1. How many olympics games have been held?

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

from olympics\_history;

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2. List down all Olympics games held so far.

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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;

OR

select Games, count(distinct(region)) as total\_countries

from [dbo].[OLYMPICS\_HISTORY] oh

join

[dbo].[OLYMPICS\_HISTORY\_NOC\_REGIONS] nr

on oh.NOC = nr.NOC

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;

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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;

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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;

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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;

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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;

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9. Fetch oldest athletes to win a gold medal

with temp as

(select name,sex,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;

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10. Top 5 athletes who have won the most gold medals.

WITH t1 AS (

SELECT name, team, COUNT(1) AS total\_gold\_medals

FROM olympics\_history

WHERE medal = 'Gold'

GROUP BY name, team

),

t2 AS (

SELECT \*, DENSE\_RANK() OVER (ORDER BY total\_gold\_medals DESC) AS rnk

FROM t1

)

SELECT name, team, total\_gold\_medals

FROM t2

WHERE rnk <= 5

ORDER BY total\_gold\_medals DESC;

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11. Top 5 athletes who have won the most medals (gold/silver/bronze).

WITH t1 AS (

SELECT name, team, COUNT(1) AS total\_medals

FROM olympics\_history

WHERE medal IN ('Gold', 'Silver', 'Bronze')

GROUP BY name, team

),

t2 AS (

SELECT \*, DENSE\_RANK() OVER (ORDER BY total\_medals DESC) AS rnk

FROM t1

)

SELECT name, team, total\_medals

FROM t2

WHERE rnk <= 5

ORDER BY total\_medals DESC;

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12. Top 5 most successful countries in olympics. Success is defined by no of medals won.

with t1 as

(select nr.region, count(Medal) as total\_medals

from olympics\_history oh

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

group by nr.region

),

t2 as

(select \*, dense\_rank() over(order by total\_medals desc) as rnk

from t1)

select \*

from t2

where rnk <= 5

order by total\_medals desc;

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

SELECT country,

ISNULL([Gold], 0) AS gold,

ISNULL([Silver], 0) AS silver,

ISNULL([Bronze], 0) AS bronze

FROM (

SELECT nr.region AS country,

medal,

COUNT(1) AS total\_medals

FROM olympics\_history oh

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

WHERE medal IN ('Gold', 'Silver', 'Bronze')

GROUP BY nr.region, medal

) AS SourceData

PIVOT (

SUM(total\_medals) FOR medal IN ([Gold], [Silver], [Bronze])

) AS PivotTable

ORDER BY gold DESC, silver DESC, bronze DESC;

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