Weather Trend Analysis

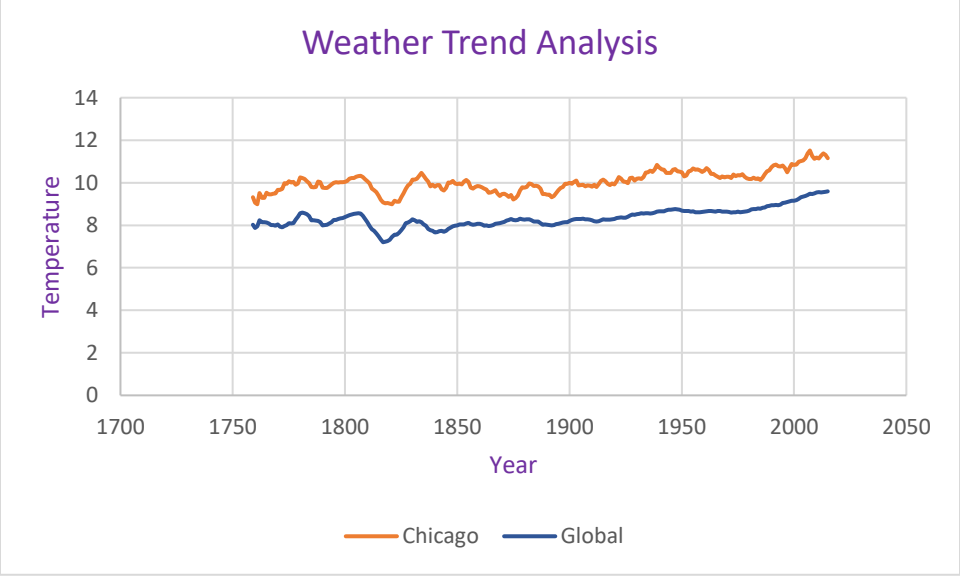
Objective: The objective of this project is to explore the weather trend of the city of Chicago that I live and to the global weather and compare the weather trends.

Data Extraction: The data is extracted from the data base using the below SQL queries and the extracted data is exported to CSV.

1. SQL Query used to extract the city level data –
   SELECT year, avg_temp from city_data
   where city LIKE 'Chicago' AND
   country LIKE 'United States'
2. SQL Query used to extract the global data
   SELECT * from global_data

Moving Average Calculation: Calculated the moving average of the temperature for 10 years. Used the below formula to calculate moving average in excel =average (cell2:cell11) and dragged down to till the last value/clicked on '+' symbol to calculate for remaining values.

Observations: Created the line chart below for the city of Chicago moving average temperatures and global temperatures to explore about the weather trends.



1. The city of the Chicago is hotter than the global temperature.
2. The global temperature is increasing bit faster than the local city of Chicago temperature.
3. The local and global temperatures seem to be increasing as the time goes by that means the world is getting hotter.
4. The trend seems to be consistent for the few years and increasing the average temperature slowly.