**Explore Weather Data**

**1 - Steps**

* **Extracting the Data**
* My city is Cairo so I will be extracting the data for it.
* Used the following SQL commands to extract Global Data and my City’s Data.
* SELECT \* FROM global\_data
* SELECT year, avg\_temp FROM city\_data WHERE city = 'Cairo'
* SELECT c.year, c.avg\_temp as cairo\_temp, g.avg\_temp as global\_temp FROM city\_data JOIN global\_data g ON c.year = g.year WHERE city = 'Cairo'
* Download result as CSV file.
* **Creating the line charts**
  + Open the file using Excel
  + Create the 7-year moving average for both columns cairo\_temp and global\_temp using AVERAGE function into MA\_cairo and MA\_global.
  + Create the line charts using Line Plot in Excel for cairo\_temp, global\_temp, MA\_cairo, and MA\_global.

**2 - Line Charts**

**­­­­­** **3 – Observations**

* The minimum average degree for Cairo is 11.6 and the maximum is 23.72 while the minimum average degree globally is 6.86 and the maximum is 9.73 .
* Cairo’s average temperature is much higher than the global average temperature.
* Cairo’s average temperature undergoes more changes and fluctuations than the global average temperature.
* Both Cairo and global temperature are trending upwards.
* Cairo had a significant drop in average temperate in the year 1818.

**Graphical user interface, application

Description automatically generated**