

Exploring Weather Trends in Doha

- First of all, I extract all cities in the database by writing SQL query as figure below (figure1), then I select Doha because the trainer says select the nearest city to Saudi Arabia by ignoring Riyadh and Mecca.

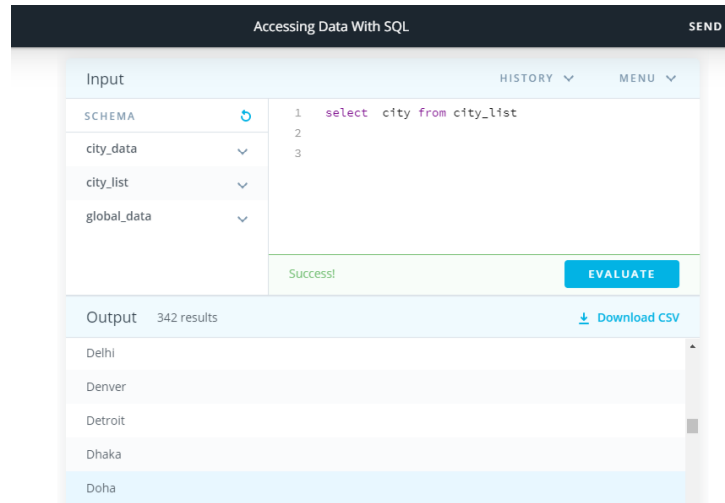


Figure 1: Extract all City's in the Database

- Write SQL query to extract the Year and Doha average temperature in °C as Dohatemp and Global average temperature in °C as globtemp then download CSV file as figure below (Figure2)

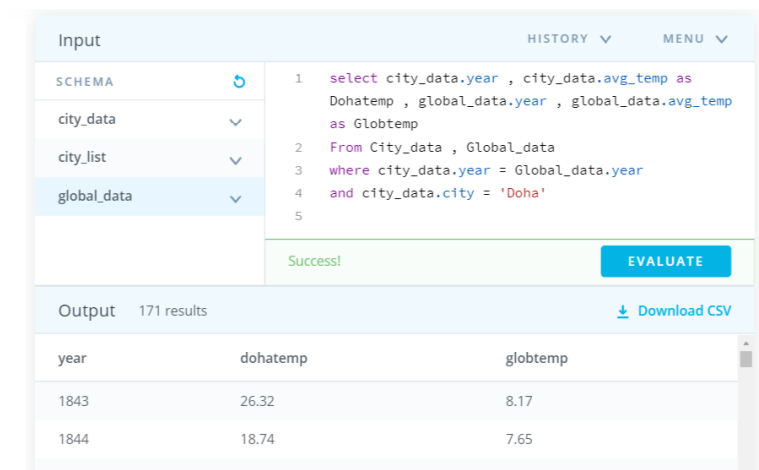


Figure 2: Extract Years and Doha temperature and global average temperature

- Open the CSV by using Microsoft excel 2016 then deleting the empty cells.
- Select 7 years moving average then I calculate 7 years moving average in Doha and Global Temp and figure below (figure3)

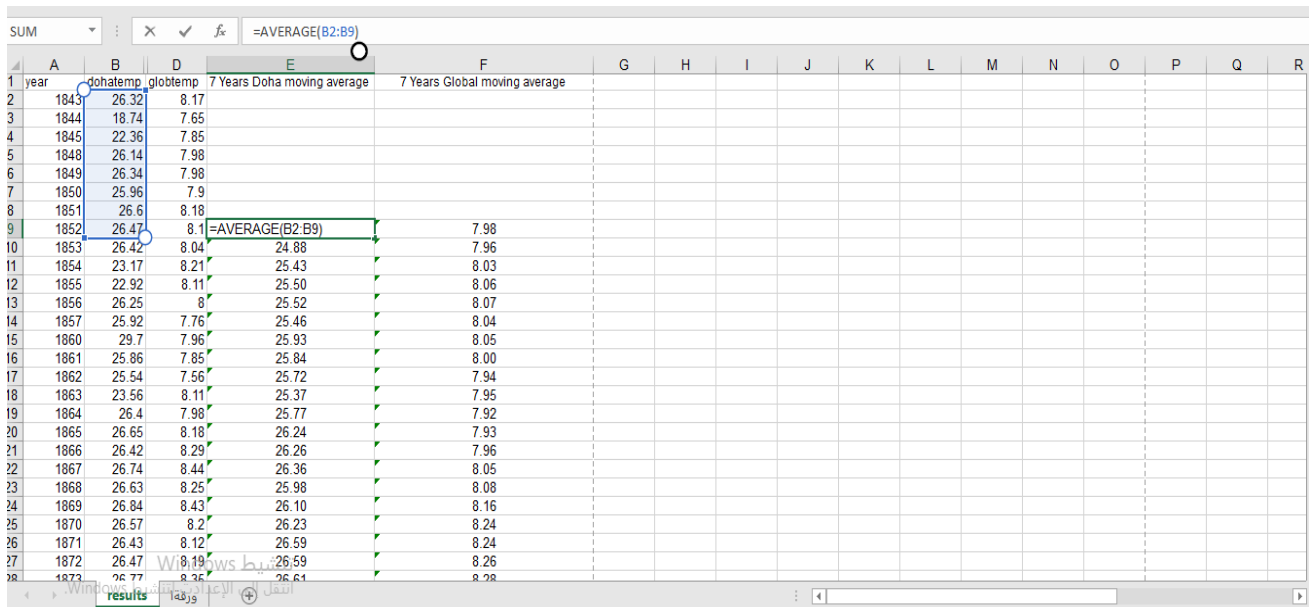


Figure 3 : calculate 7 years moving average in Doha and Global average air temperature (1843 to 2013) in degrees Celsius

- compares Doha temperatures with the global temperatures by create a line chart as in figure below (Figure 4)

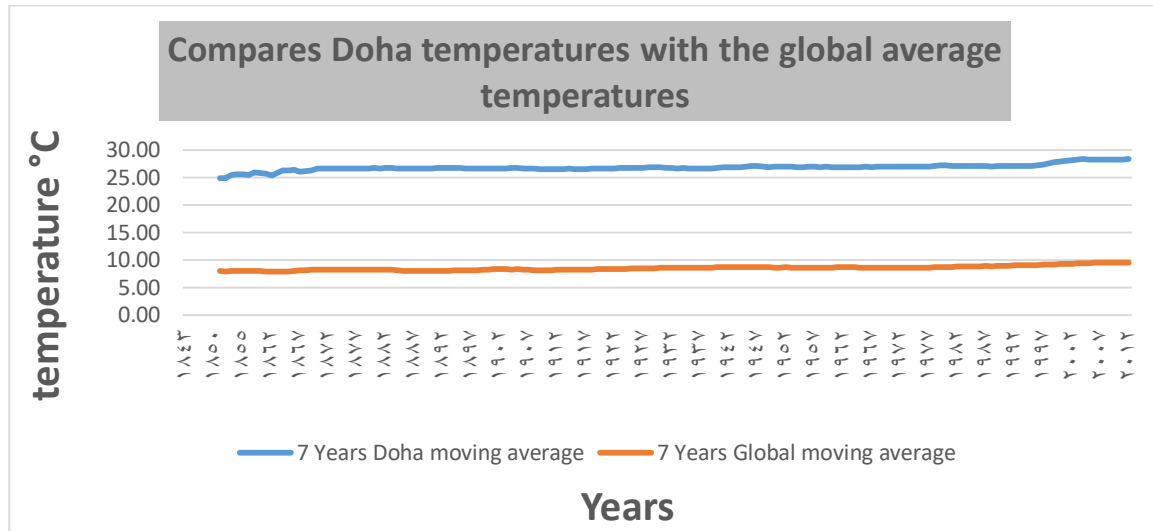


Figure 4: Compares Doha temperatures with the global average temperatures

- After analyze the above data from 1843 to 2013 we observe:
 - Doha is a hotter city compared to the global average temperature in the world.
 - There is a notice increased in temperatures in Doha after 1997 As the average temperature reached 28 degrees Celsius.
 - most noticeable is the occurrence frequency in the global average in the annual mean temperature and The average rate of increase is very simple and the world getting hotter.
 - In the global avrage difference have been consistent over time.
 - Average temperatures of cities around the world is 8.54 degrees Celsius and avrage of doha is 26.77 degrees Celsius.