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# Explore Weather Trends

## REVIEW

## HISTORY

### Meets Specifications

Overall, the project submission is complete and the student demonstrated his/her ability to perform introductory tasks as a data analyst. Keep up the great work, and definitely keep spending more time on making insights as it'll be proven to be valuable in the future. You will want to develop good habits as a data analyst in this nanodegree to build up your career as a data analyst successfully.

### Analysis

- The SQL query used to extract the data is included.
- The query runs without error and pulls the intended data.

- Good job pulling the data from the database! It's clear that you understand how to do so with SQL query!
- Good job using the **JOIN** statement to combine the results, as well as creating abbreviation for the datasets for readability.
- Your SQL skill is more advanced than most students, but if you're interested in learning more on SQL or strengthen your SQL skill, you can check out the free online course below (I personally found it quite helpful back then):  
[https://lagunita.stanford.edu/courses/DB/SQL/SelfPaced/courseware/ch-sql/seq-vid-introduction\\_to\\_sql/](https://lagunita.stanford.edu/courses/DB/SQL/SelfPaced/courseware/ch-sql/seq-vid-introduction_to_sql/)

Moving averages are calculated to be used in the line chart.

- Great job selecting 14 years to use for calculating the moving averages. It creates a reasonably smooth line.
- You may want to increase the number of years to use for this calculation if the curves aren't smooth enough. This is a judgement call that's entirely up to you to determine whether you can see the overall trend well or not.
- If you need more information on moving averages, please check the webpage below:  
<https://www.investopedia.com/terms/m/movingaverage.asp>

- A line chart is included in the submission.
- The chart and its axes have titles, and there's a clear legend (if applicable).

- Good job for showing a clear plot for comparison!

Suggestions:

- The legends were a bit wordy. You just need to show the difference between the two curves, so using **Global** and **Faisalabad** is sufficient for that purpose. Try to make your plot clear and concise to make your readers focus on the actual plot instead of the minor details.
- Instead of using Years for x-axis label, I'd use the singular form. You are just showing the measurement and the unit, so singular format is conventionally preferred.
- The title is a bit misleading. Weather is often associated with rainy, sunny, cloudy, etc.. It's better to just use temperature instead. You can use **Line Chart of Moving Average Temperatures** or **Line Chart of Global vs. Faisalabad Temperature** to show general idea of the plot. You can also include a short one sentence description underneath the plot if you want to explain further.
- I like how you tilted the x-axis year. You can also try decreasing the number of x-axis ticks and rotate the tick labels by 135 instead of 90 degrees for readability

- The student includes four observations about their provided data visualization.
- The four observations are accurate.

- Great job including the more than 4 detailed observations. They are more insightful than the ones I usually get, and it's good since it's essentially the most important thing about this project. Investigators usually only value how much information you can provide, so it's good that you are spending more time on it and it shows.
- Try to spend some time searching to explain temperature trend with historical events if possible to help translating data into insights. It's not a requirement here, but it's a good practice to build up your skills.