Q1. How many Olympic games have been held?

Answer: select count(distinct games) as total\_games from athlete\_events;

Q2. List down all Olympic games held so far?

Answer: select distinct year, season, sport from athlete\_events;

Q3. Mention the total no of nations who participated in each Olympics game?

Answer: select games, count(distinct NOC) as total\_nations from athlete\_events group by games order by games;

Q4.Which year saw the highest and lowest no of countries participating in Olympics.

Answer: with nation\_counts as (select games, count(distinct NOC) as total\_nations from athlete\_events group by games) select \* from nation\_counts where total\_nations= (select max(total\_nations) from nation\_counts) or total\_nations=(select min(total\_nations) from nation\_counts);

Q5. Which nation has participated in all of the Olympic games?

Answer: select team from athlete\_events group by team having count(distinct games) = (select count(distinct games) from athlete\_events);

Q6. Identify the sport which was played in all summer Olympics.

Answer: select sport, games, season from athlete\_events where season="summer";

Q7. Which Sports were just played only once in the Olympics in which year.

Answer: select sport, min(games) from athlete\_events group by sport having count(distinct games)=1;

Q8. Fetch the total no of sports played in each Olympic games.

Answer: select games, count(distinct sport) as total sport from athlete\_events group by games order by games;

Q9. Fetch details of the oldest athletes to win any medal.

Answer: select \* from athlete\_events where medal is not null and age=(select max(age) from athlete\_events where medal is not null);

Q10. Find the Ratio of male and female athletes participated in all Olympic games

Answer: select count(sex) from athlete\_events where sex="M";

select count(sex) from athlete\_events where sex="F";

Q11. Fetch the top 5 athletes who have won the most gold medals.

Answer: select name, count(medal) as total gold from athlete\_events where medal="gold" group by name order by total\_gold desc limit 5;

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

Answer: select name, count(medal) as total\_medal from athlete\_events where medal is not null group by name order by total\_medal desc limit 5;

Q13. Fetch the top 5 most successful countries in Olympics. Success is defined by no of medals won.

Answer: select team, count(medal) as total\_medal from athlete\_events where medal is not null group by team order by total\_medal desc limit 5;

Q14. List down total gold, silver and bronze medals won by each country.

Answer: select team, count(CASE when medal="gold" then 1 end) as gold,

count(CASE when medal="silver" then 1 end) as silver,

count(CASE when medal="bronze" then 1 end) as bronze from athlete\_events where medal is not null group by team order by gold desc, silver desc, bronze desc;

Q15. List down total gold, silver and bronze medals won by each country corresponding to each Olympic games.

Answer: select games, team, sum(CASE when medal="gold" then 1 else 0 end ) as gold,

sum(CASE when medal="silver" then 1 else 0 end) as silver,

sum(CASE when medal="bronze" then 1 else 0 end ) as bronze from athlete\_events where medal is not null group by games, team order by games, team;

Q16. Identify which country won the most gold, most silver, most bronze medals and the most medals in each Olympic games.

Q17. Which countries have never won gold medal but have won silver/bronze medals?

Answer: select team from athlete\_events where medal in("silver","bronze") and team not in (select distinct team from athlete\_events

where medal="gold") group by team having count(\*)>0 order by team;

Q18. In which Sport/event, India has won highest medals.

Answer: select sport, count(\*) as total medal from athlete events where team = 'india' and medal is not null group by sport order by total medals desc limit 1;

Q19. Break down all Olympic games where India won medal for Hockey and how many medals in each Olympic games.

Answer: select games, count(\*) as total\_medals from athlete\_event where team = 'india' and sport = 'hockey' and medal is not null group by games order by games;

Q20. Which gender has won more medals historically.

Answer: select sex, count(medal) as total\_medal from athlete\_events group by sex;