Udacity Data Analyst: Project 1 Explore Weather Trends

Steps



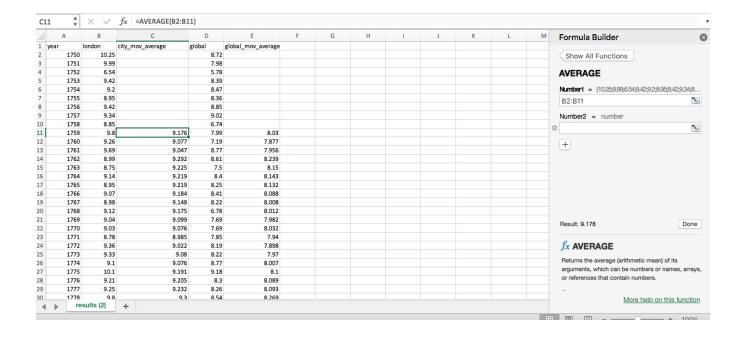
Step 1: SQL Query to Extract to CSV

I used SQL query to join global_data and city_data to get London, UK and global temperature data. And then I exported them to a single CSV file.

```
MENU V
Input
                                                             HISTORY V
                                   SELECT c.year, c.avg_temp AS london,
                               1
                       5
SCHEMA
                               2
                                           g.avg_temp AS global
  year
                               3
                                   FROM city_data AS c
                                   JOIN global_data AS g
                               4
  city
                               5
                                   ON c.year = g.year
  country
                                   WHERE c.city = 'London' AND c.country = 'United
                                   Kingdom';
  avg_temp
                              Success!
city_list
```

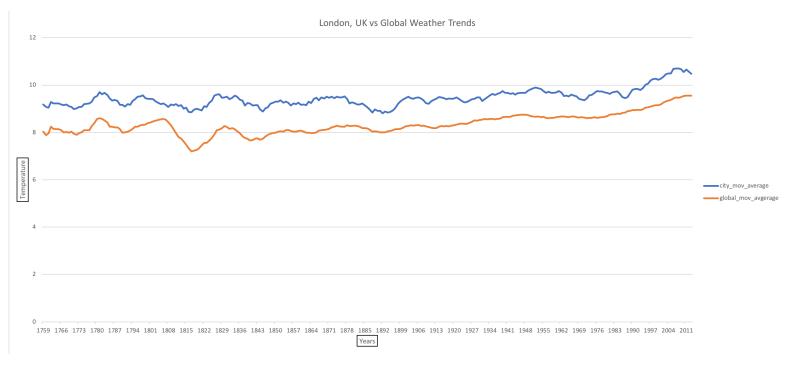
Step 2: Calculate Moving Average

I calculated 10 year moving average using the AVERAGE() function in Microsoft Excel, of London, UK and global temperature data into city_mov_average and global_mov_average columns respectively.



Step 3: Create line chart

I created line chart in Microsoft Excel.



Step 4: Observations

- 1. It can be observed that the temperature in London as well as the global temperature are both on the rise. This could be due to global warming.
- 2. Both of the city_mov_average and global_mov_average are following the same trends and are very much related.
- 3. We can see that there is not much difference in London and global temperature. The difference is around 1.
- 4. There was a major global temperature drop in the year 1818.