Moving Maximum of Scandinavian Athletes' Medals

☰ Course Outline
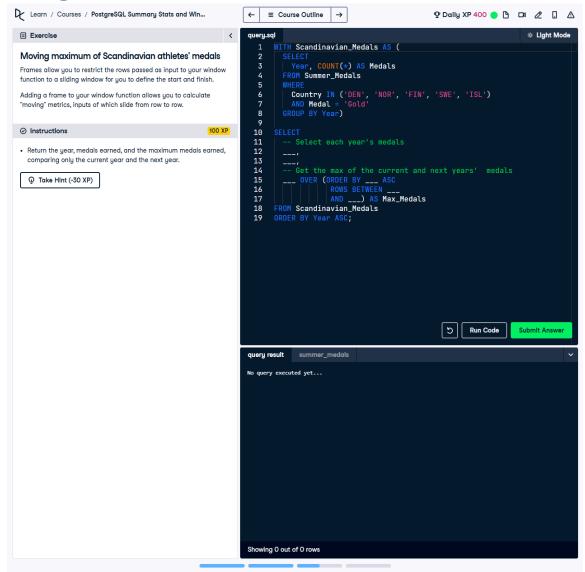
🏆 Daily XP 400

Exercise

Moving maximum of Scandinavian athletes' medals

Frames allow you to restrict the rows passed as input to your window function to a sliding window for you to define the start and finish.

Adding a frame to your window function allows you to calculate "moving" metrics, inputs of which slide from row to row.

✓ **Instructions**   `100 XP`

- Return the year, medals earned, and the maximum medals earned, comparing only the current year and the next year.

💡 Take Hint (-30 XP)

query.sql   ☀ Light Mode

```sql
1   WITH Scandinavian_Medals AS (
2     SELECT
3       Year, COUNT(*) AS Medals
4     FROM Summer_Medals
5     WHERE
6       Country IN ('DEN', 'NOR', 'FIN', 'SWE', 'ISL')
7       AND Medal = 'Gold'
8     GROUP BY Year)
9
10  SELECT
11    -- Select each year's medals
12    ___,
13    ___,
14    -- Get the max of the current and next years'  medals
15    ___ OVER (ORDER BY ___ ASC
16              ROWS BETWEEN ___
17              AND ___) AS Max_Medals
18  FROM Scandinavian_Medals
19  ORDER BY Year ASC;
```

Run Code   Submit Answer

query result   summer_medals

No query executed yet...

Showing 0 out of 0 rows

Frames allow you to restrict the rows passed as input to your window function to a sliding window for you to define the start and finish. Adding a frame to your window function allows you to calculate 'moving' metrics, inputs of which slide from row to row.

This exercise involves calculating the moving maximum of gold medals earned by Scandinavian countries year by year, comparing the current year and the next year. The results are sorted by year in ascending order.

Correct Answer

```
WITH Scandinavian_Medals AS (
  SELECT
    Year,
    COUNT(*) AS Medals
  FROM Summer_Medals
  WHERE
    Country IN ('DEN', 'NOR', 'FIN', 'SWE', 'ISL') AND
    Medal = 'Gold'
  GROUP BY Year
)
SELECT
  Year,
  Medals,
  MAX(Medals) OVER (ORDER BY Year ASC ROWS BETWEEN CURRENT
ROW AND 1 FOLLOWING) AS Max_Medals
FROM Scandinavian_Medals
ORDER BY Year ASC;
```

Explanation of the query:

1. `WITH Scandinavian_Medals AS (…)`: Calculates the total gold medals won by Scandinavian countries (Denmark, Norway, Finland, Sweden, Iceland) for each year.

2. `MAX(Medals) OVER (ORDER BY Year ASC ROWS BETWEEN CURRENT ROW AND 1 FOLLOWING) AS Max_Medals`: Computes the maximum medals within a sliding window of the current year and the next year.

3. `ORDER BY Year ASC`: Sorts the results by year to ensure a chronological order.