

STEPS

1. Query Udacity Workspace Database using SQL(Sequel).
2. Download CSV file to Local Storage.
3. Look at Overall Data and Validate that it makes sense.
4. Clean CSV Data using Excel and Excel Filter Tool.
5. Combine City Data table and Global_data data in Excel(Copy and Paste).
6. Repeat Step 4
7. Calculate 5 Years Moving Average by summing five consecutive years and dividing by 5. In Excel, use '=Average(range of data eg b2:b6)'
8. Create new tables
9. Visualize Data using a Line graph.
10. Make Observations

SQL CODE FOR EXTRACTION

1) SELECT *

FROM global_data

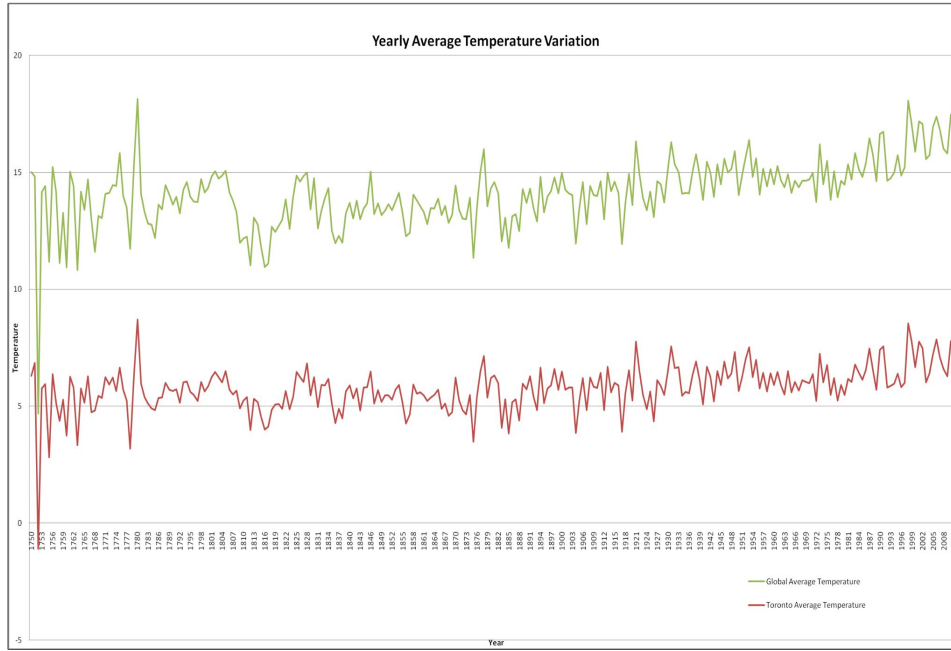
2)SELECT *

FROM city_data

WHERE city ='Toronto'

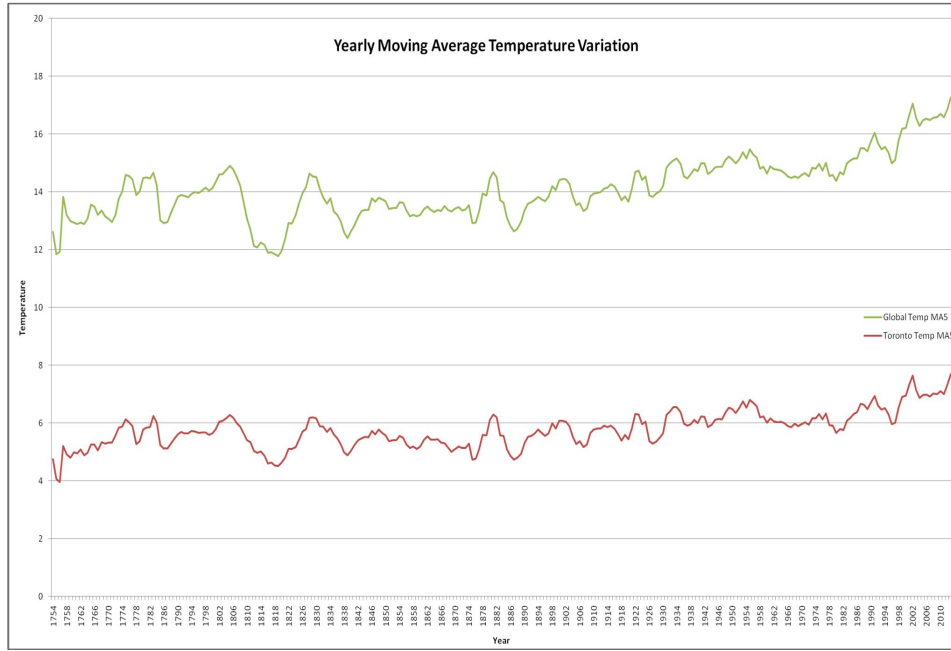
I did cleaning using Excel

Toronto Temperatures VS Global Temperatures



- In general, they both follow similar trends
- They also share similar pattern. Although, the global temperatures seem to be slightly more spread out indicating higher variance.(More data Needed for conclusion)
- Huge Deep in 1752 below minimum range

Toronto Moving Average Temperatures VS Globe



- Taking 5 Year Moving Average makes the Graph edges smoother but minute details are lost
- Range of average temperatures in Toronto is well below the Global range

Conclusion

In conclusion,

- Both graphs show an increase in temperature indicating that it is getting warmer
- The range of average temperature in Toronto is lower than the range of global average. This means that Toronto is cooler
- The Moving Average seems to smoothen the curve and cut off huge offsets. Although, some minute details are lost
- They both show similar trends and pattern but the Global average temperature seems to be more spread out which could indicate higher variance