Explore Weather Trends Project

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Overview:

We have been provided with data of global and cities temperature to analyze local and global temperature data and compare the temperature trends where you live to overall global temperature trends using tools to visualize the data.

Goals:

1. Extract the data from the database
2. Visualize the data by line chart
3. Analyze the data and find the relations and differences between global and local temperature

Steps taken to prepare the data to be visualized in the chart:

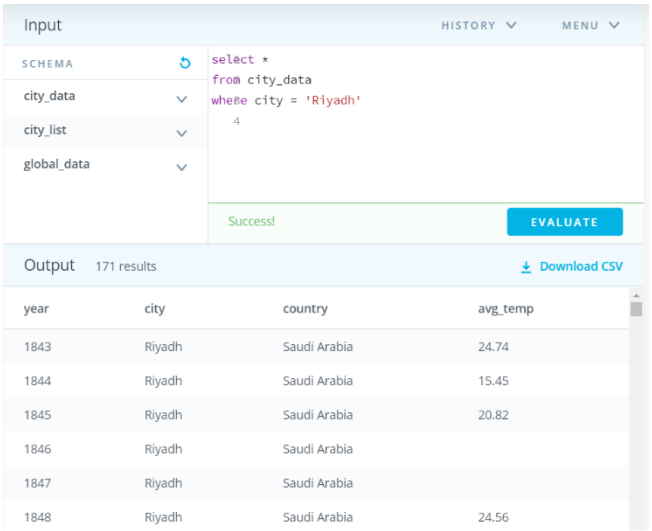
Step 1: extract the data from the data base using SQL

- The quires to extract the local data

  SELECT *

  FROM city_data

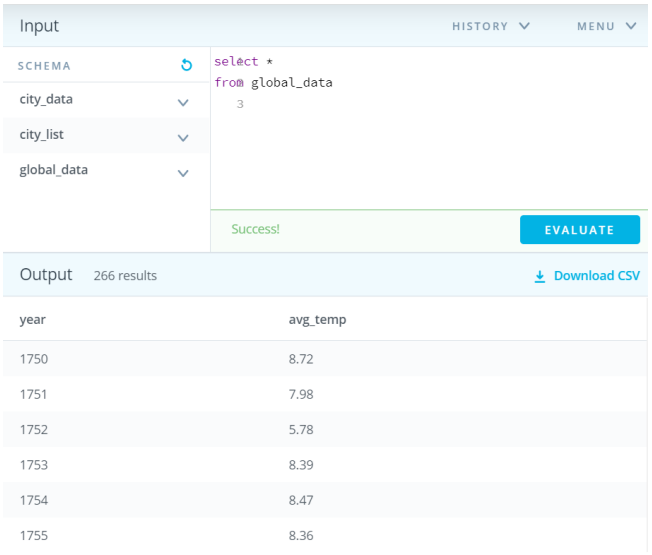
  WHERE city = 'Riyadh' AND country='Saudi Arabia'



- The quires to extract the

  SELECT *

  FROM global_data

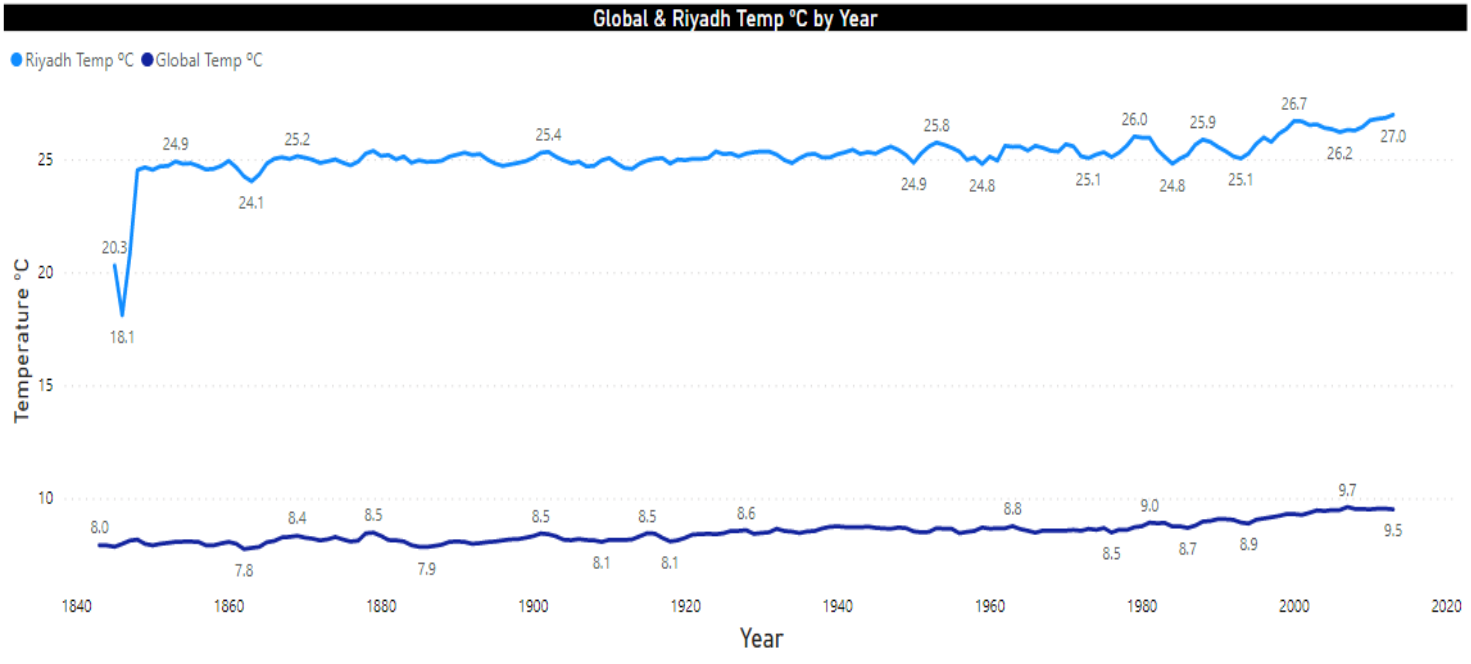


year	avg_temp
1750	8.72
1751	7.98
1752	5.78
1753	8.39
1754	8.47
1755	8.36

Step 2: check and clean the data and upload moving average using Excel

- I used the tool moving average from the excel where we can find it in Data tab's > Data Analysis command button > select moving average > select the column “avg_temp” > ok.
- I used 3 years to calculate the moving averages.

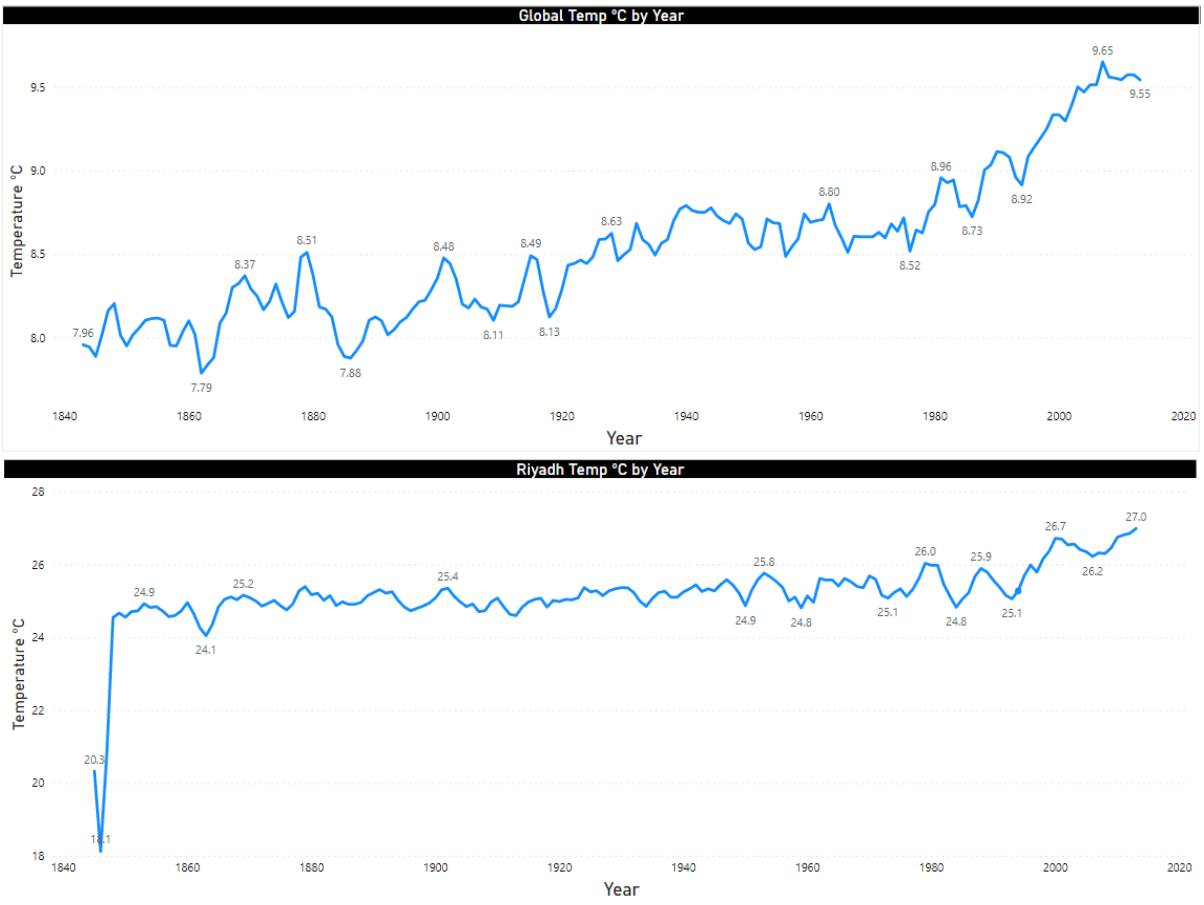
Step 3: visualize the data by line chart to find relations and differences using Power BI



observations:

- The average of Riyadh between 18.1 and 27.0.
- The global average between 7.8 and 9.7.
- No similiters or relation interactions between Riyadh and the global.
- There is a difference about 10.3 between the global and Riyadh.
- The global temp in a steady state with little increase which means there are changes in the world that effects on the global temp as well as in Riyadh.
- In Riyadh we found that the temp in increase Specifically in between 1846 - 1849 which means it was there a strong effect that changes the temp average

See also:



Thank You