Udacity: Data Analyst Nanodegree

Project name: Explore Weather Trends
Student Name: Tuguldur Batjargal

1) Extracting data

I used the SELECT Statement to retrieve global average temperature:

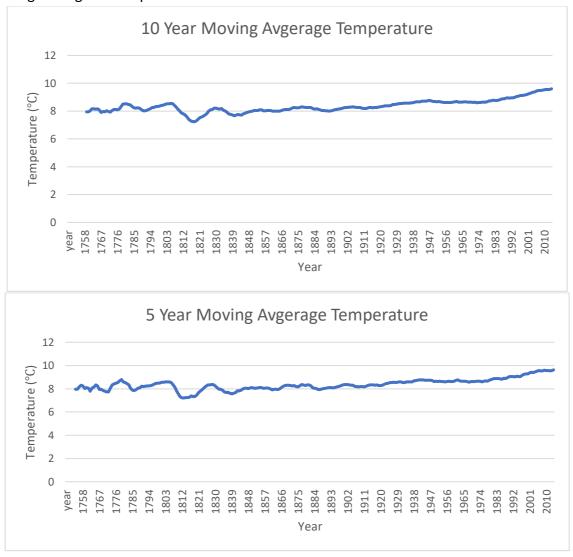
SELECT *FROM global data

Retrieve the nearest city data from the city_data using SELECT and WHERE:

• SELECT *FROM city_data WHERE city = 'Edinburgh'

2) Moving averages

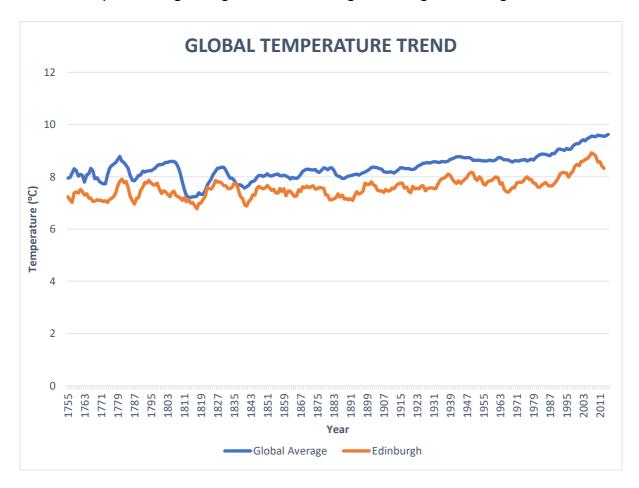
I calculated the moving average using the formal: =AVERAGE (Year1: YearX)
I started with 10 years moving averages on the global data set. Then, I went to 5 year moving averages. I compared the two results.



I noticed that 10 year moving average temperature was losing some key trends/information. Therefore, I decided to implement 5 year moving averages temperature in my project.

3) Comparison between my city and global average temperature

I am currently living in Edinburgh, UK. So, I have selected Edinburgh from the city_data. I have used 5 year moving average for both Edinburgh and the global average.



Observations and comments:

- 1) In general, Edinburgh is cooler on average compared to the global average. Edinburgh is usually 1 °C colder than the global average.
- 2) The overall trend in temperature change is similar for both Edinburgh and the global average. Edinburgh temperature illustrates slightly fluctuated figure compared to the global average.
- 3) Both Edinburgh and Global Temperature shows that the temperature is increasing since 1755. But, since 2007, figure shows that Edinburgh's temperature is decreasing. On the other hand, global temperature is increasing during this period.
- 4) In 1836, temperature for both Edinburgh and global average was almost equal to each other at 7.72 $^{\circ}$ C.