

Moving Total of Countries' Medals

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Daily XP 800

Exercise

Moving total of countries' medals

What if your data is split into multiple groups spread over one or more columns in the table? Even with a defined frame, if you can't somehow separate the groups' data, one group's values will affect the average of another group's values.

Instructions

100 XP

- Calculate the 3-year moving sum of medals earned per country.

Take Hint (-30 XP)

query.sql

Light Mode

```
1 WITH Country_Medals AS (  
2   SELECT  
3     Year, Country, COUNT(*) AS Medals  
4   FROM Summer_Medals  
5   GROUP BY Year, Country)  
6  
7   SELECT  
8     Year, Country, Medals,  
9     -- Calculate each country's 3-year moving total  
10    -- OVER  
11    (PARTITION BY ____  
12     ORDER BY Year ASC  
13     ROWS BETWEEN  
14      ____ AND ____ ) AS Medals_MA  
15 FROM Country_Medals  
16 ORDER BY Country ASC, Year ASC;
```

↺ Run Code Submit Answer

query result summer_medals

No query executed yet...

Showing 0 out of 0 rows

What if your data is split into multiple groups spread over one or more columns in the table? Even with a defined frame, if you can't somehow separate the groups' data, one group's values will affect the average of another group's values.

This exercise involves calculating the 3-year moving total of medals earned per country. The query ensures the moving total is calculated independently for each country, using a defined frame and partitioning.

Correct Answer

```
WITH Country_Medals AS (  
  SELECT  
    Year,  
    Country,  
    COUNT(*) AS Medals  
  FROM Summer_Medals  
  GROUP BY Year, Country  
)  
SELECT  
  Year,  
  Country,  
  Medals,  
  SUM(Medals) OVER (PARTITION BY Country ORDER BY Year ASC ROWS  
    BETWEEN 2 PRECEDING AND CURRENT ROW) AS Medals_MA  
FROM Country_Medals  
ORDER BY Country ASC, Year ASC;
```

Explanation of the query:

1. `WITH Country_Medals AS (...)`: Calculates the total medals for each country per year, grouping results by year and country.
2. `SUM(Medals) OVER (PARTITION BY Country ORDER BY Year ASC ROWS BETWEEN 2 PRECEDING AND CURRENT ROW) AS Medals_MA`: Computes the 3-year moving total of medals, independently for each country, including the current year and the two preceding years.
3. `ORDER BY Country ASC, Year ASC`: Ensures the output is sorted by country and year for clear presentation.