Name : Zaid Saad Alzuaiber

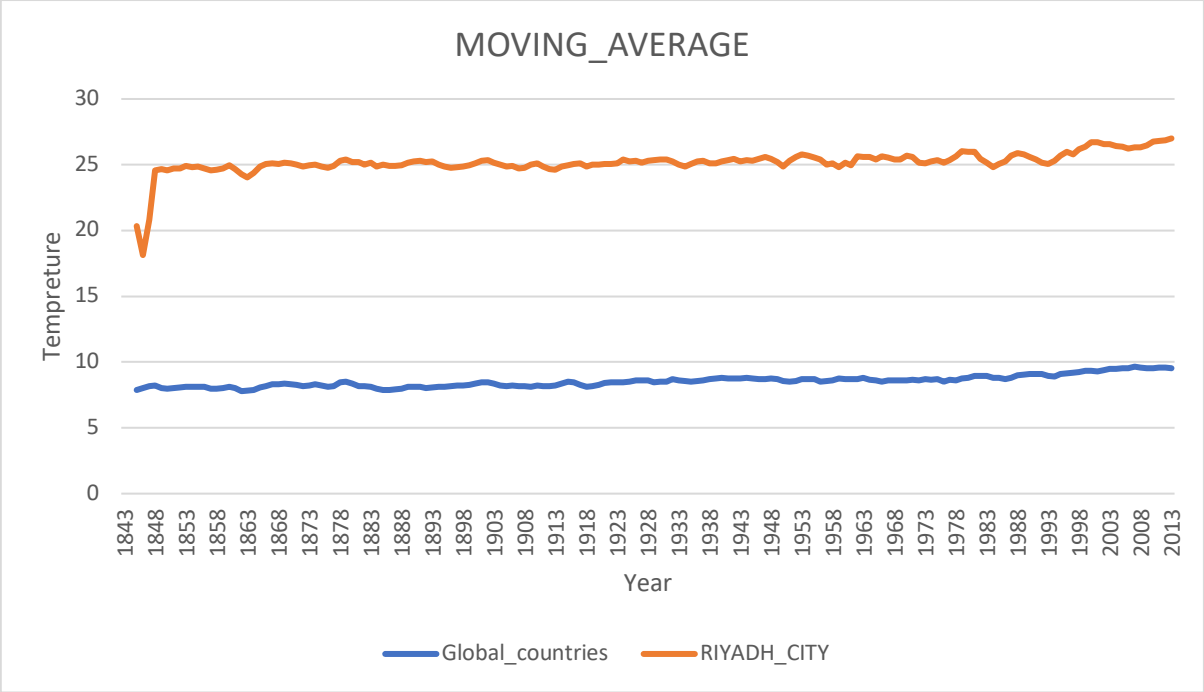
Program: DAND

Project : Exploring Weather Trends

Date of submit : 29 October 2018

- Is your city hotter or cooler on average compared to the global average? Has the difference been consistent over time?

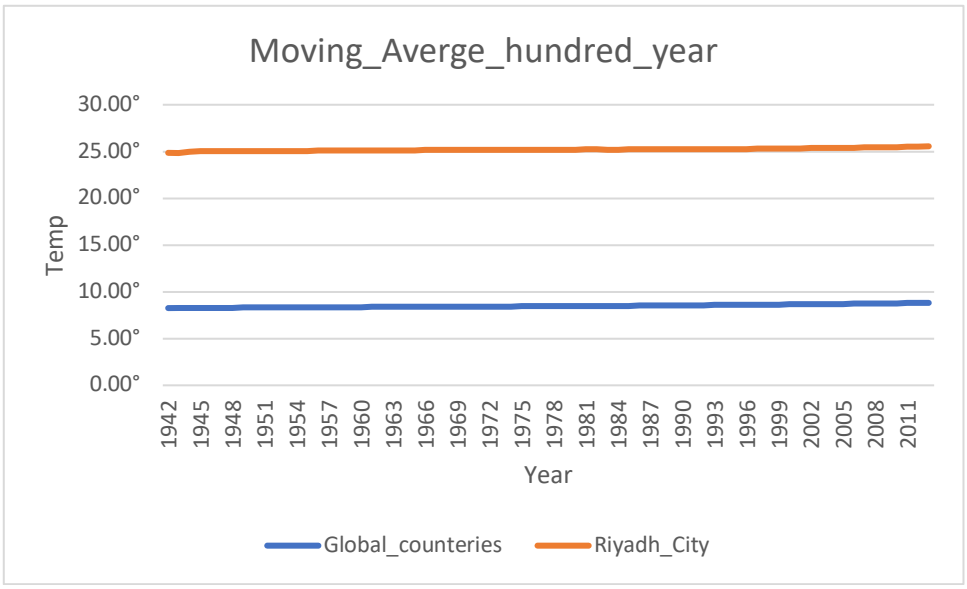
  Riyadh is hotter than as we can see in the bellow chart, and the difference is not consistent, between 1844 – 1852 there was a small gap as we can notice in the bellow chart.



- "How do the changes in your city's temperatures over time compare to the changes in the global average?"

  The changes indicate that temperatures year by year becoming hotter than in previous years.

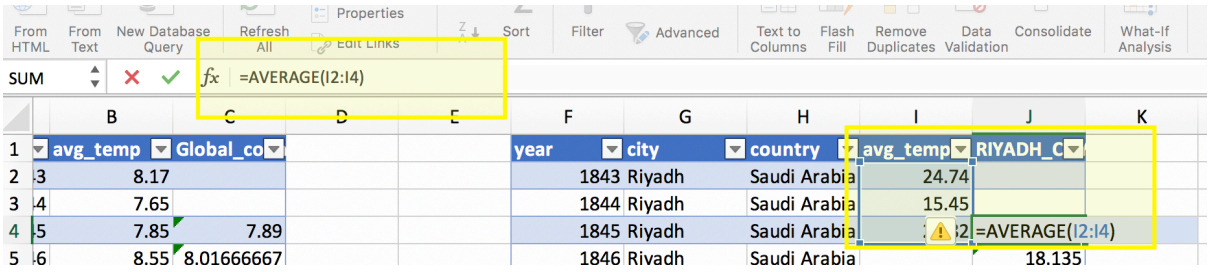
- What does the overall trend look like? Is the world getting hotter or cooler? Has the trend been consistent over the last few hundred years?
  It looks the world getting hotter and we can notice that in previous chart and compare it with new chart after we change the interval to 100, at 1845 the temperature was 8.01 and in 1945 it shows 8.28 in global temperature as it is the same in Riyadh city in 1845 18.135 but in 1945 25.01.



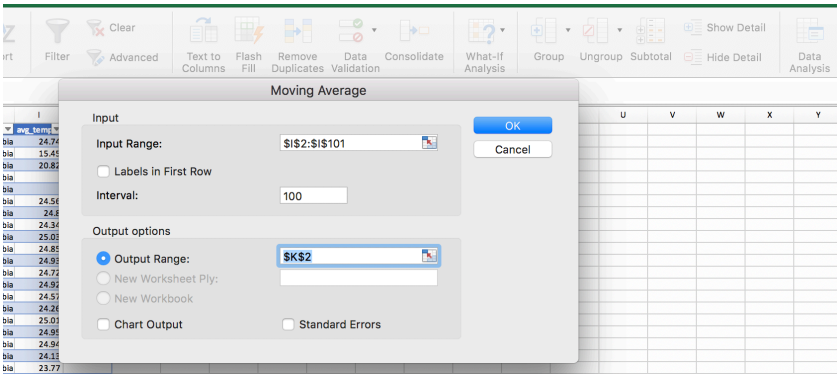
STEPS

- What tools did you use for each step? Excel
- How did you calculate the moving average?

There are two ways and I used both,
for first chart I use the same way in previous lesson, you can see the screenshot bellow:



Second way by clicking data analysis in data tab and select moving average it will shows the box as bellow



Input range: I select all temperature rows to calculate the moving average
Interval : I choose 100 to calculate the interval for a hundred year ago
By clicking chart output it will come as a values and line chart

- At least **four observations** about the similarities and/or differences in the trends

  - ✓ We can see the temperatures are becoming hotter than previous years for both.
  - ✓ The difference in temperatures between years is not consistent.
  - ✓ we see the temperatures for a few years are getting colder in the global and we can notice that reflected on Riyadh.
  - ✓ If we calculate the difference percentage for each 3 years and earlier we can say it does not exceed three ratios.

- SQL Statements:

  select * from global_data

  select * from city_list

  select * from city_data