Exploring Weather Trends – Project

Data Analyst Nanodegree first project

PREPARED BY

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This is the report for the Exploring Weather Trends
Project in this project we will analyze the temperature data for the local and global temperature and compare between them

Extract the data

To extract data from database we need to write some SQL query

Prepare the data to be visualiz ed To make the data ready to be visualized will use the Microsoft Excel tool

Moving average

We will calculate the moving average for every ten years

Extract the data from database

The SQL query that was used

First we need to see if my country in database or not we will use that SQL query

select country from city_list

Second after making sure that my county in database will need to see the list of city to chosen the local area we will use that SQL query

select city from city_list where country = 'Saudi Arabia'

Third after chosen the city will need the average temperatures for this city so we will use that SQL query

select * from city_data where city = 'Riyadh'

Fourthly will need the global average temperatures so we will use that SQL query

select * from global_data

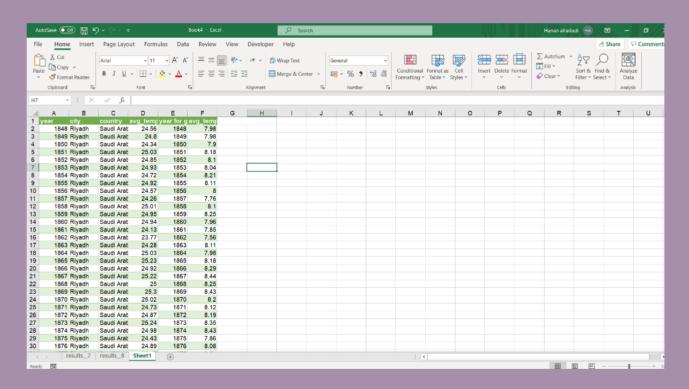
Sixthly we will unload data to making it visualized

- 1) After writing the query click on to see the results
- 2) To download the results click on bownload csv

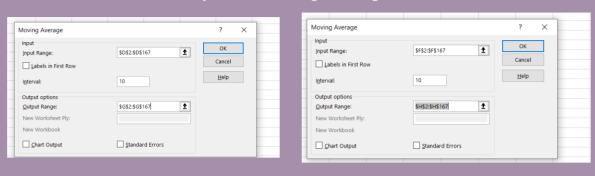
Moving average

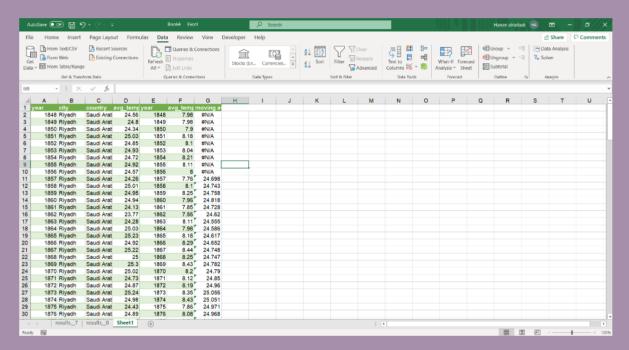
we will calculate the moving average for the average temperatures to Riyadh and global by use the Microsoft Excel tool

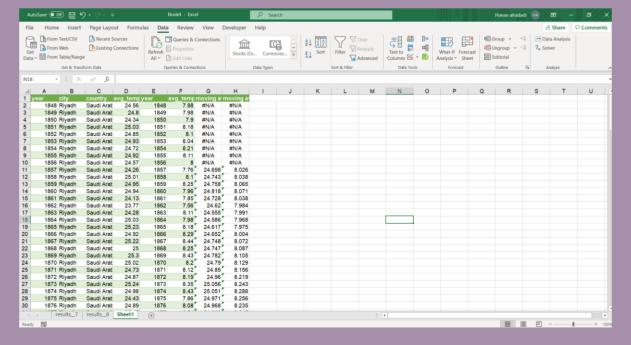
First in the Riyadh data we have missing data so we will delete and in the global data we have extra years we will ignore after do that the start years will became 1848 and end years became 2013



Data -> data analysis -> moving average

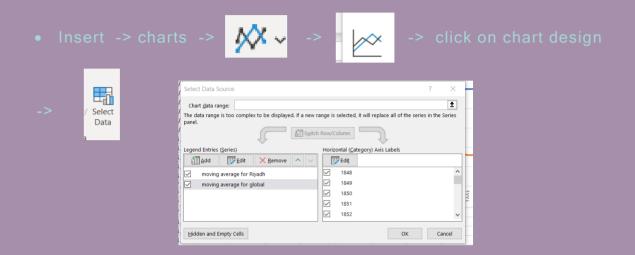


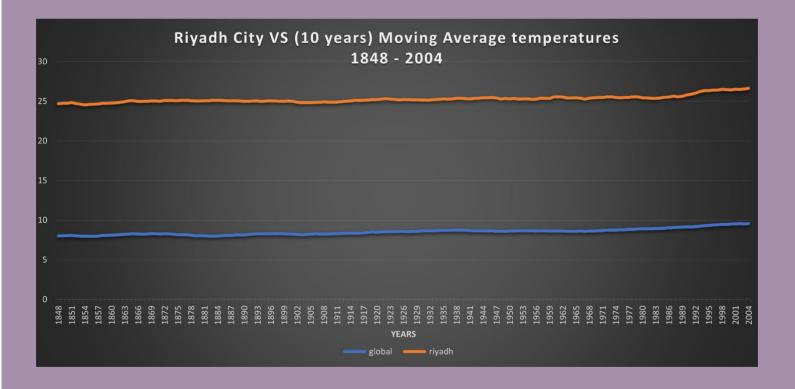




Line chart

To make the data visualized we will use the line chart





Observations

After completing the data analysis, the following was noted

- The moving average for Riyadh is always more than moving average for global so Riyadh is hotter than global
- Both Rivadh and global Increase a little or decrease a little
- Both Riyadh and global has In the last 10 years the max moving average
- In Riyadh the moving average from 1883 to 1892 and from 1884 to 1893 the same