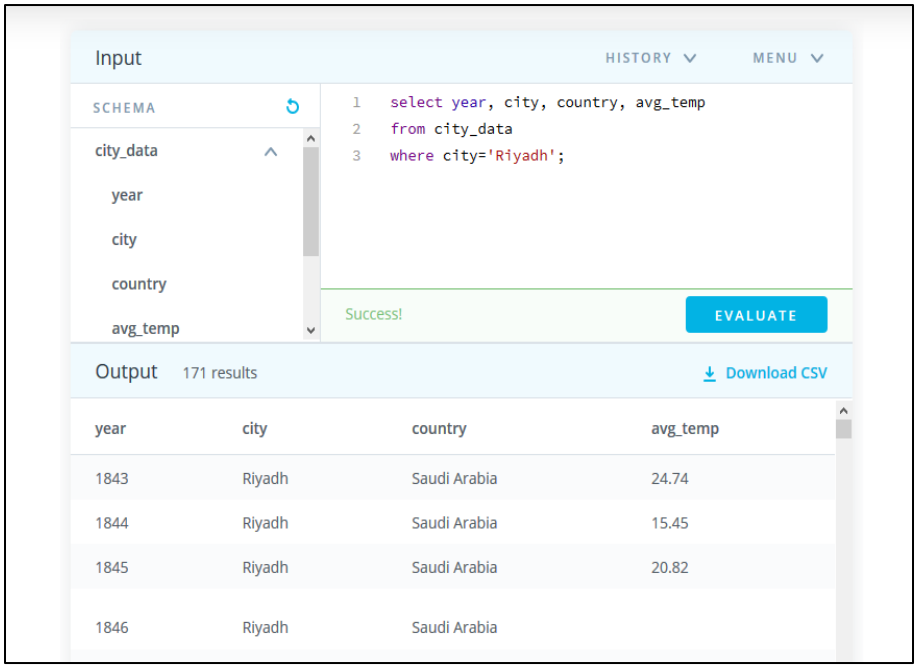
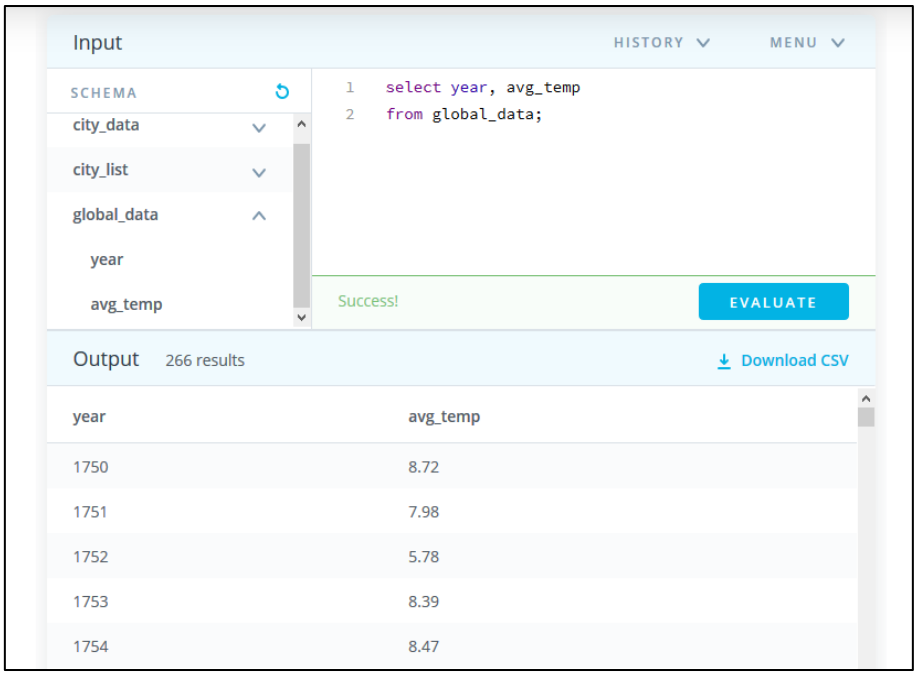
Exploring Weather Trends

1. **Extracting the data** from the database:
    - SQL query to extract the city level data:



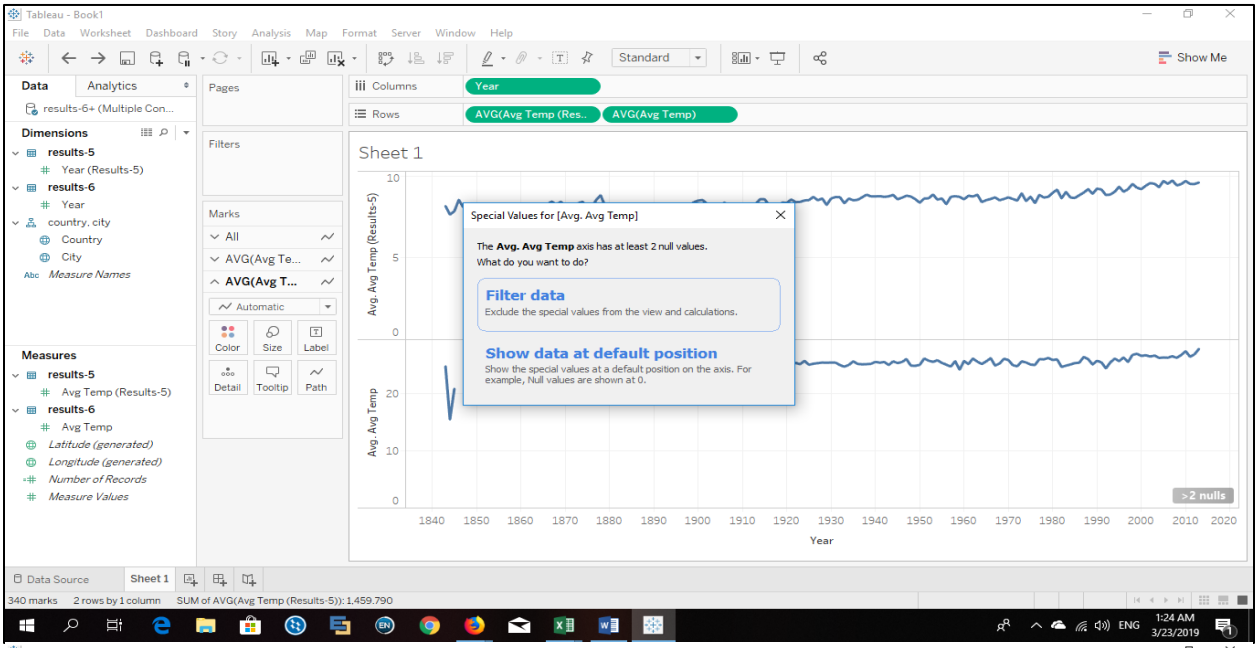
    - SQL query to extract the global data:

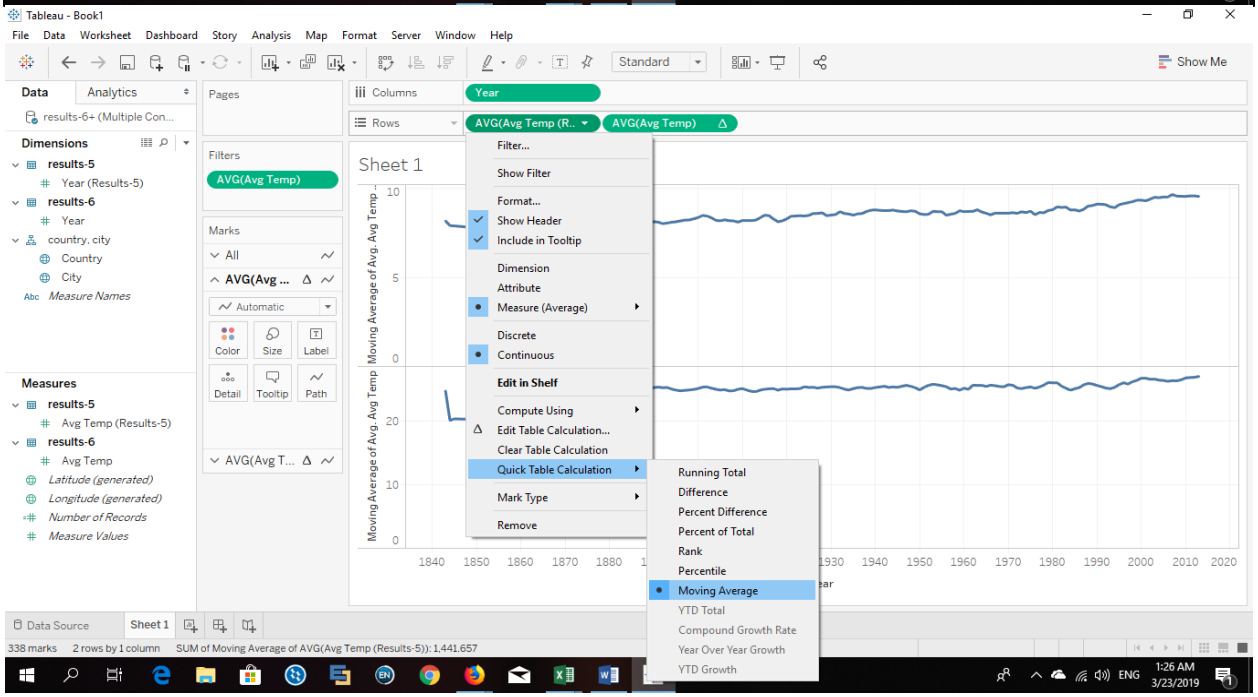


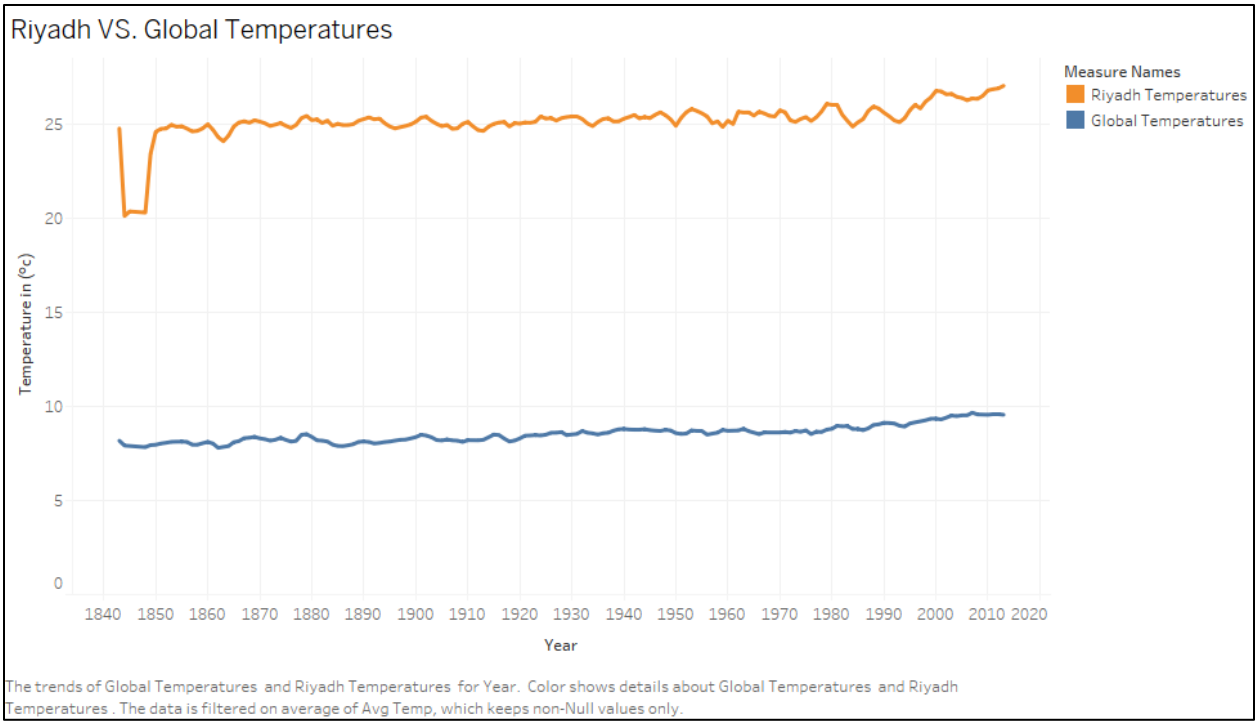
2. Create a line chart:

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

1. I used Tableau to open the data set after saving the files as Excel files.
2. I joined the two data sets using the year as a primary key.
3. I removed the null values.
4. Then I automatically calculated the moving average.
5. I joined the values in one graph.
6. Making sure that the chart and its axes have titles, and there's a clear legend.







3. **Make observations:**

- Riyadh is way hotter than the global average.
- The global temperatures were more consistent than Riyadh's.
- The world unfortunately is getting hotter and the trend has been consistent over the last few hundred years globally.
- Between 1840 and 1860, Riyadh's temperatures were decreasing and increasing while the global temperatures were consistent.
- The changes of Riyadh temperatures compared to the global were obvious between 1840 and 1860.
- In 1863 the global and Riyadh temperatures were decreasing.
- In 2000 Riyadh had encountered a sudden rise in temperatures compared to the rest of the world.
- Riyadh's temperatures are increasing way faster than the rest of the world over the last years.