UDACITY Data Analysis Nanodegree Project 01:
Exploring Weather Trends

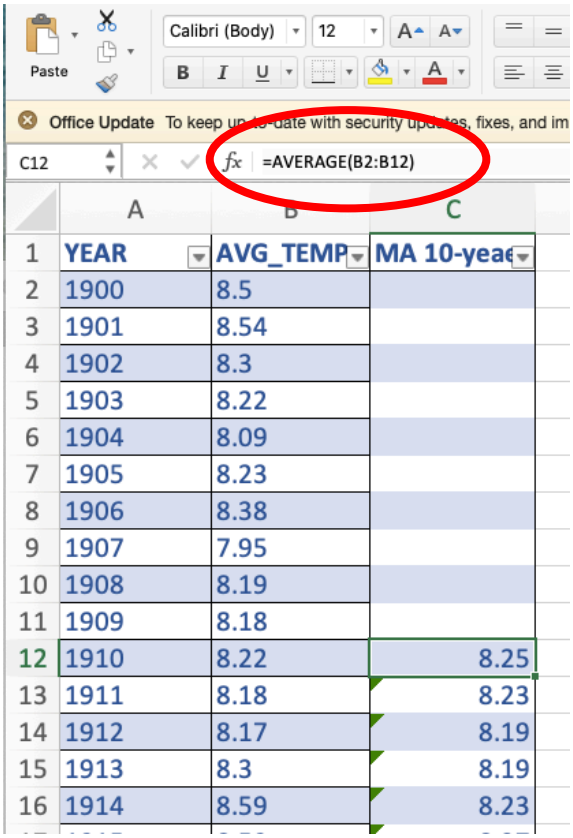
Introduction:

Using SQL Query to download average temperature of Riyadh and the global, then analyzing data using Excel.

Progress outline:

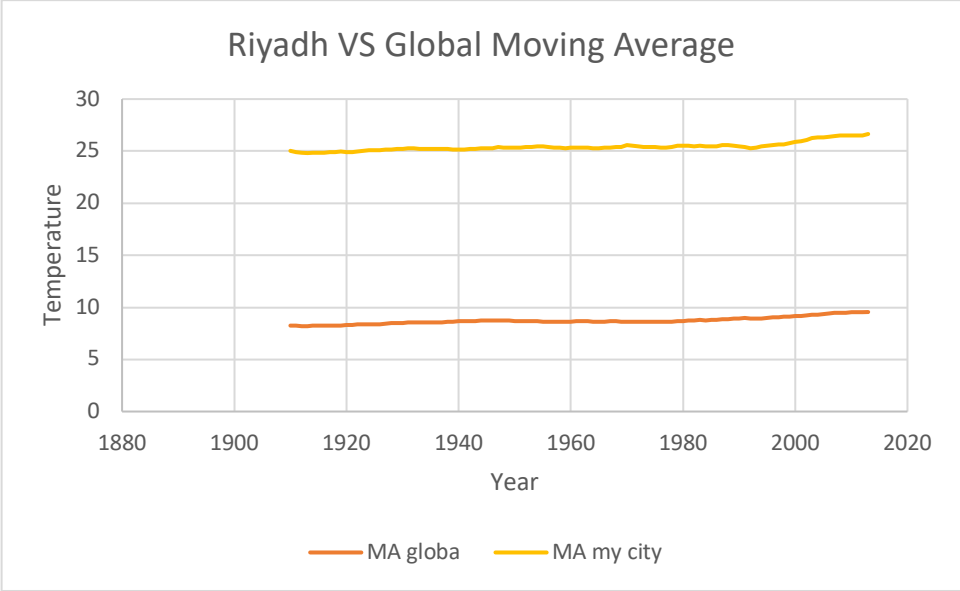
- Exporting data from SQL:
  - Global data: SELECTE year, avg_temp FROM global_data
  - My city data: SELECTE year, city, avg_temp FROM city_data
    WHERE city = 'Riyadh'

- Moving average by AVERAGE formula in Excel
  The moving average was calculate for every 10 years.



	A	B	C
1	YEAR	AVG_TEMP	MA 10-yeae
2	1900	8.5	
3	1901	8.54	
4	1902	8.3	
5	1903	8.22	
6	1904	8.09	
7	1905	8.23	
8	1906	8.38	
9	1907	7.95	
10	1908	8.19	
11	1909	8.18	
12	1910	8.22	8.25
13	1911	8.18	8.23
14	1912	8.17	8.19
15	1913	8.3	8.19
16	1914	8.59	8.23

- Chart line:



Observations:

- I found that my city's average temperature Riyadh is hotter than the global average. Also the change was not consistent change over time.
- Global average temperature for 10 years MA varies between 8.25 C and 9.5 C
- Riyadh average temperature for 10 years MA varies between 25.02 C and 26.65 C.
- The changes in my city temperatures is so slow change.
- Overall trend show that temperatures are raising over years , I did a 10 Years moving average which shows how doses the weather trends changes.
- Over the last few hundred years the average temperature changed in a non-consistent rate.
- The similarities between my city and the global that is both are getting higher over time, and the different that the global average temperature is lower than my city average temperature.
- The change between global and Riyadh is slightly small, both of them are raising.

Conclusion

The analysis shows that there is a rising in temperature for many reasons of climate changing.