



SQL CASE STUDY

OLYMPICS GAMES DATASET

QUESTIONS:

- Q1. How many olympics games have been held?
- Q2. List down all Olympics games held so far.
- Q3. Mention the total no of Countries who participated in each olympics game.
- Q4. Which year was the highest and lowest no of countries participated in olympics?
- Q5. Which Country has participated in all of the olympic games?
- Q6. Identify the sport which was played at every summer olympics.
- Q7. Which Sports were just played only once in the olympics?
- Q8. Fetch the Total No of sports played in each olympic games.
- Q9. Fetch oldest athletes to win a gold medal.
- Q10. Fetch the top 5 athletes who have won the most gold medals.
- Q11. Fetch the top 5 athletes who have won the most medals.
- Q12. Fetch the top 5 most successful countries in olympics by No of medals won.
- Q13. List down total gold, silver and bronze medals won by each country.
- Q14. List down total gold, silver and bronze medals won by each country corresponding to each olympic games.
- Q15. Identify which country won the most gold, most silver and most bronze medals in each olympic games.
- 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?
- Q18. In which Sport/event, India has won highest medals.
- Q19. Break down all olympic games where India won medal for Hockey and how many medals in each olympic games.

27 SELECT * FROM OLYMPICS_HISTORY;

Data Output Messages Notifications



	id integer	name character varying	sex character varying	age character varying	height character varying	weight character varying	team character varying	noc character varying	games character varying
1	1	A Dijiang	M	24	180	80	China	CHN	1992 Summer
2	2	A Lamusi	M	23	170	60	China	CHN	2012 Summer
3	3	Gunnar Nielsen Aaby	M	24	NA	NA	Denmark	DEN	1920 Summer
4	4	Edgar Lindenau Aabye	M	34	NA	NA	Denmark/Sweden	DEN	1900 Summer
5	5	Christine Jacoba Aaftink	F	21	185	82	Netherlands	NED	1988 Winter
6	5	Christine Jacoba Aaftink	F	21	185	82	Netherlands	NED	1988 Winter
7	5	Christine Jacoba Aaftink	F	25	185	82	Netherlands	NED	1992 Winter
8	5	Christine Jacoba Aaftink	F	25	185	82	Netherlands	NED	1992 Winter
9	5	Christine Jacoba Aaftink	F	27	185	82	Netherlands	NED	1994 Winter
10	5	Christine Jacoba Aaftink	F	27	185	82	Netherlands	NED	1994 Winter
11	6	Per Knut Aaland	M	31	188	75	United States	USA	1992 Winter
12	6	Per Knut Aaland	M	31	188	75	United States	USA	1992 Winter
13	6	Per Knut Aaland	M	31	188	75	United States	USA	1992 Winter
14	6	Per Knut Aaland	M	31	188	75	United States	USA	1992 Winter
15	6	Per Knut Aaland	M	33	188	75	United States	USA	1994 Winter
16	6	Per Knut Aaland	M	33	188	75	United States	USA	1994 Winter
17	6	Per Knut Aaland	M	33	188	75	United States	USA	1994 Winter
18	6	Per Knut Aaland	M	33	188	75	United States	USA	1994 Winter
19	7	John Aalberg	M	31	183	72	United States	USA	1992 Winter

28 SELECT * FROM OLYMPICS_HISTORY_NOC_REGIONS;

	id integer	name character varying	sex character varying	age character varying	height character varying	weight character varying	team character varying	noc character varying	games character varying
1	1	A Dijiang	M	24	180	80	China	CHN	1992 Summer
2	2	A Lamusi	M	23	170	60	China	CHN	2012 Summer
3	3	Gunnar Nielsen Aaby	M	24	NA	NA	Denmark	DEN	1920 Summer
4	4	Edgar Lindenau Aabye	M	34	NA	NA	Denmark/Sweden	DEN	1900 Summer
5	5	Christine Jacoba Aaftink	F	21	185	82	Netherlands	NED	1988 Winter
6	5	Christine Jacoba Aaftink	F	21	185	82	Netherlands	NED	1988 Winter
7	5	Christine Jacoba Aaftink	F	25	185	82	Netherlands	NED	1992 Winter
8	5	Christine Jacoba Aaftink	F	25	185	82	Netherlands	NED	1992 Winter
9	5	Christine Jacoba Aaftink	F	27	185	82	Netherlands	NED	1994 Winter
10	5	Christine Jacoba Aaftink	F	27	185	82	Netherlands	NED	1994 Winter
11	6	Per Knut Aaland	M	31	188	75	United States	USA	1992 Winter
12	6	Per Knut Aaland	M	31	188	75	United States	USA	1992 Winter
13	6	Per Knut Aaland	M	31	188	75	United States	USA	1992 Winter
14	6	Per Knut Aaland	M	31	188	75	United States	USA	1992 Winter
15	6	Per Knut Aaland	M	33	188	75	United States	USA	1994 Winter
16	6	Per Knut Aaland	M	33	188	75	United States	USA	1994 Winter
17	6	Per Knut Aaland	M	33	188	75	United States	USA	1994 Winter
18	6	Per Knut Aaland	M	33	188	75	United States	USA	1994 Winter
19	7	John Aalberg	M	31	183	72	United States	USA	1992 Winter
20	7	John Aalberg	M	31	183	72	United States	USA	1992 Winter

```
28 SELECT * FROM OLYMPICS_HISTORY;
29 SELECT * FROM OLYMPICS_HISTORY_NOC_REGIONS;
30
31
32 -- Q1. How many olympics games have been held?
33 SELECT COUNT(DISTINCT(games)) FROM OLYMPICS_HISTORY;
34
35 -- Q2. List down all Olympics games held so far.
36 SELECT DISTINCT year, season, city FROM OLYMPICS_HISTORY;
37
38 -- Q3. Mention the total no of Countries who participated in each olympics game?
39 WITH All_Countries AS
40     (SELECT games,nr.region
41      from OLYMPICS_HISTORY oh
42      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr on oh.noc=nr.noc
43      GROUP BY games,nr.region)
44 SELECT games,COUNT(1) as Total_Countries
45 FROM All_Countries
46 GROUP BY games
47 ORDER BY games;
48
```

Data Output Messages Notifications

	lowest_no_of_countries text	highest_no_of_countries text
1	1896 Summer-12	2016 Summer-204



```
48
49 -- Q4. Which year was the highest and lowest no of countries participated in olympics?
50 WITH All_Countries AS
51     (SELECT games,nr.region
52      FROM OLYMPICS_HISTORY oh
53      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr on oh.noc=nr.noc
54      GROUP BY games,nr.region),
55 count_Countries AS
56     (SELECT games,COUNT(1) as Total_Countries
57      FROM All_Countries
58      GROUP BY games
59      ORDER BY games)
60 SELECT DISTINCT
61     CONCAT(FIRST_VALUE(games) OVER(ORDER BY Total_Countries)
62     , '-'
63     ,FIRST_VALUE(Total_Countries) OVER(ORDER BY Total_Countries)) AS Lowest_no_of_countries,
64     CONCAT(LAST_VALUE(games) OVER(ORDER BY Total_Countries
65     RANGE BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING)
66     , '-'
67     ,LAST_VALUE(Total_Countries) OVER(ORDER BY Total_Countries
68     RANGE BETWEEN UNBOUNDED PRECEDING AND UNBOUNDED FOLLOWING)) AS Highest_no_of_countries
69 FROM count_Countries;
```

Data Output Messages Notifications



	lowest_no_of_countries text	highest_no_of_countries text
1	1896 Summer-12	2016 Summer-204



```
71 -- Q5. Which Country has participated in all of the olympic games?
72
73 -- Approach-1 (Using CTE & JOIN):
74 WITH Tot_games AS
75     (SELECT COUNT(DISTINCT (games)) as Total_games
76      FROM OLYMPICS_HISTORY),
77 All_Countries AS
78     (SELECT games,nr.region as Country
79      FROM OLYMPICS_HISTORY oh
80      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr ON oh.noc=nr.noc
81      GROUP BY games,nr.region),
82 count_Countries AS
83     (SELECT Country,COUNT(1) AS Total_Participated_games
84      FROM All_Countries
85      GROUP BY Country)
86 SELECT cc.*
87 FROM count_Countries cc
88 JOIN Tot_games tg ON tg.Total_games=cc.Total_Participated_games ;
89
90 -- Approach-2 (Using CTE & SubQuery)
91 WITH All_Countries AS
92     (SELECT games,nr.region AS Country
93      FROM OLYMPICS_HISTORY oh
94      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr ON oh.noc=nr.noc
95      GROUP BY games,nr.region),
96 count_Countries AS
97     (SELECT Country,COUNT(1) AS Total_Participated_games
98      FROM All_Countries
99      GROUP BY Country)
100 SELECT *
101 FROM count_Countries
102 WHERE Total_Participated_games IN
103     (SELECT COUNT(DISTINCT (games)) AS Total_games
104      FROM OLYMPICS_HISTORY );
105
106
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106
107 -- Q6. Identify the sport which was played at every summer olympics.
108
109 WITH table1 AS
110     (SELECT COUNT(DISTINCT (games)) as Total_games
111      FROM OLYMPICS_HISTORY WHERE season='Summer' ),
112 table2 AS
113     (SELECT DISTINCT games,sport
114      FROM OLYMPICS_HISTORY WHERE season='Summer'),
115 table3 AS
116     (SELECT sport,COUNT(1) AS no_of_games
117      FROM table2
118      GROUP BY sport)
119 SELECT *
120 FROM table3 t3
121 JOIN table1 t1
122 ON t1.Total_games=t3.no_of_games;
123
```

Data Output

Messages

Notifications



	sport character varying	no_of_games bigint	total_games bigint
1	Swimming	29	29
2	Cycling	29	29
3	Fencing	29	29
4	Gymnastics	29	29
5	Athletics	29	29


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124 --Q7. Which Sports were just played only once in the olympics?
125
126 WITH table1 AS
127     (SELECT DISTINCT games,sport
128      FROM OLYMPICS_HISTORY),
129      table2 AS
130      (SELECT sport,COUNT(1) AS no_of_games
131       FROM table1
132       GROUP BY sport)
133 SELECT t2.*,t1.games
134 FROM table1 t1
135 JOIN table2 t2
136 ON t1.sport=t2.sport
137 WHERE t2.no_of_games=1
138 ORDER BY sport;
```

Data Output Messages Notifications



	sport character varying	no_of_games bigint	games character varying
1	Aeronautics	1	1936 Summer
2	Basque Pelota	1	1900 Summer
3	Cricket	1	1900 Summer
4	Croquet	1	1900 Summer
5	Jeu De Paume	1	1908 Summer
6	Military Ski Patrol	1	1924 Winter
7	Motorboating	1	1908 Summer
8	Racquets	1	1908 Summer
9	Roque	1	1904 Summer
10	Rugby Sevens	1	2016 Summer

```
142 -- Q8. Fetch the Total No of sports played in each olympic games.
143
144 WITH table1 AS
145     (SELECT distinct games,sport
146      FROM OLYMPICS_HISTORY),
147      table2 AS
148      (SELECT games,COUNT(1) AS no_of_games
149       FROM table1
150       GROUP BY games)
151 SELECT t2.*
152 FROM table1 t1
153 JOIN table2 t2
154 ON t1.games=t2.games
155 ORDER BY no_of_games DESC;
```

Data Output Messages Notifications



	games character varying	no_of_games bigint
1	2000 Summer	34
2	2004 Summer	34
3	2000 Summer	34
4	2004 Summer	34
5	2000 Summer	34
6	2004 Summer	34
7	2008 Summer	34
8	2004 Summer	34
9	2008 Summer	34
10	2016 Summer	34
11	2000 Summer	34
12	2016 Summer	34

```
157 -- Q9. Fetch oldest athletes to win a gold medal.
158
159 WITH table1 AS
160     (SELECT name,sex,cast(case when age = 'NA' then '0' else age end as int) as age,
161      team,noc,games,city,sport,event,medal
162      FROM OLYMPICS_HISTORY),
163 athlete_ranking AS
164     (SELECT *,
165      RANK() OVER(ORDER BY age DESC) AS rnk
166      FROM table1
167      WHERE medal='Gold')
168 SELECT *
169 FROM athlete_ranking
170 WHERE rnk=1;
171
```

Data Output Messages Notifications



	name character varying	sex character varying	age integer	team character varying	noc character varying	games character varying	city character varying	sport character varying	event character varying	medal character varying
1	Oscar Gomer Swahn	M	64	Sweden	SWE	1912 Summer	Stockholm	Shooting	Shooting Men's Running Target, Single Shot, Team	Gold
2	Charles Jacobus	M	64	United States	USA	1904 Summer	St. Louis	Roque	Roque Men's Singles	Gold



```
171
172
173 -- Q10. Fetch the top 5 athletes who have won the most gold medals
174
175 -- Condition1: Top 5 Athletes with most gold medals
176 WITH table1 AS
177     (SELECT name,count(1) AS Medal_count
178      FROM OLYMPICS_HISTORY
179      WHERE medal='Gold'
180      GROUP BY name
181      ORDER BY Medal_count DESC),
182 top_athletes AS
183     (SELECT *,
184      ROW_NUMBER() OVER(ORDER BY medal_count DESC) AS rn
185      FROM table1)
186 SELECT *
187 FROM top_athletes
188 where rn<=5;
189
190 -- Condition2: Top 5 athletes considering the same medal holders as one rank
191
192 WITH table1 AS
193     (SELECT name,count(1) AS Medal_count
194      FROM OLYMPICS_HISTORY
195      WHERE medal='Gold'
196      GROUP BY name
197      ORDER BY Medal_count DESC),
198 top_athletes AS
199     (SELECT *,
200      DENSE_RANK() OVER(ORDER BY medal_count DESC) AS d_rnk
201      FROM table1)
202 SELECT name,medal_count
203 FROM top_athletes
204 WHERE d_rnk<=5;
205
206 --Q11. Fetch the top 5 athletes who have won the most medals
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```
--Q11. Fetch the top 5 athletes who have won the most medals

--Condition1: Top 5 Athletes with most medals
SELECT name,team,COUNT(1) AS Medal_count
FROM OLYMPICS_HISTORY
WHERE medal IN ('Gold','Silver','Bronze')
GROUP BY name,team
ORDER BY Medal_count DESC
LIMIT 5;

--Condition2: Top 5 Athletes with most medals (considering same no of medals as one rank)

WITH table1 AS
    (SELECT name,team,COUNT(1) AS Medal_count
    FROM OLYMPICS_HISTORY
    WHERE medal IN ('Gold','Silver','Bronze')
    GROUP BY name,team
    ORDER BY Medal_count DESC),
    Top_Athletes AS
    (SELECT *,
    DENSE_RANK() OVER(ORDER BY Medal_count DESC) AS d_rnk
    FROM table1)
SELECT *
FROM Top_Athletes
WHERE d_rnk<=5;
```

```
233 --Q12. Fetch the top 5 most successful countries in olympics by No of medals won.
```

```
234
```

```
235 WITH table1 AS
```

```
236     (SELECT nr.region,COUNT(1) AS Medal_count
```

```
237     FROM OLYMPICS_HISTORY oh
```

```
238     JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
```

```
239     ON oh.noc=nr.noc
```

```
240     WHERE oh.medal<>'NA'
```

```
241     GROUP BY nr.region
```

```
242     ORDER BY Medal_count DESC),
```

```
243     Region_ranking AS
```

```
244     (SELECT *,
```

```
245     ROW_NUMBER() OVER(ORDER BY Medal_count DESC) AS rn
```

```
246     FROM table1)
```

```
247 SELECT *
```

```
248 FROM Region_ranking
```

```
249 WHERE rn<=5;
```

Data Output Messages Notifications



	region character varying	medal_count bigint	rn bigint
1	USA	5637	1
2	Russia	3947	2
3	Germany	3756	3
4	UK	2068	4
5	France	1777	5

```

252 --Q13. List down total gold, silver and bronze medals won by each country.
253
254 WITH table1 AS
255     (SELECT nr.region,oh.medal,COUNT(1) AS Medal_count
256      FROM OLYMPICS_HISTORY oh
257      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
258      ON oh.noc=nr.noc
259      WHERE oh.medal<>'NA'
260      GROUP BY nr.region,oh.medal
261      ORDER BY Medal_count DESC)
262
263 SELECT region,
264        MAX(CASE WHEN medal='Gold' THEN medal_count ELSE 0 END )AS gold_medal,
265        MAX(CASE WHEN medal='Silver' THEN medal_count ELSE 0 END) AS Silver_medal,
266        MAX(CASE WHEN medal='Bronze' THEN medal_count ELSE 0 END) AS Bronze_medal
267 FROM table1
268 GROUP BY region
269 ORDER BY gold_medal DESC, silver_medal DESC, bronze_medal DESC;
270

```

Data Output Messages Notifications



	region character varying	gold_medal bigint	silver_medal bigint	bronze_medal bigint
1	USA	2638	1641	1358
2	Russia	1599	1170	1178
3	Germany	1301	1195	1260
4	UK	678	739	651
5	Italy	575	531	531
6	France	501	610	666
7	Sweden	479	522	535
8	Canada	463	438	451
9	Hungary	432	332	371

Total rows: 136 of 136 Query complete 00:00:00.291

Ln 269, Col 64



```
273 --Q14. List down total gold, silver and bronze medals won by each country corresponding to each olympic games.
```

```
274
275 WITH table1 AS
276     (SELECT oh.games,nr.region,oh.medal,COUNT(1) AS Medal_count
277      FROM OLYMPICS_HISTORY oh
278      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
279      ON oh.noc=nr.noc
280      WHERE oh.medal<>'NA'
281      GROUP BY oh.games,nr.region,oh.medal
282      ORDER BY Medal_count DESC)
283
284 SELECT games,region,
285        MAX(CASE WHEN medal='Gold' THEN Medal_count ELSE 0 END) AS Gold_medal,
286        MAX(CASE WHEN medal='Silver' THEN Medal_count ELSE 0 END) AS Silver_medal,
287        MAX(CASE WHEN medal='Bronze' THEN Medal_count ELSE 0 END) AS Bronze_medal
288 FROM table1
289 GROUP BY games,region
290 ORDER BY Gold_medal DESC, Silver_medal DESC, Bronze_medal DESC;
291
```

Data Output Messages Notifications



	games character varying	region character varying	gold_medal bigint	silver_medal bigint	bronze_medal bigint
1	1980 Summer	Russia	187	129	126
2	1984 Summer	USA	186	116	50
3	1996 Summer	USA	159	48	52
4	1908 Summer	UK	147	131	90
5	2012 Summer	USA	145	57	46
6	2016 Summer	USA	139	54	71
7	1988 Summer	Russia	134	67	99
8	2000 Summer	USA	130	61	51
9	1904 Summer	USA	128	141	125

Total rows: 1000 of 1640 Query complete 00:00:00.279

Ln 289, Col 22



```
294 --Q15. Identify which country won the most gold, most silver and most bronze medals in each olympic games
295
296 WITH table1 AS
297     (SELECT oh.games,nr.region,oh.medal,COUNT(1) AS Medal_count
298      FROM OLYMPICS_HISTORY oh
299      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
300      ON oh.noc=nr.noc
301      WHERE oh.medal<>'NA'
302      GROUP BY oh.games,nr.region,oh.medal
303      ORDER BY Medal_count DESC),
304 -- SELECT * FROM table1
305     table2 AS
306     (SELECT games,region,
307      MAX(CASE WHEN medal='Gold' THEN Medal_count ELSE 0 END) AS Gold_medal,
308      MAX(CASE WHEN medal='Silver' THEN Medal_count ELSE 0 END) AS Silver_medal,
309      MAX(CASE WHEN medal='Bronze' THEN Medal_count ELSE 0 end) AS Bronze_medal
310      FROM table1
311      GROUP BY games,region
312      ORDER BY Gold_medal DESC, Silver_medal DESC, Bronze_medal DESC)
313 -- SELECT * FROM table2
314 SELECT DISTINCT games,
315
316 CONCAT(FIRST_VALUE(region) OVER(PARTITION BY games ORDER BY gold_medal DESC)
317 , '-'
318 ,FIRST_VALUE(gold_medal) OVER(PARTITION BY games ORDER BY gold_medal DESC)) AS Max_gold_medal,
319
320 CONCAT(FIRST_VALUE(region) OVER(PARTITION BY games ORDER BY silver_medal DESC)
321 , '-'
322 ,FIRST_VALUE(silver_medal) OVER(PARTITION BY games ORDER BY silver_medal DESC)) AS Max_silver_medal,
323
324 CONCAT(FIRST_VALUE(region) OVER(PARTITION BY games ORDER BY Bronze_medal DESC)
325 , '-'
326 ,FIRST_VALUE(bronze_medal) OVER(PARTITION BY games ORDER BY bronze_medal DESC)) AS Max_bronze_medal
327 FROM table2
328 ORDER BY games;
```



```
332 --Q16. Identify which country won the most gold, most silver, most bronze medals and the most medals in each olympic games.
```

```
333 WITH tot_medals AS
```

```
334     (SELECT oh.games,nr.region,COUNT(1) AS Total_medals
```

```
335     FROM OLYMPICS_HISTORY oh
```

```
336     JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
```

```
337     ON oh.noc=nr.noc
```

```
338     WHERE oh.medal<>'NA'
```

```
339     GROUP BY oh.games,nr.region ORDER BY 1, 2),
```

```
340 No_of_medals AS
```

```
341     (SELECT oh.games,nr.region,oh.medal,COUNT(1) AS Medal_count
```

```
342     FROM OLYMPICS_HISTORY oh
```

```
343     JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
```

```
344     ON oh.noc=nr.noc
```

```
345     WHERE oh.medal<>'NA'
```

```
346     GROUP BY oh.games,nr.region,oh.medal
```

```
347     ORDER BY Medal_count DESC),
```

```
348 Max_Medal AS
```

```
349     (SELECT games,region,
```

```
350     MAX(CASE WHEN medal='Gold' THEN Medal_count ELSE 0 END) AS Gold_medal,
```

```
351     MAX(CASE WHEN medal='Silver' THEN Medal_count ELSE 0 END) AS Silver_medal,
```

```
352     MAX(CASE WHEN medal='Bronze' THEN Medal_count ELSE 0 end) AS Bronze_medal
```

```
353     FROM No_of_medals
```

```
354     GROUP BY games,region
```

```
355     ORDER BY Gold_medal DESC, Silver_medal DESC, Bronze_medal DESC)
```

```
356 SELECT DISTINCT mm.games,
```

```
357 CONCAT(FIRST_VALUE(mm.region) OVER(PARTITION BY mm.games ORDER BY gold_medal DESC)
```

```
358 ,'- ',FIRST_VALUE(mm.gold_medal) OVER(PARTITION BY mm.games ORDER BY gold_medal DESC)) AS Max_gold_medal,
```

```
359 CONCAT(FIRST_VALUE(mm.region) OVER(PARTITION BY mm.games ORDER BY silver_medal DESC)
```

```
360 ,'- ',FIRST_VALUE(mm.silver_medal) OVER(PARTITION BY mm.games ORDER BY silver_medal DESC)) AS Max_silver_medal,
```

```
361 CONCAT(FIRST_VALUE(mm.region) OVER(PARTITION BY mm.games ORDER BY Bronze_medal DESC)
```

```
362 ,'- ',FIRST_VALUE(mm.bronze_medal) OVER(PARTITION BY mm.games ORDER BY bronze_medal DESC)) AS Max_bronze_medal,
```

```
363 CONCAT(FIRST_VALUE(tm.region) OVER(PARTITION BY tm.games ORDER BY Total_medals DESC)
```

```
364 ,'- ',FIRST_VALUE(tm.Total_medals) OVER(PARTITION BY tm.games ORDER BY Total_medals DESC)) AS Max_medals
```

```
365 FROM Max_medal mm
```

```
366 JOIN tot_medals tm ON tm.games=mm.games AND tm.region=mm.region ORDER BY games;
```

```
367
```

```

383 --Q17. Which countries have never won gold medal but have won silver/bronze medals?
384
385 WITH Table1 AS
386     (SELECT nr.region,oh.medal,COUNT(1) AS medal_count
387      FROM OLYMPICS_HISTORY oh
388      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
389      ON oh.noc=nr.noc
390      WHERE medal<>'NA'
391      GROUP BY nr.region,oh.medal
392      ORDER BY nr.region,oh.medal)
393 SELECT * FROM (SELECT region,
394     MAX(CASE WHEN medal='Gold' THEN Medal_count ELSE 0 END) AS Gold_medal,
395     MAX(CASE WHEN medal='Silver' THEN Medal_count ELSE 0 END) AS Silver_medal,
396     MAX(CASE WHEN medal='Bronze' THEN Medal_count ELSE 0 end) AS Bronze_medal
397 FROM Table1
398 GROUP BY region) table2
399 WHERE Gold_medal=0 AND (Silver_medal>0 OR Bronze_medal>0);
400

```

Data Output Messages Notifications



	region character varying	gold_medal bigint	silver_medal bigint	bronze_medal bigint
1	Afghanistan	0	0	2
2	Barbados	0	0	1
3	Bermuda	0	0	1
4	Botswana	0	1	0
5	Curacao	0	1	0
6	Cyprus	0	1	0
7	Djibouti	0	0	1
8	Eritrea	0	0	1
9	Gabon	0	1	0
10	Chana	0	1	??



```
401
402 -- Q18. In which Sport/event, India has won highest medals.
403
404 --Approach-1 (Window Function)
405
406 WITH Total_medals AS
407     (SELECT oh.sport,COUNT(medal) as Medal_count
408      FROM OLYMPICS_HISTORY oh
409      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
410      ON oh.noc=nr.noc
411      WHERE medal<>'NA' AND REGION='India'
412      GROUP BY sport),
413 Highest_medal AS
414     (SELECT *,
415      RANK() OVER(ORDER BY Medal_count DESC) as rnk
416      FROM Total_medals)
417 SELECT sport,Medal_count
418 FROM Highest_medal
419 WHERE rnk=1;
420
421 -- Approach-2 (SubQuery)
422
423 WITH Total_medals AS
424     (SELECT oh.sport,COUNT(medal) as Medal_count
425      FROM OLYMPICS_HISTORY oh
426      JOIN OLYMPICS_HISTORY_NOC_REGIONS nr
427      ON oh.noc=nr.noc
428      WHERE medal<>'NA' AND REGION='India'
429      GROUP BY sport)
430 SELECT sport, Medal_count
431 FROM Total_medals
432 WHERE medal_count IN (SELECT MAX(Medal_count) FROM Total_medals);
433
434
435
436
```