Udacity Data Analyst Project 1

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Project Step(s)

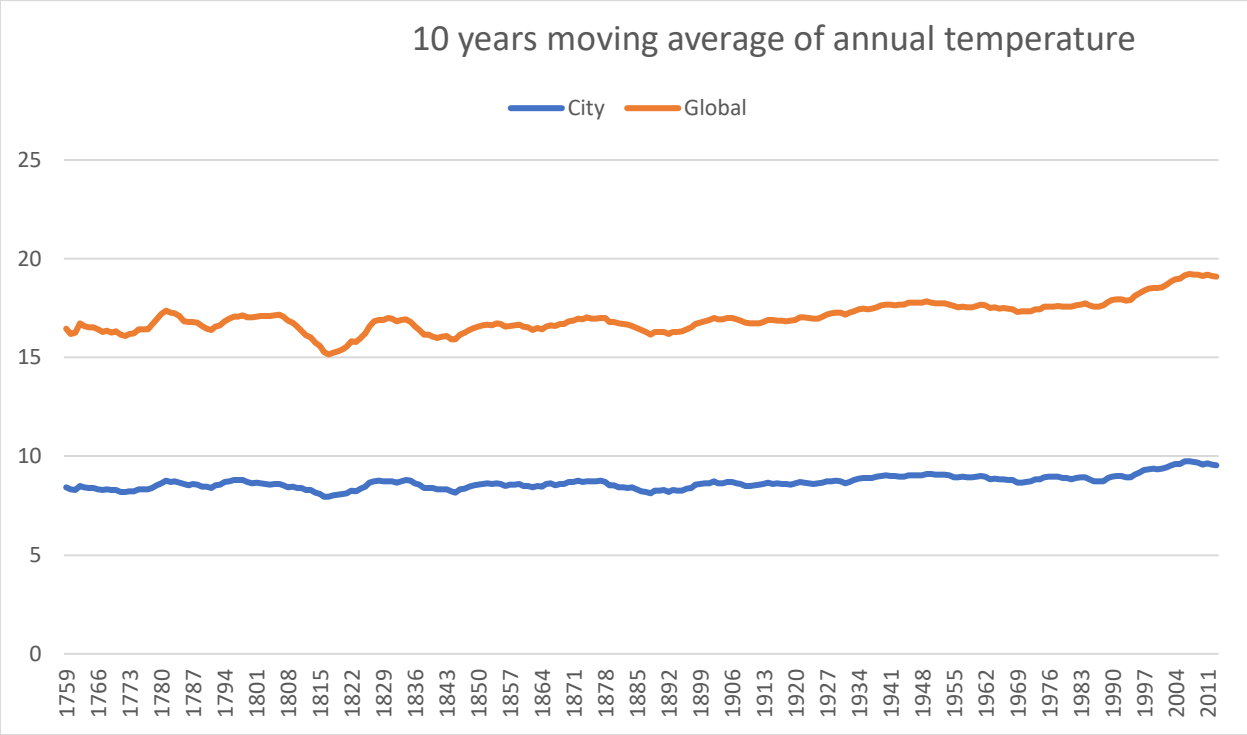
These are the steps I took to finish the project.

```
select
city_data.city as city,
city_data.country as country,
city_data.year as year,
city_data.avg_temp as city_temp,
global_data.avg_temp as global_temp
 from city_data join global_data on
 city_data.year = global_data.year
 where city = 'Dublin'
 and country = 'Ireland';
```

1. Extract the information from Udacity weather data using the SQL statement above.
2. Use Excel to open the CSV file.
3. Calculate the 10 years average by making a new column and use formula `=AVERAGE(D2:D11)` where D represents the column data of city temperature.
4. Repeat Step 3 and did the same for global temperature.
5. Use Excel Charting tool to generate a line chart comparing two moving average.

Justification for line graph

I believe line chart is the most appropriate visualization because the temperature data is a continuous dependent variable. If the variables are independent, I would consider a bar chart. I would also consider an ogive chart if the data are accumulative like investments value.



Observations

1. Global temperature is consistently higher than Dublin Ireland.
2. The two trends follow a very similar pattern, but with a constant shift in value.
3. The average for both trends is slowly increasing.
4. The rolling average for global appears to suffer higher volatility than the Dublin's rolling average.
5. As the rolling average increases, so is the delta between global temperature and Dublin.