Exploring Weather Trends

Outline:

I used SQL Workspace to extract specific data from temperatures database and combine this data to a csv file.

The database schema consisted of three tables: city_list, city_data and global_data.

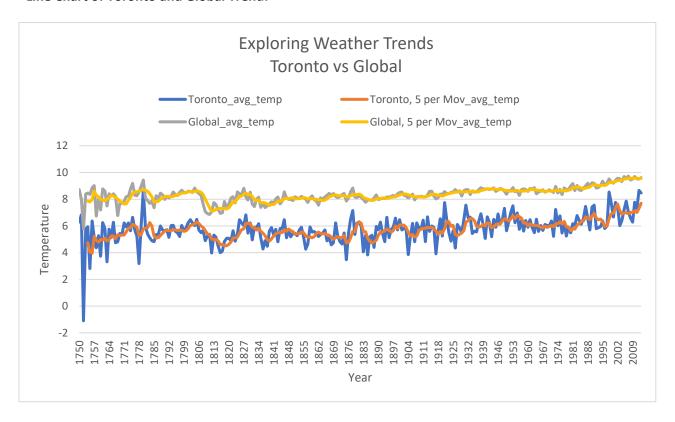
I wrote SQL query to extract the data as:

- 1) SELECT * FROM temperatures. city_list;
- 2) SELECT * FROM temperatures. global data;
- 3) SELECT * FROM city_data WHERE city = 'Toronto'

And exported to a csv file named global_data. csv and Toronto avg_temp. csv.

Excel has been used to calculate moving average (5 yr) over decades of years in order to get the best visualized line chart comparing data of Toronto vs Global.

Line Chart of Toronto and Global Trend:



Observations

- 1) Toronto's averages temperature range is colder than world averages.
- 2) Over the hundred years, the global and Toronto average temperature increased.
- 3) Toronto and global average temperature increased around rang 1.7-3.0 degree.
- 4) Overall trends look like world is consistently getting hotter over the last few hundred years.