SQL Queries Using Real Dataset.

TO CREATE A TABLE STRUCTURE

DROP TABLE IF EXISTS OLYMPICS\_HISTORY;

CREATE TABLE IF NOT EXISTS OLYMPICS\_HISTORY

(

id INT,

name VARCHAR,

sex VARCHAR,

age VARCHAR,

height VARCHAR,

weight VARCHAR,

team VARCHAR,

noc VARCHAR,

games VARCHAR,

year INT,

season VARCHAR,

city VARCHAR,

sport VARCHAR,

event VARCHAR,

medal VARCHAR

);

DROP TABLE IF EXISTS OLYMPICS\_HISTORY\_NOC\_REGIONS;

CREATE TABLE IF NOT EXISTS OLYMPICS\_HISTORY\_NOC\_REGIONS

(

noc VARCHAR,

region VARCHAR,

notes VARCHAR

);

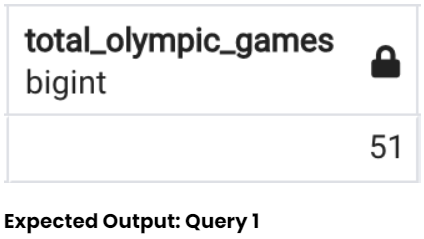
select \* from OLYMPICS\_HISTORY;

select \* from OLYMPICS\_HISTORY\_NOC\_REGIONS;

1. How many olympics games have been held?

select count(distinct games) as total\_olympic\_games

from olympics\_history;



2. List down all Olympics games held so far. (Data issue at 1956-"Summer"-"Stockholm")

select distinct oh.year,oh.season,oh.city

from olympics\_history oh

order by year;



3. Mention the total no of nations who participated in each olympics game?

with all\_countries as

(select games, nr.region

from olympics\_history oh

join olympics\_history\_noc\_regions nr ON nr.noc = oh.noc

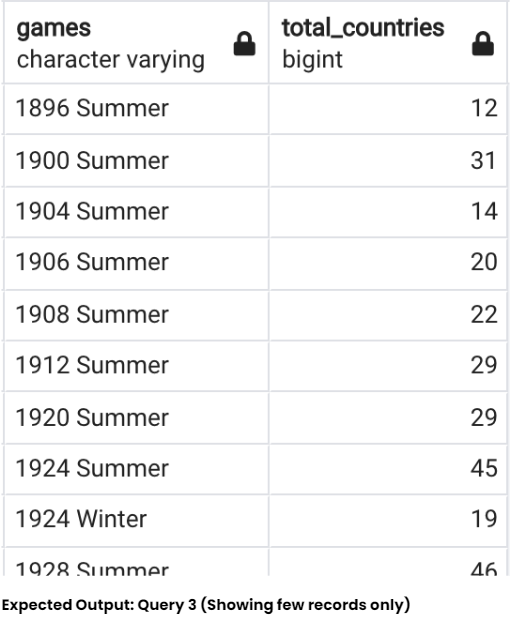
group by games, nr.region)

select games, count(1) as total\_countries

from all\_countries

group by games

order by games;



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

with all\_countries as

(select games, nr.region

from olympics\_history oh

join olympics\_history\_noc\_regions nr ON nr.noc=oh.noc

group by games, nr.region),

tot\_countries as

(select games, count(1) as total\_countries

from all\_countries

group by games)

select distinct

concat(first\_value(games) over(order by total\_countries)

, ' - '

, first\_value(total\_countries) over(order by total\_countries)) as Lowest\_Countries,

concat(first\_value(games) over(order by total\_countries desc)

, ' - '

, first\_value(total\_countries) over(order by total\_countries desc)) as Highest\_Countries

from tot\_countries

order by 1;



5. Which nation has participated in all of the olympic games

with tot\_games as

(select count(distinct games) as total\_games

from olympics\_history),

countries as

(select games, nr.region as country

from olympics\_history oh

join olympics\_history\_noc\_regions nr ON nr.noc=oh.noc

group by games, nr.region),

countries\_participated as

(select country, count(1) as total\_participated\_games

from countries

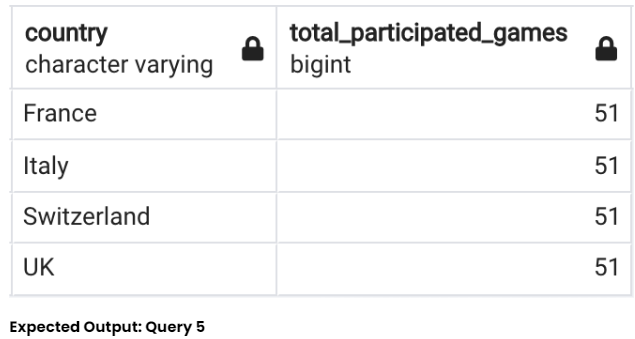
group by country)

select cp.\*

from countries\_participated cp

join tot\_games tg on tg.total\_games = cp.total\_participated\_games

order by 1;



6. Identify the sport which was played in all summer olympics.

with t1 as

(select count(distinct games) as total\_games

from olympics\_history where season = 'Summer'),

t2 as

(select distinct games, sport

from olympics\_history where season = 'Summer'),

t3 as

(select sport, count(1) as no\_of\_games

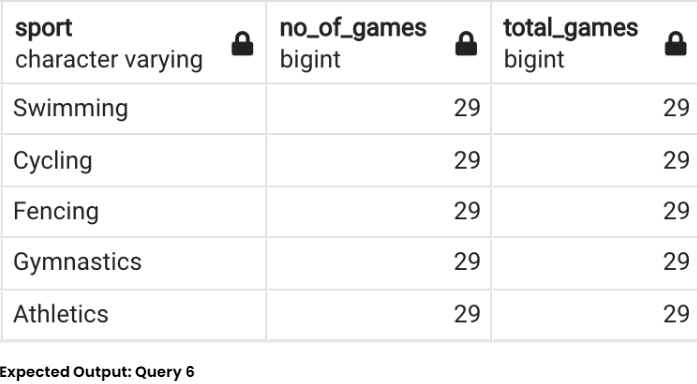
from t2

group by sport)

select \*

from t3

join t1 on t1.total\_games = t3.no\_of\_games;



7. Which Sports were just played only once in the olympics.

with t1 as

(select distinct games, sport

from olympics\_history),

t2 as

(select sport, count(1) as no\_of\_games

from t1

group by sport)

select t2.\*, t1.games

from t2

join t1 on t1.sport = t2.sport

where t2.no\_of\_games = 1

order by t1.sport;



8. Fetch the total no of sports played in each olympic games.

with t1 as

(select distinct games, sport

from olympics\_history),

t2 as

(select games, count(1) as no\_of\_sports

from t1

group by games)

select \* from t2

order by no\_of\_sports desc;



9. Fetch oldest athletes to win a gold medal

with temp as

(select name,sex,cast(case when age = 'NA' then '0' else age end as int) as age,

team,games,city,sport, event, medal

from olympics\_history),

ranking as

(select \*, rank() over(order by age desc) as rnk

from temp

where medal='Gold')

select \*

from ranking

where rnk = 1;



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

with t1 as

(select sex, count(1) as cnt

from olympics\_history

group by sex),

t2 as

(select \*, row\_number() over(order by cnt) as rn

from t1),

min\_cnt as

(select cnt from t2 where rn = 1),

max\_cnt as

(select cnt from t2 where rn = 2)

select concat('1 : ', round(max\_cnt.cnt::decimal/min\_cnt.cnt, 2)) as ratio

from min\_cnt, max\_cnt;

