Exploring Weather trends project

First of all, I analyzed local and global temperature data and compared the temperature trends where I live to overall global temperature trends.

Goals :

- Extract the data from the database on udacity portal.
- Create a line chart that compares your city's temperatures with the global temperatures.
- Make observations.

The 1st step :

I have been used SQL query on Udacity portal to extract specific data then Working on these data by Excel.

I used SQL queries to extract the city that I live in data as shown in figure1.

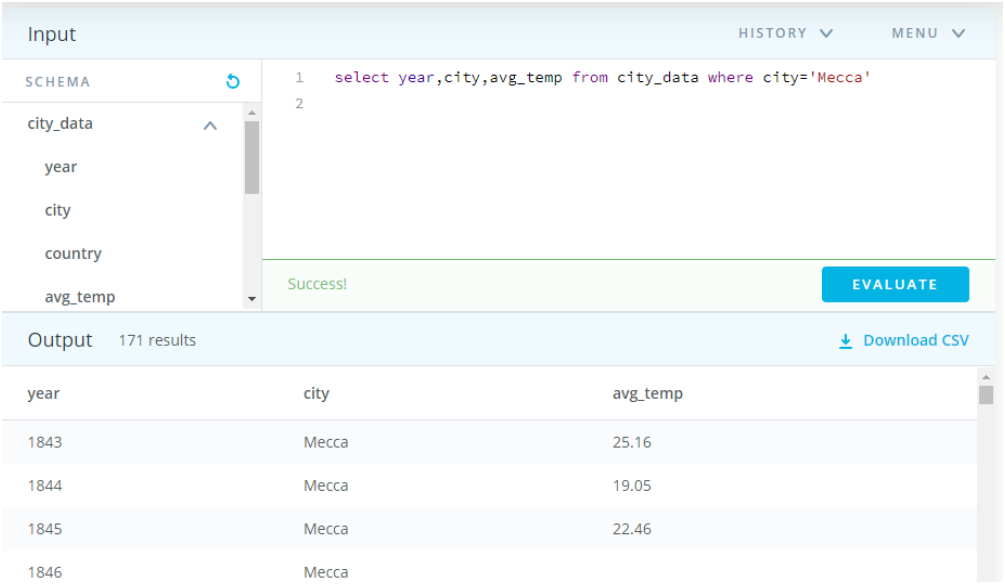


Figure1

In figure2 , I extract the global temperature without specifying a date. But then I removed the years that doesn't match with the local city.

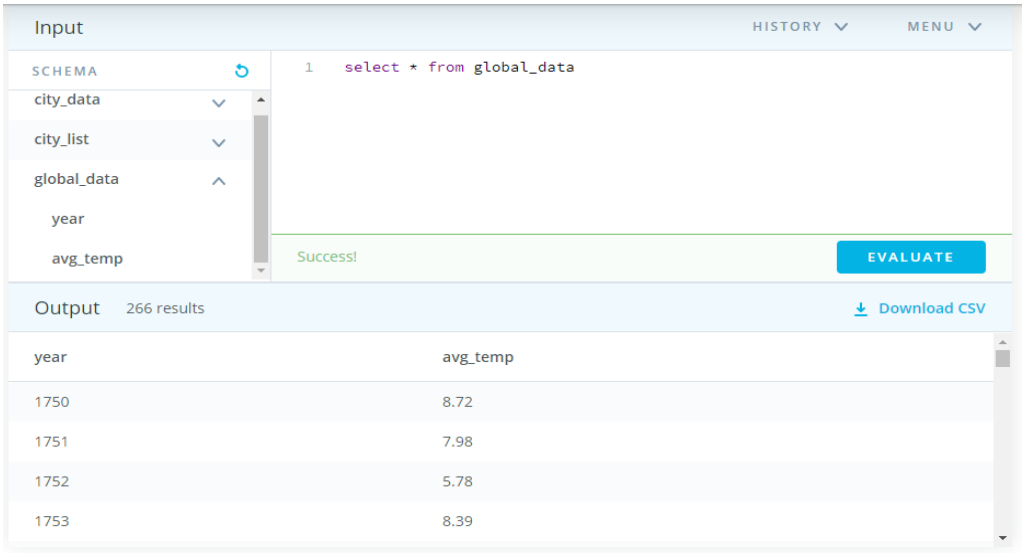


Figure2

The 2nd step :

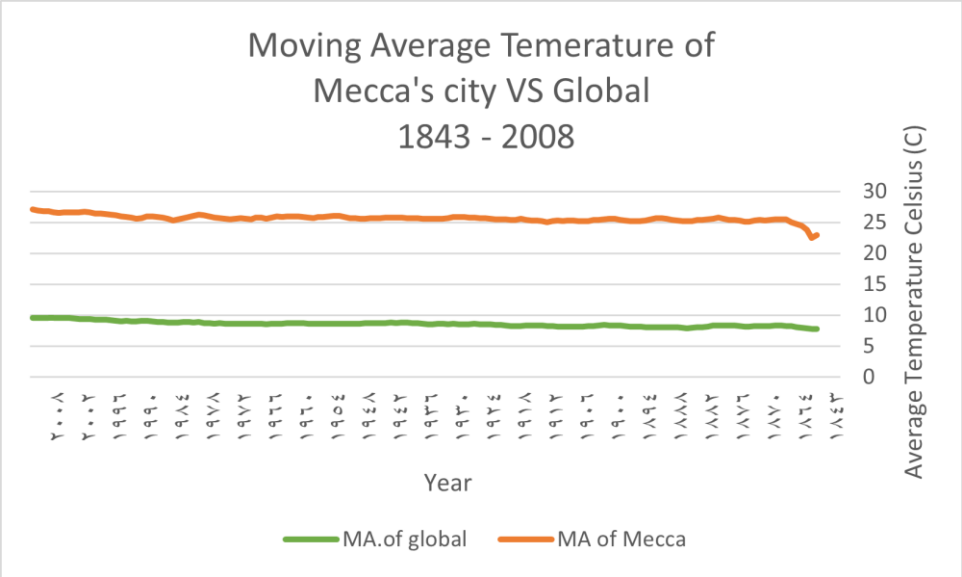
After downloading the data from udacity portal , Working on it by using Excel and Creating Moving Average.

Moving Average used to analyze Data and allow us to get information. By calculation it , I can extract predications for future moves or exploring a specific Data over a period of a time even if in the past.

I have been research about moving average to get truly understanding and get more info.

I calculate the moving avg. by using Excel functions. 1st, I calculate the global moving avg. temperature for each 5 years the same period for the local to get more reliability data.

And from these data we can get a Line chart of Moving Average temperature trends as shown bellow.



The last Step :

Which is making an observation/comparison between the average .Temperatures of Local & global

- from the above line chart shows that the mecca's weather hotter than the global average temperature and the difference have been consistent over time.

- The weather also changing in similar way but differ in the range of temperatures. where the range of average temperature of mecca's between 19˚C to 27˚C and the world .avg. temperatures between 7˚C - 9˚C.

- overall trend looks like that the world Average temperature .getting hotter consistently over the last few hundred years.

- I note that the average moving temperatures have been increased in the last years to get higher temperature than what they were.