	gold			result_location	
Column 7	silver				
Column 8	bronze				
Column 9	total				

Rahul Mahapatra

This project presents a diagram where elements of the same color are interconnected. The visual representation effectively demonstrates the relationships and dependencies between these elements within a specific system or concept.

Creating Database & Tables
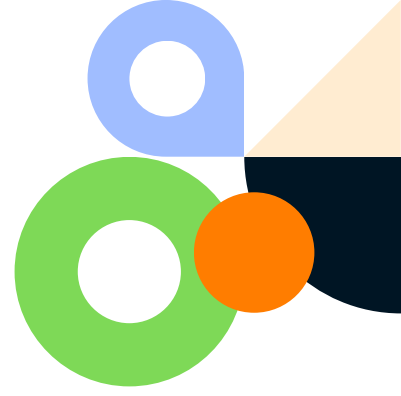
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```sql
create database Olympic;
use Olympic;

create table Medal_Details(
edition varchar(255),
edition_id int,
year int,
country varchar(255),
country_noc varchar(3),
gold int,
silver int,
bronze int,
total int,
primary key
(edition_id,country_noc)
);

create table Games_Held
(
edition varchar(255),
edition_id int,
year int,
city varchar(255),
country_noc varchar(3),
primary key (edition_id)
);
```

Creating Database & Tables
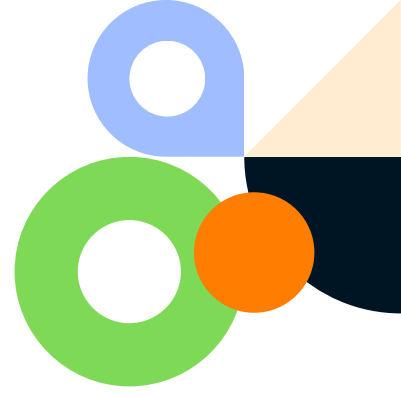
Rahul Mahapatra

```sql
create table Athlete_Bio
(
athlete_id int,
athlete_name varchar(255),
sex enum('male','female'),
country varchar(255),
country_noc varchar(3),
primary key (athlete_id)
);

create table Oly_Results
(
result_id int,
event_title varchar(255),
edition varchar(255),
edition_id int,
sport varchar(255),
result_location varchar(255),
primary key(result_id)
);

create table Country_details
(
country_noc varchar(3),
country varchar(255),
primary key (country_noc)
);
```
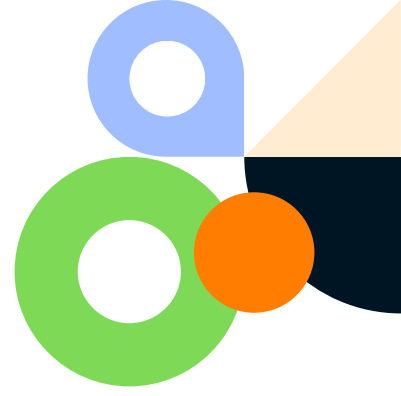
Q1. Count the total Indian Athlete participates in Olympic

```
                                          Input

select Count(athlete_name) As
total_indian_athlete , country
from athlete_bio
where country_noc = "ind"
group by country ;
```

```
                                          Output

| total_indian_athlete | country       |
|----------------------|---------------|
| 1035                 | India         |
| 3                    | India Pakistan|
| 1                    | India Uganda  |
```

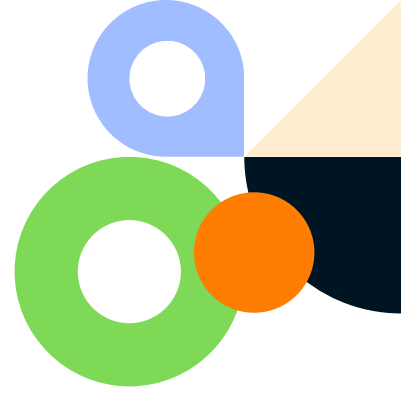# Q2. Count the number of countries that have participated in Olympic

```sql
select
count(distinct country_noc)
as total_country
from country_details;
```

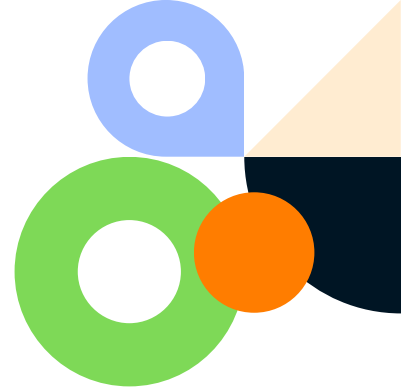| total_country |
|---------------|
| 234 |

Q3. The total no of each medals won by India

```sql
select sum(gold) as Gold_Medals,
sum(silver) as Silver_Medals,
sum(bronze) as Bronze_Medals,
sum(total) as Total
from medal_details
where country = "india";
```

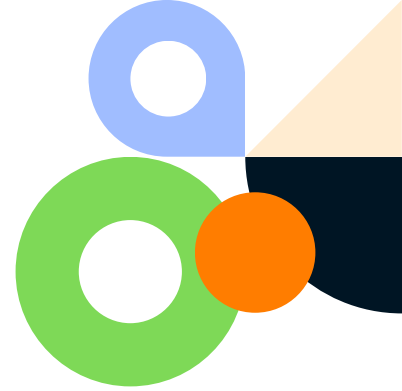| Gold_Medals	Silver_Medals	Bronze_Medals	Total
10	9	16	35

Q4. List the top 5 countries with most gold medals

```sql
select country ,
sum(gold) as gold_medals
from medal_details
group by country
order by gold_medals desc limit 5;
```

country	gold_medals
United States	1195
Soviet Union	473
Germany	355
Great Britain	312
France	287

# Q5. Find top 5 countries with the hightest average number of medals per edition

```sql
Select country, country_noc,
avg(total) as Average_Medals
from medal_details
group by country , country_noc
order by Average_Medals desc limit
5;
```

| country	country_noc	Average_Medals
Unified Team	EUN	67.5000
Soviet Union	URS	66.8889
United States	USA	56.7736
East Germany	GDR	47.1818
ROC	ROC	40.0000
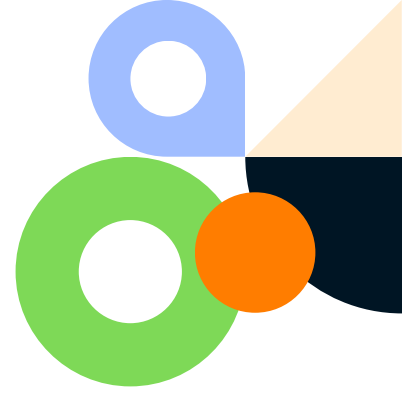
Q6. Analyze the trend of total medal won by India over the year

```sql
select year,
sum(total) as total_medal
from medal_details
where country_noc = 'IND'
group by year;
```

year	total_medal
1900	2
1928	1
1932	1
1936	1
1948	1
1952	2
1956	1
1960	1
1964	1
1968	1
1972	1
1980	1
1996	1
2000	1
2004	1
2008	3
2012	6
2016	2
2020	7
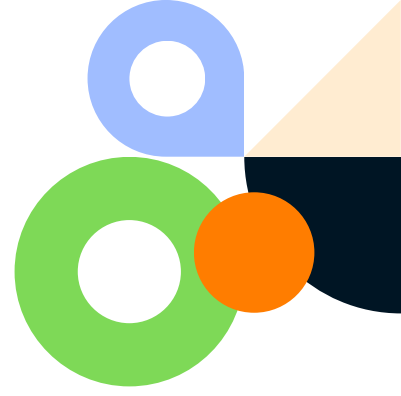
Q7. Find Out the Ratio of Male to Female Athlete Gender

```
                                              Input

select sum(sex = 'male') as male,
sum(sex= 'female') as female,
sum(sex = 'male') / sum(sex=
'female') as Male_to_female_ratio
from athlete_bio;
```

```
                                             Output


| male   | female | Male_to_female_ratio |
| 115526 | 40334  | 2.8642               |
```

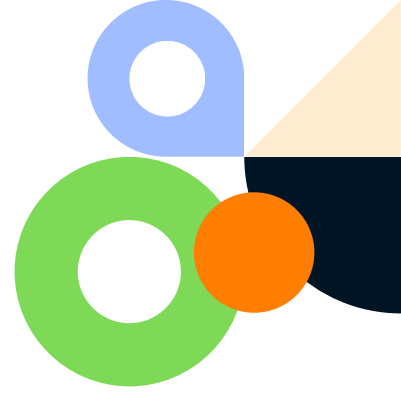## Q8. Find the country that has won the most gold medals in Football.

```sql
select country , sum(gold) as
total_gold from medal_details
join oly_results
on medal_details.edition_id =
oly_results.edition_id
where sport = 'football'
group by country
order by total_gold desc limit 1;
```

country	total_gold
United States	948

Q9. In which year and city where USA hosted the Olympic Games

```sql
select year,
city from games_held
where country_noc = 'USA';
```

year	city
1904	St. Louis
1932	Los Angeles
1984	Los Angeles
1996	Atlanta
1932	Lake Placid
1960	Squaw Valley
1980	Lake Placid
2002	Salt Lake City
2028	Los Angeles
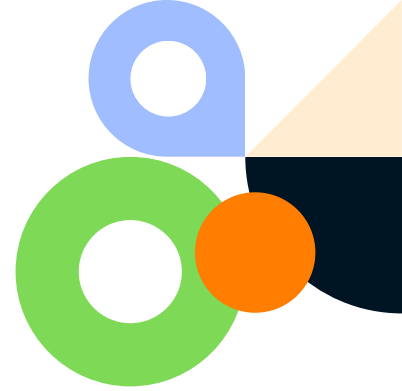
Q10. List all the Olympic Games held in the 20th century

```
select *
from games_held
where year between
1900 and 1999;
```

Input

Output

edition	edition_id	year	city	country_noc
1960 Winter Olympics	36	1960	Squaw Valley	USA
1964 Winter Olympics	37	1964	Innsbruck	AUT
1968 Winter Olympics	38	1968	Grenoble	FRA
1972 Winter Olympics	39	1972	Sapporo	JPN
1976 Winter Olympics	40	1976	Innsbruck	AUT
1980 Winter Olympics	41	1980	Lake Placid	USA
1984 Winter Olympics	42	1984	Sarajevo	YUG
1988 Winter Olympics	43	1988	Calgary	CAN
1992 Winter Olympics	44	1992	Albertville	FRA
1994 Winter Olympics	45	1994	Lillehammer	NOR
1998 Winter Olympics	46	1998	Nagano	JPN
1956 Equestrian	48	1956	Stockholm	SWE
1916 Summer Olympics	50	1916	Berlin	GER
1940 Summer Olympics	51	1940	Helsinki	FIN
1944 Summer Olympics	52	1944	London	GBR
1940 Winter Olympics	55	1940	Garmisch-P...	GER
1944 Winter Olympics	56	1944	Cortina d'A...	ITA