

- Write a SQL query to list down all the Olympic Games held so far.

```
select distinct games
from `olympic.athlete_events`
order by games
```

Row	games
1	1896 Summer
2	1900 Summer
3	1904 Summer
4	1906 Summer
5	1908 Summer
6	1912 Summer
7	1920 Summer
8	1924 Summer
9	1924 Winter
10	1928 Summer

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

```
select count(distinct NOC) as total_nations
from `olympic.athlete_events`
```

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Row	total_nations	
1	230	

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

```
with cte_1 as (select games, count(NOC) as con_cnt
from `olympic.athlete_events`
group by games
)
select substr(games,1,4) as year, con_cnt, dense_rank()over(order by con_cnt desc
) as highest,
dense_rank()over(order by con_cnt) as lowest
from cte_1
order by con_cnt desc
```

Row	year	con_cnt	highest	lowest
1	2000	13821	1	51
2	1996	13780	2	50
3	2016	13688	3	49
4	2008	13602	4	48
5	2004	13443	5	47
6	1992	12977	6	46
7	2012	12920	7	45
8	1988	12037	8	44
9	1972	10304	9	43
10	1984	9454	10	42

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

```
select distinct sport
from `olympic.athlete_events`
where games in (select distinct games
                 from `olympic.athlete_events`
                 where games like '% Summer%')
order by sport
```

Row	sport
1	Aeronautics
2	Alpinism
3	Archery
4	Art Competitions
5	Athletics
6	Badminton
7	Baseball
8	Basketball
9	Basque Pelota
10	Beach Volleyball
11	Boxing
12	Canoeing

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

```
select games, count(*) as total_count
from `olympic.athlete_events`
group by games
order by total_count desc
```

Row	games	total_count
1	2000 Summer	13821
2	1996 Summer	13780
3	2016 Summer	13688
4	2008 Summer	13602
5	2004 Summer	13443
6	1992 Summer	12977
7	2012 Summer	12920
8	1988 Summer	12037
9	1972 Summer	10304
10	1984 Summer	9454

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

```
with cte_1 as (select distinct *
from `olympic.athlete_events`
where age in (select max(distinct age) from `olympic.athlete_events`
              where age <> 'NA' and medal = 'Gold'))

select * from cte_1
where medal = 'Gold'
```

JOB INFORMATION

RESULTS

CHART

PREVIEW

JSON

EXECUTION DETAILS

EXECUTION GRAPH

Row	ID	Name	Sex	Age	Height	Weight
1	117046	Oscar Gomer Swahn	M	64	NA	NA
2	53238	Charles Jacobus	M	64	NA	NA

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

```
with cte_1 as(select count(sex) as M
from `olympic.athlete_events`
where sex = 'M'),

cte_2 as(select count(sex) as F
from `olympic.athlete_events`
where sex = 'F')

select round((c1.M/c2.F),2) as ratio
from cte_1 c1, cte_2 c2
```

Row	ratio
1	2.64

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

```
with cte_1 as(select name, count(medal) as cnt
from `olympic.athlete_events`
where medal = 'Gold'
group by name
)
select * , dense_rank()over(order by cnt desc) as top_5
from cte_1
order by cnt desc
```

Row	name	cnt	top_5
1	Michael Fred Phelps, II	23	1
2	Raymond Clarence "Ray" Ewry	10	2
3	Larysa Semenivna Latynina (Di...	9	3
4	Frederick Carlton "Carl" Lewis	9	3
5	Paavo Johannes Nurmi	9	3
6	Mark Andrew Spitz	9	3
7	Birgit Fischer-Schmidt	8	4
8	Usain St. Leo Bolt	8	4
9	Sawao Kato	8	4
10	Ole Einar Bjrndalen	8	4
11	Jennifer Elisabeth "Jenny" Tho...	8	4
12	Matthew Nicholas "Matt" Biondi	8	4

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

```
with cte_1 as (select name, count(medal) as count_of_medals
from `olympic.athlete_events`
where medal <> 'NA'
group by Name)
select *, dense_rank()over(order by count_of_medals desc) as medal_count
from cte_1
order by medal_count
```

Row	name	count_of_medals	medal_count
1	Michael Fred Phelps, II	28	1
2	Larysa Semenivna Latynina (Di...	18	2
3	Nikolay Yefimovich Andrianov	15	3
4	Borys Anfiyanovych Shakhlin	13	4
5	Edoardo Mangiarotti	13	4
6	Ole Einar Bjrndalen	13	4
7	Takashi Ono	13	4
8	Birgit Fischer-Schmidt	12	5

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

```

with cte_1 as (select c1.string_field_1 as country, count(c2.medal) as cnt
from `olympic.noc_regions` c1
join `olympic.athlete_events` c2
on c1.string_field_0 = c2.NOC
where c2.medal <> "NA"
group by c1.string_field_1
)
select *, dense_rank()over(order by cnt desc) as medal_count
from cte_1
order by medal_count

```

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

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

```

select distinct Sport, count(medal) as cnt
from `olympic.athlete_events`
where noc = 'IND' and medal <> 'NA'
group by Sport
order by cnt desc
limit 1

```

Row	Sport	cnt
1	Hockey	173

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

```

WITH MedalCounts AS (
SELECT
    c1.string_field_1 AS country,
    c2.games,
    COUNT(CASE WHEN c2.medal = 'Gold' AND c2.medal <> 'NA' THEN 1 END) AS
gold_count,
    COUNT(CASE WHEN c2.medal = 'Silver' AND c2.medal <> 'NA' THEN 1 END) AS
silver_count,
    COUNT(CASE WHEN c2.medal = 'Bronze' AND c2.medal <> 'NA' THEN 1 END) AS
bronze_count
FROM
    `olympic.noc_regions` c1
JOIN `olympic.athlete_events` c2
ON c1.string_field_0 = c2.NOC
WHERE
    c2.medal IN ('Gold', 'Silver', 'Bronze') AND c2.medal <> 'NA'
GROUP BY

```

```

        c1.string_field_1, c2.games
    )

```

```

SELECT
    games,
    country,
    gold_count,
    silver_count,
    bronze_count
FROM
    MedalCounts
ORDER BY
    games, country, gold_count DESC, silver_count DESC, bronze_count DESC;

```

JOB INFORMATION RESULTS CHART PREVIEW JSON EXECUTION DETAILS EXECUTION GRAPH						
Row	games	country	gold_count	silver_count	bronze_count	
1	1896 Summer	Australia	2	0	1	
2	1896 Summer	Austria	2	1	2	
3	1896 Summer	Denmark	1	2	3	
4	1896 Summer	France	5	4	2	
5	1896 Summer	Germany	25	5	2	
6	1896 Summer	Greece	10	18	20	
7	1896 Summer	Hungary	2	1	3	
8	1896 Summer	Switzerland	1	2	0	
9	1896 Summer	UK	3	3	3	
10	1896 Summer	USA	11	7	2	
11	1900 Summer	Australia	3	0	3	
12	1900 Summer	Austria	0	3	3	

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

```

select games, string_field_1, sport, count(*) as medal_count
from `olympic.athlete_events` c1
join `olympic.noc_regions` c2
on c1.noc = c2.string_field_0
where noc = 'IND' and sport = 'Hockey'
group by games, string_field_1, sport

```

Row	games	string_field_1	sport	medal_count
1	1928 Summer	India	Hockey	14
2	1932 Summer	India	Hockey	15
3	1936 Summer	India	Hockey	19
4	1948 Summer	India	Hockey	20
5	1952 Summer	India	Hockey	14
6	1956 Summer	India	Hockey	17
7	1960 Summer	India	Hockey	13
8	1964 Summer	India	Hockey	15
9	1968 Summer	India	Hockey	16
10	1972 Summer	India	Hockey	14
11	1976 Summer	India	Hockey	16

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

```
with cte_1 as (select c1.games, c2.string_field_1 as country,
    sum(CASE WHEN c1.medal = 'Gold' AND c1.medal <> 'NA' THEN 1 else 0 END) AS
gold_count,
    sum(CASE WHEN c1.medal = 'Silver' AND c1.medal <> 'NA' THEN 1 else 0 END) AS
silver_count,
    sum(CASE WHEN c1.medal = 'Bronze' AND c1.medal <> 'NA' THEN 1 else 0 END) AS
bronze_count,
    dense_rank()over(partition by games order by sum(CASE WHEN c1.medal = 'Gold'
AND c1.medal <> 'NA' THEN 1 else 0 END) desc) as x,
    dense_rank()over(partition by games order by sum(CASE WHEN c1.medal = 'Silver'
AND c1.medal <> 'NA' THEN 1 else 0 END) desc) as y,
    dense_rank()over(partition by games order by sum(CASE WHEN c1.medal = 'Bronze'
AND c1.medal <> 'NA' THEN 1 else 0 END) desc) as z
from `olympic.athlete_events` c1
join `olympic.noc_regions` c2
on c1.noc = c2.string_field_0
group by games, c2.string_field_1
order by games),
cte_2 as(
select games, concat(country, '-', gold_count) as gold
from cte_1
where x = 1
order by games),
cte_3 as(select games, concat(country, '-', silver_count) as silver
from cte_1
where y = 1
order by games),
cte_4 as (select games, concat(country, '-', Bronze_count) as bronze
from cte_1
where z = 1
order by games)

select distinct c2.games, c2.gold, c3.silver, c4.bronze
from cte_2 c2
join cte_3 c3
on c2.games = c3.games
join cte_4 c4
on c2.games = c4.games
order by games
```

Row	games	gold	silver	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
6	1912 Summer	Sweden-103	UK-64	UK-59
7	1920 Summer	USA-111	France-71	Belgium-66
8	1924 Summer	USA-97	France-51	USA-49
9	1924 Winter	UK-16	USA-10	UK-11
10	1928 Summer	USA-47	Netherlands-29	Germany-41
11	1928 Winter	Canada-12	Sweden-13	Switzerland-12
12	1932 Summer	USA-81	USA-47	USA-61

```

with cte_1 as (select c1.games, c2.string_field_1 as country,
    sum(CASE WHEN c1.medal = 'Gold' AND c1.medal <> 'NA' THEN 1 else 0 END) AS
gold_count,
    sum(CASE WHEN c1.medal = 'Silver' AND c1.medal <> 'NA' THEN 1 else 0 END) AS
silver_count,
    sum(CASE WHEN c1.medal = 'Bronze' AND c1.medal <> 'NA' THEN 1 else 0 END) AS
bronze_count,
    sum(case when c1.medal in ('Gold','Silver', 'Bronze') and c1.medal <> 'NA'
then 1 else 0 end) as max_count,
    dense_rank()over(partition by games order by sum(CASE WHEN c1.medal = 'Gold'
AND c1.medal <> 'NA' THEN 1 else 0 END) desc) as x,
    dense_rank()over(partition by games order by sum(CASE WHEN c1.medal = 'Silver'
AND c1.medal <> 'NA' THEN 1 else 0 END) desc) as y,
    dense_rank()over(partition by games order by sum(CASE WHEN c1.medal = 'Bronze'
AND c1.medal <> 'NA' THEN 1 else 0 END) desc) as z,
    dense_rank()over(partition by games order by sum(case when c1.medal in
('Gold','Silver', 'Bronze') and c1.medal <> 'NA' then 1 else 0 end) desc) p
from `olympic.athlete_events` c1
join `olympic.noc_regions` c2
on c1.noc = c2.string_field_0
group by games, c2.string_field_1
order by games),
cte_2 as(
select games, concat(country,'-',gold_count) as gold
from cte_1
where x = 1
order by games),
cte_3 as(select games, concat(country,'-',silver_count) as silver
from cte_1
where y = 1
order by games),
cte_4 as (select games, concat(country,'-',Bronze_count) as bronze
from cte_1
where z = 1
order by games),
cte_5 as (select games, concat(country,'-',max_count) as max
from cte_1
where p = 1
order by games)
select distinct c2.games, c2.gold, c3.silver, c4.bronze, c5.max
from cte_2 c2
join cte_3 c3
on c2.games = c3.games
join cte_4 c4
on c2.games = c4.games
join cte_5 c5
on c2.games = c5.games
order by games

```


Row	games	gold	silver	bronze	max
1	1896 Summer	Germany-25	Greece-18	Greece-20	Greece-48
2	1900 Summer	UK-59	France-101	France-82	France-235
3	1904 Summer	USA-128	USA-141	USA-125	USA-394
4	1906 Summer	Greece-24	Greece-48	Greece-30	Greece-102
5	1908 Summer	UK-147	UK-131	UK-90	UK-368
6	1912 Summer	Sweden-103	UK-64	UK-59	Sweden-190
7	1920 Summer	USA-111	France-71	Belgium-66	USA-194
8	1924 Summer	USA-97	France-51	USA-49	USA-182
9	1924 Winter	UK-16	USA-10	UK-11	UK-31
10	1928 Summer	USA-47	Netherlands-29	Germany-41	USA-88
11	1928 Winter	Canada-12	Sweden-13	Switzerland-12	Sweden-16
12	1932 Summer	USA-81	USA-47	USA-61	USA-189

--How many olympics games have been held?

```
select count(distinct games) as count_of_games
from `olympic.athlete_events`
```

Row	count_of_games
1	51