Explore Weather Trends

Data Extraction:

SQL query is used to show all data stored in the Database.

- SELECT * FROM city_list;
- SELECT * FROM city_data;
- SELECT * FROM global_data;

Tool used:

• Microsoft Excel 2010 is used for preparation and analysis of the data.

• Steps :

o Read and observe the available data.

o Calculate the moving average of global temperature.

o Find out your nearest city.

o Calculate the moving average of the city temperature.

o Join the tables. o Create a Pivot Table.

o Create a line chart.

o Find Correlation coefficient.

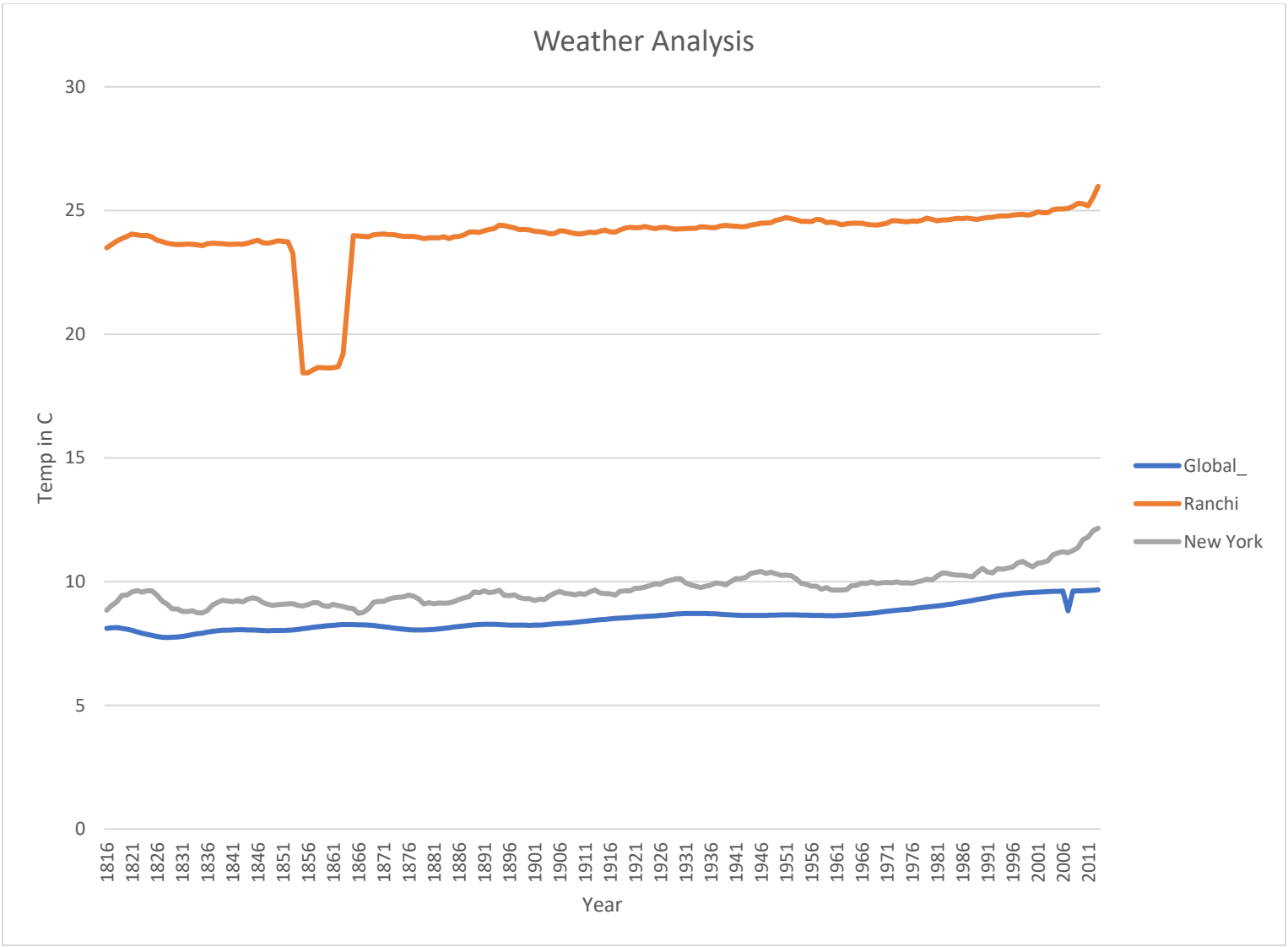
• How to find nearest city?

Use filter table to filter out cities of your country, then find out the nearest city from the table.

• Moving average:

To calculate the moving average, subset of 10 data points where taken at a time for the calculation.

Built in function AVERAGE (range) was used to calculate the moving average.



Observations:

- Global average temperature is much lower compared to average temperature in Ranchi and Ludhiana.
- In chart we can see that there was sudden decrease in temperature during 1855-1862, there is also noticeable decrease in temperature i.e., 22° C during 1925-1930, but temperature of Ranchi has been consistent in past few decades i.e., approx. 24° C.
- New York temperature is much lower if compared to my city.
- New York temperature is increasing gradually.
- Global temperature is also increasing gradually.