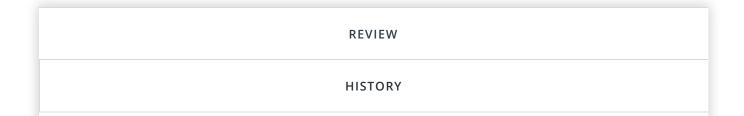


#### Return to Classroom

# **Explore Weather Trends**



## **Meets Specifications**

# Congratulations!! 🎉

YOU HAVE SUCCESSFULLY MET ALL THE REQUIREMENTS OF THE RUBRIC. EXCELLENT JOB ON THIS PROJECT! (4)

- You demonstrated your ability to retrieve data from a SQL Database and derive interesting, accurate results from the output of your query.
- Furthermore, you were able to manipulate this data using external software (Haskell) and create a meaningful visualization with attention to detail to demonstrate your observed results. This is a tremendously important skill and will prove useful throughout your career in data analytics.
- Before you move on to your next lessons, take pride in the effort you've put into this project. I hope you found this exercise both challenging and rewarding. Keep up the exceptional work and effort here, and I look forward to seeing you rock those future submissions!! :)

All the best for your upcoming lessons and projects..!!!
Stay Udacious and Happy Learning.!!

## **Analysis**

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

Well done!!

You did a nice job in extracting the data for your local city and comparing that to global temperatures.!!

 Your queries were spot on, error-free and fetched correct data for both Local and Global temperatures.

```
Good Job..!! 👍
```

### TIP: 4 4

- SQL is a very powerful language used to perform various data manipulation, transformation and extraction processes.
- You can even perform joins and conduct analysis in SQL.

#### Example:

In order to overcome the missing values in local data we could drop these values in SQL query itself. (This is one of the most popular methods of imputing missing values in data).

• Here is the way to get the data that you want for both Local and Global while excluding the empty years in one table output!

```
SELECT city_data.year,
city_data.avg_temp as city_temp,
global_data.avg_temp as global_temp
FROM city_data, global_data
WHERE city_data.year = global_data.year
AND NOT city_data.avg_temp IS NULL
AND city_data.city = 'Milan'
```

Thus you can reduce your upcoming tasks by initially dealing with them in SQL itself.

#### **Resources:**

• If you're interested in boosting your SQL concepts with more questions and puzzles, here are a couple of websites:

I often enjoy looking for extra coding practice for SQL:

- Link1
- o Link2

You'll get a chance to practice increasingly difficult questions and learn how to interact with multiple tables at once.

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

Great Job...!!!

You did Excellent work here in calculating the 10 years moving average for both Milan and Global temperatures and then using a line graph to display them !!!

- The gap between these two lines is clearly visible here.
- The trends have smoothened as compared to original graphs and thus depict the general trends of both local and global temperature.
- A line chart is included in the submission.
- The chart and its axes have titles, and there's a clear legend (if applicable).

#### The line graph included in your submission looks nice!!! 💥 Good job !!

- The chart contains a clearly represented title that explains the details of the presented line graphs for both local as well as global temperatures.
- Both axes have suitable titles with good naming conventions.
- Legends have been appropriately added.

This attention to detail really goes a long way to help communicate your results to an audience. Good work..!!

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

Great work in looking at the output of your graph and making multiple observations from them...!!



- You have drawn accurate observations and they are easy to interpret for the audience.
- Your observations can be clearly reflected in the output of your visualization.

To be able to draw out meaningful observations from visualisations is critical for every data analyst. Well done..!!

I ↓ DOWNLOAD PROJECT

RETURN TO PATH