

Exploring Weather Trends Project:

1- Using SQL statement:

a- to extract Riyadh city from city_data schema:

Select *

From city_data

Where city = 'Riyadh'

b- Using SQL statement again to extract all data of global_data schema:

Select *

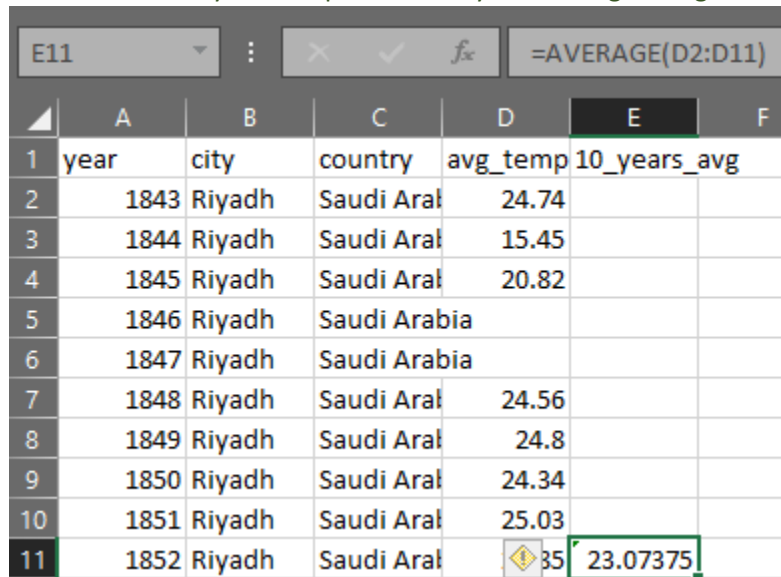
From global_data

2- Using Excel to calculate moving Average:

a- Calculating moving average of temperatures of Riyadh city and global by this formula:

=average ()

Screenshot for Riyadh temperature 10-year moving average:



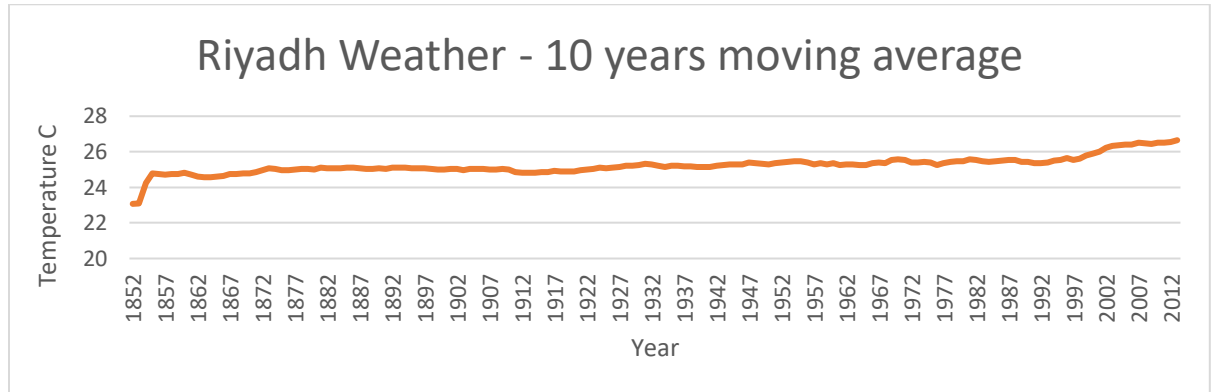
	A	B	C	D	E	F
1	year	city	country	avg_temp	10_years_avg	
2	1843	Riyadh	Saudi Ara	24.74		
3	1844	Riyadh	Saudi Ara	15.45		
4	1845	Riyadh	Saudi Ara	20.82		
5	1846	Riyadh	Saudi Arabia			
6	1847	Riyadh	Saudi Arabia			
7	1848	Riyadh	Saudi Ara	24.56		
8	1849	Riyadh	Saudi Ara	24.8		
9	1850	Riyadh	Saudi Ara	24.34		
10	1851	Riyadh	Saudi Ara	25.03		
11	1852	Riyadh	Saudi Ara	35	23.07375	

I did the same in Global temperature 10-year moving average

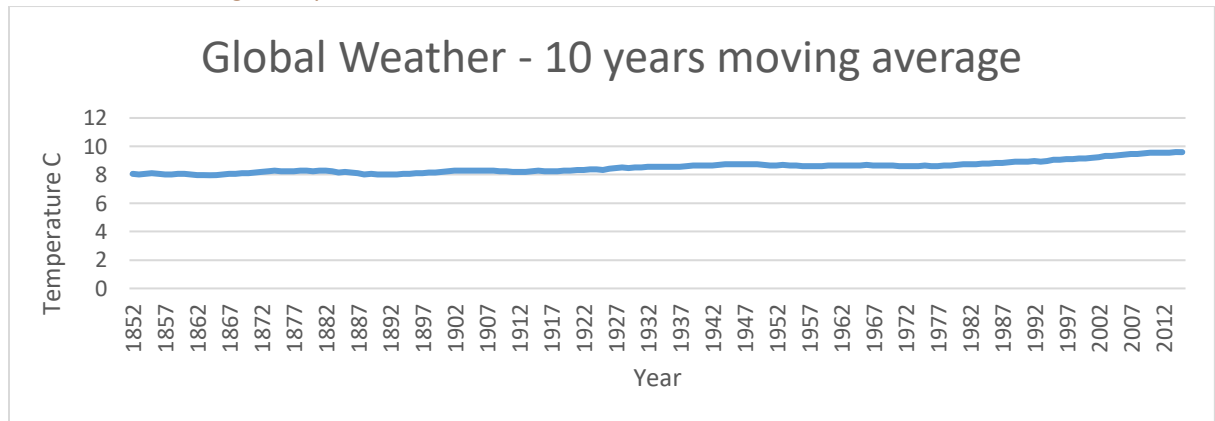
Note: the data for Riyadh city started from 1843 year, which is the starting point of my analysis

3- Creating Line Chart:

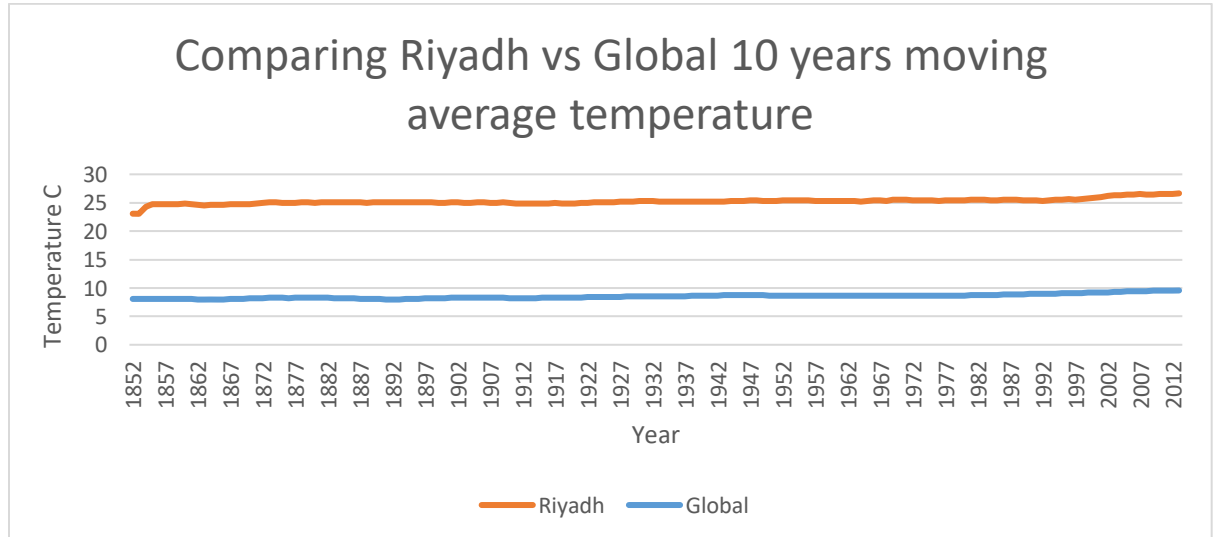
a- Line chart of average temperature for Riyadh City



b- Line chart of average temperature for Global



c- Line Chart to compare Riyadh vs Global average temperature



4- Observations:

- a- Riyadh city average temperature was around 23 degrees in 1852 and 26 degrees in these days.
- b- Riyadh city average temperature is increasing but not that much. It is all about 3 degrees in average during one century.
- c- Global average temperature was around 8 degrees in 1852 and 9.5 degrees in these days.
- d- The average of global temperature is increasing by 1.5 degree from last century until now.
- e- When we compare Riyadh city with Global we see that average temperature of Riyadh city is increasing more than the average temperature of global in the same period.