

1. How many olympics games have been held?

```
select  
COUNT(DISTINCT Games) as no_of_games  
from olympics.athlete_events
```

Row	no_of_games
1	51

2. List down all Olympics games held so far

```
select distinct Games from olympics.athlete_events
```

Row	Games
1	1920 Summer
2	1960 Summer
3	1928 Summer
4	1964 Summer
5	1952 Summer

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

```
with cte as  
(select string_field_0 as NOC,string_field_1 as region,string_field_2 as  
notes from olympics.noc_regions)  
select  
Games,  
COUNT(DISTINCT NOC) as no_of_nations_participated  
from olympics.athlete_events  
GROUP BY Games  
order by Games asc
```

Row	Games	no_of_nations_participated
1	1896 Summer	12
2	1900 Summer	31
3	1904 Summer	15
4	1906 Summer	21
5	1908 Summer	22

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

```
with cte as
  (select
    Year,
    COUNT(DISTINCT NOC) as no_of_nations_participated
  from olympics.athlete_events a
  GROUP BY Year
  order by 2 asc)
,
cte1 as
(
  select *,
    dense_rank() over(order by no_of_nations_participated desc) as
took_part
  from cte
  order by 2 asc
)
select
  Year,
  no_of_nations_participated
from cte1
where took_part = 1 or took_part = 33
order by 2 desc
```

Row	Year	no_of_nations_participated
1	2016	207
2	1896	12

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

```
select
  string_field_1 as country_name
from olympics.noc_regions nr
join
olympics.athlete_events ae
on nr.string_field_0 = ae.NOC
group by string_field_1
having count(distinct Games) = (select count(distinct Games) from
olympics.athlete_events)
```

Row	country_name
1	UK
2	Italy
3	France
4	Switzerland

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

```
select distinct Sport from olympics.athlete_events
where Season = 'Summer'
and Sport not in
(select distinct Sport from olympics.athlete_events
where Season = 'Winter')
```

Row	Sport
1	Sailing
2	Athletics
3	Boxing
4	Judo
5	Fencing

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

```
select
    count(distinct Games) as freq,
    Sport
from
    olympics.athlete_events
group by Sport
Having count(distinct Games) = 1
```

1	1	Rugby Sevens
2	1	Military Ski Patrol
3	1	Basque Pelota
4	1	Croquet
5	1	Motorboating

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

```
select
    count(distinct Sport) as no_of_sports,
    Games
from olympics.athlete_events
GROUP BY Games
order by 2 asc
```

Row	no_of_sports	Games
1	9	1896 Summer
2	20	1900 Summer
3	18	1904 Summer
4	13	1906 Summer
5	24	1908 Summer

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

```
select
*,
from olympics.athlete_events
where Medal = 'Gold' and age != 'NA'
order by age desc
limit 2
```

Row	ID	Name
1	53238	Charles Jacobus
2	117046	Oscar Gomer Swahn

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

```
with cte as
(select count(DISTINCT ID) AS male_count
FROM olympics.athlete_events
where Sex = 'M'),
cte1 as
(select count(DISTINCT ID) AS female_count
FROM olympics.athlete_events
where Sex = 'F')

select round(male_count/female_count,2) as ration from cte,cte1
```

Row	ration
1	2.99

11. Fetch the top 5 athletes who have won the most gold medals.

```
with cte as
(
    select distinct
        ID,
        Name,
        Team,
        count(Medal) over(Partition by ID,Name order by Medal desc) as
no_of_gold_medals,
from olympics.athlete_events
where Medal = 'Gold'
order by 3 desc),
cte1 as
(select distinct *,dense_rank() over(order by no_of_gold_medals
desc) as rankings from cte order by 4 asc)

select distinct
    ID,
    Name,
```

```

        Team,
        no_of_gold_medals,
        rankings as Top_5
from cte1
where rankings < 6
order by Top_5 asc

```

Row	ID	Name	Team	no_of_gold_medals	Top_5
1	94406	Michael Fred Phelps, II	United States	23	1
2	33557	Raymond Clarence "Ray" Ewry	United States	10	2
3	69210	Frederick Carlton "Carl" Lewis	United States	9	3
4	67046	Larysa Semenivna Latynina (Di...	Soviet Union	9	3
5	113912	Mark Andrew Spitz	United States	9	3

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

```

with cte as
(select distinct
    ID,
    Name,
    Team,
    COUNT(Medal) over(PARTITION BY ID,Name) as no_of_medals
from olympics.athlete_events
where Medal != 'NA'
order by 3 desc),
cte1 as
(select *,dense_rank() over(order by no_of_medals desc) as rn from cte
order by rn asc)

```

```

select distinct
    ID,
    Name,
    Team,
    no_of_medals
from cte1 where rn < 6
order by no_of_medals desc

```

Row	ID	Name	Team	no_of_medals
1	94406	Michael Fred Phelps, II	United States	28
2	67046	Larysa Semenivna Latynina (Di...	Soviet Union	18
3	4198	Nikolay Yefimovich Andrianov	Soviet Union	15
4	109161	Borys Anfiyanovych Shakhlin	Soviet Union	13
5	11951	Ole Einar Bjrndalen	Norway	13

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

```
with cte as
(select
    string_field_1 as country ,
    count(Medal) as no_of_medals
from olympics.athlete_events a
join olympics.noc_regions b
on a.NOC = b.string_field_0
where Medal != 'NA'
group by string_field_1
order by no_of_medals desc
),
cte1 as
(select
*, dense_rank() over(order by no_of_medals desc) as ranks
from cte)
select * from cte1 where ranks < 6 order by ranks asc
```

Row	country	no_of_medals	ranks
1	USA	5637	1
2	Russia	3947	2
3	Germany	3756	3
4	UK	2068	4
5	France	1777	5

14. List down total gold, silver and bronze medals won by each country.

```
select
SUM(CASE WHEN Medal = 'Gold' then 1 else 0 end) as Gold_medals,
SUM(CASE WHEN Medal = 'Silver' then 1 else 0 end) as Silver_medals,
SUM(CASE WHEN Medal = 'Bronze' then 1 else 0 end) as Bronze_medals,
b.string_field_1
from olympics.athlete_events a
join olympics.noc_regions b
on a.NOC = b.string_field_0
group by b.string_field_1
order by 1 desc,2 desc,3 desc
```

Row	Gold_medals	Silver_medals	Bronze_medals	string_field_1
1	2638	1641	1358	USA
2	1599	1170	1178	Russia
3	1301	1195	1260	Germany
4	678	739	651	UK
5	575	531	531	Italy

15. List down total gold, silver and bronze medals won by each country corresponding to each olympic games.

```
select
SUM(CASE WHEN Medal = 'Gold' then 1 else 0 end) as Gold_medals,
SUM(CASE WHEN Medal = 'Silver' then 1 else 0 end) as Silver_medals,
SUM(CASE WHEN Medal = 'Bronze' then 1 else 0 end) as Bronze_medals,
b.string_field_1 as country,a.Games
from olympics.athlete_events a
join olympics.noc_regions b
on a.NOC = b.string_field_0
where Medal != 'N/A'
group by b.string_field_1,a.Games
order by a.Games asc,country asc
```

Row	Gold_medals	Silver_medals	Bronze_medals	country	Games
1	2	0	1	Australia	1896 Summer
2	2	1	2	Austria	1896 Summer
3	1	2	3	Denmark	1896 Summer
4	5	4	2	France	1896 Summer
5	25	5	2	Germany	1896 Summer

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

```
with cte as
(select
SUM(CASE WHEN Medal = 'Gold' then 1 else 0 end) as Gold_medals,
SUM(CASE WHEN Medal = 'Silver' then 1 else 0 end) as Silver_medals,
SUM(CASE WHEN Medal = 'Bronze' then 1 else 0 end) as Bronze_medals,
b.string_field_1 as country,a.Games
from olympics.athlete_events a
join olympics.noc_regions b
on a.NOC = b.string_field_0
where Medal != 'N/A'
group by b.string_field_1,a.Games
order by a.Games asc,country asc),
cte1 as
(
select concat(country,' - ',Gold_medals) as Gold_number,
Games,'Gold_medals' as Gold from
(select country,Games,Gold_medals,
max(Gold_medals) over(partition by Games order by Gold_medals desc) as
a,
from cte
ORDER BY Gold_medals desc) a1
where a1.a = Gold_medals),
cte2 as
(select concat(country,' - ',Silver_medals) as Silver_number,
Games,'Silver_medals' as Silver from
(select country,Games,Silver_medals,
max(Silver_medals) over(partition by Games order by Silver_medals desc)
as a,
```

```

from cte
ORDER BY Silver_medals desc) a1
where a1.a = Silver_medals),
cte3 as
(select concat(country,' - ',Bronze_medals) as Bronze_number,
Games,'Bronze_medals' as Bronze from
(select country,Games,Bronze_medals,
max(Bronze_medals) over(partition by Games order by Bronze_medals desc)
as a,
from cte
ORDER BY Bronze_medals desc) a1
where a1.a = Bronze_medals),
cte4 as
(select * from
cte1 join cte2 USING(Games)
join cte3 using(Games))

select
Games,
Gold_number as max_gold,
Silver_number as max_silver,
Bronze_number as max_Bronze
from cte4

```

Row	Games	max_gold	max_silver	max_Bronze
1	1896 Summer	Germany - 25	Greece - 18	Greece - 20
2	1900 Summer	UK - 59	France - 101	France - 82
3	1904 Summer	USA - 128	USA - 141	USA - 125
4	1906 Summer	Greece - 24	Greece - 48	Greece - 30
5	1908 Summer	UK - 147	UK - 131	UK - 90

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

```

with cte as
(select
SUM(CASE WHEN Medal = 'Gold' then 1 else 0 end) as Gold_medals,
SUM(CASE WHEN Medal = 'Silver' then 1 else 0 end) as Silver_medals,
SUM(CASE WHEN Medal = 'Bronze' then 1 else 0 end) as Bronze_medals,
b.string_field_1 as country,a.Games
from olympics.athlete_events a
join olympics.noc_regions b
on a.NOC = b.string_field_0
where Medal != 'N/A'
group by b.string_field_1,a.Games
order by a.Games asc,country asc),
cte1 as
(select country,Games,Gold_medals+Silver_medals+Bronze_medals as
most_medals,
max(Gold_medals+Silver_medals+Bronze_medals) over(partition by Games
order by Gold_medals+Silver_medals+Bronze_medals desc) as max_medals
from cte)

```



```
select Games,concat(country,' - ',most_medals) as country_and_medals
from cte1
where max_medals = most_medals
```

Row	Games	country_and_medals
1	1896 Summer	Greece - 48
2	1900 Summer	France - 235
3	1904 Summer	USA - 394
4	1906 Summer	Greece - 102
5	1908 Summer	UK - 368

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

```
with cte as
(select
    SUM(CASE WHEN Medal = 'Gold' then 1 else 0 end) as Gold_medals,
    SUM(CASE WHEN Medal = 'Silver' then 1 else 0 end) as Silver_medals,
    SUM(CASE WHEN Medal = 'Bronze' then 1 else 0 end) as Bronze_medals,
    b.string_field_1 as country,
    a.Games
from olympics.athlete_events a
join olympics.noc_regions b
on a.NOC = b.string_field_0
where Medal != 'N/A'
group by b.string_field_1,a.Games
order by a.Games asc,country asc),

cte1 as
(select distinct
    country,
    Gold_medals,
    Silver_medals,
    Bronze_medals,
    Silver_medals+Bronze_medals as b from cte
order by country asc)

select DISTINCT
    Country,
    Gold_medals,
    Silver_medals,
    Bronze_medals from cte1 where Gold_medals = 0 AND b >= 1
order by country as
```

Row	Country	Gold_medals	Silver_medals	Bronze_medals
1	Afghanistan	0	0	1
2	Algeria	0	0	2
3	Algeria	0	1	1
4	Algeria	0	2	0
5	Argentina	0	3	1

19. In which Sport/event, India has won highest medals.

```
select
Sport,
COUNT(Medal) as highest_no_of_medals
from olympics.athlete_events a join olympics.noc_regions b on a.NOC =
b.string_field_0
WHERE b.string_field_1 = 'India' and Medal != 'NA'
GROUP BY Sport
order by 2 desc
limit 1
```

Sport ▼	highest_no_of_medals ▼
Hockey	173

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

```
select distinct
Games,
Sport,
a2.string_field_1 as Country,
count(Medal) as no_of_medals
from olympics.athlete_events a1 join olympics.noc_regions a2
on a1.NOC= a2.string_field_0
where a2.string_field_1 = 'India' and Sport = 'Hockey' and Medal != 'N/A'
group by Games,Sport,a2.string_field_1
order by 4 desc
```

Row	Games ▼	Sport ▼	Country ▼	no_of_medals ▼
1	2016 Summer	Hockey	India	32
2	1980 Summer	Hockey	India	30
3	1948 Summer	Hockey	India	20
4	1936 Summer	Hockey	India	19
5	1956 Summer	Hockey	India	17