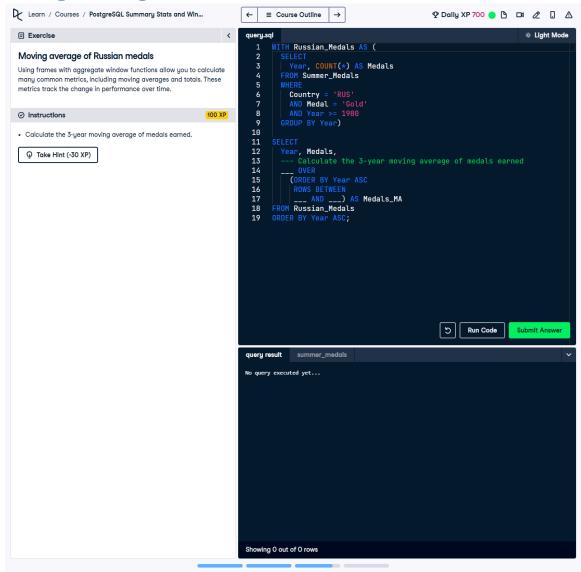
Moving Average of Russian Medals



Using frames with aggregate window functions allow you to calculate many common metrics, including moving averages and totals. These metrics track the change in performance over time.

This exercise involves calculating the 3-year moving average of gold medals earned by Russia since 1980. The results help analyze trends in Russian performance over consecutive years.

Correct Answer

WITH Russian Medals AS (

```
SELECT
  Year,
  COUNT(*) AS Medals
 FROM Summer Medals
 WHERE
  Country = 'RUS' AND
  Medal = 'Gold' AND
  Year >= 1980
 GROUP BY Year
)
SELECT
Year.
 Medals,
 AVG(Medals) OVER (ORDER BY Year ASC ROWS BETWEEN 2
PRECEDING AND CURRENT ROW) AS Medals MA
FROM Russian Medals
ORDER BY Year ASC;
```

Explanation of the query:

- 1. `WITH Russian_Medals AS (...)`: Calculates the total number of gold medals won by Russia for each year since 1980, grouping results by year.
- 2. `AVG(Medals) OVER (ORDER BY Year ASC ROWS BETWEEN 2 PRECEDING AND CURRENT ROW) AS Medals_MA`: Computes the 3-year moving average of medals, including the current year and the two preceding years.
- 3. `ORDER BY Year ASC`: Ensures the results are sorted by year in ascending order.