

# **PROJECT REPORT ON EXPLORING WEATHER TRENDS**

**BY**

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## **OVERVIEW**

This project aims at analysing local and global temperature data, comparing the temperature of Lagos to overall global temperature trends and making an observation based on the moving average. This was done using the SQL query to extract data from the database, downloading the data with CSV and using Google sheets to analyse the data.

## **EXTRACTING THE DATA**

To extract data from the database, I used the following SQL query.

No.	DATA	SQL QUERY
1.	To extract data from the city_list	SECLEC * FROM city_list;
2.	To extract data from city_data	SECLEC * FROM city_data;
3	To extract data in mycountry (Nigeria)	SECLEC * FROM city_data; WHERE Country = 'Nigeria';
4.	To extract data in the city closest to me (Lagos)	SECLEC * FROM city_data WHERE City = 'Lagos';
5.	To extract just the year and the average temperature.	SECLEC year, avg_temp FROM city_list WHERE City = 'Lagos';
6.	To extract global data	SECLEC * FROM global_data

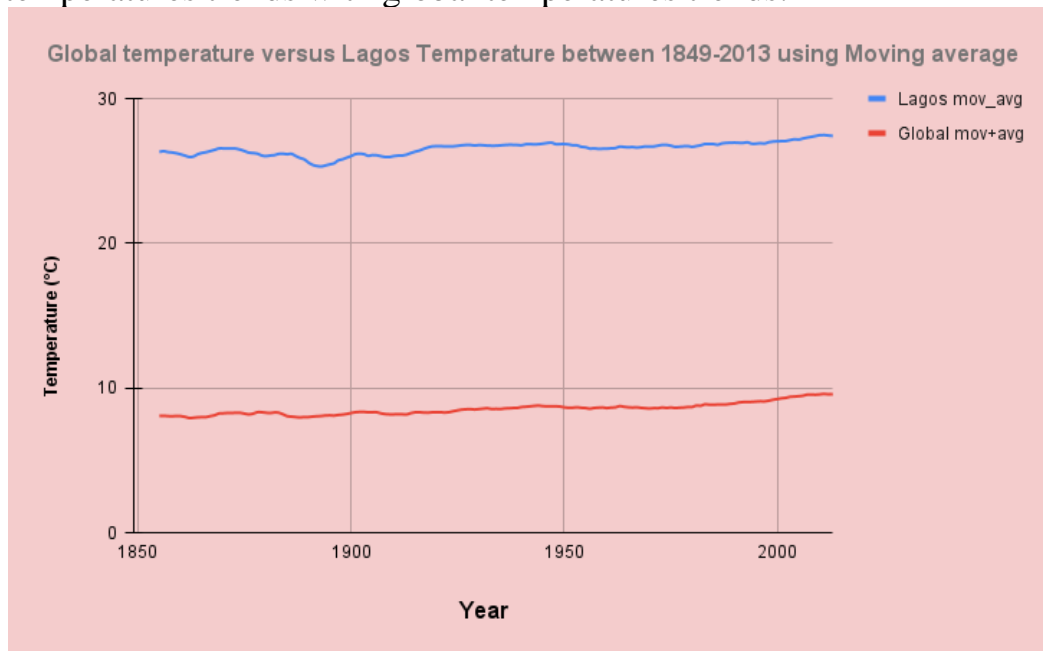
The file I needed was downloaded to CSV.

## **DATA ANALYSIS**

The Google sheet was used to analyse the data downloaded from the CSV. Some data were missing from Lagos average temperature, in order to get the accurate moving average, I have to fill in the missing data. This I did by averaging all the data in average temperature to get the data to fill in the missing or blank spaces. To fill in the blank spaces, I used the Google filter to get just the blank spaces. This I did by using the formula (=countblank) highlighting the entire temperature average then I entered the data. After entering the data I use Google filter to restore the entire data.

Seven (7) years moving average was used to calculate the moving average of both the city and global data using Google sheet: just as we were taught.

A line chart was created using Google sheet which compares Lagos temperatures trends with global temperatures trends.



## **OBSERVATION**

The observations in this project include:

1. The city's (Lagos) average temperature trend is way hotter than the global average temperature trend.
2. The city's (Lagos) average temperature trend has been consistently higher than the global temperature trend.
3. Noticeably, the city and global temperature trends are on the rise- this can be seen between 1940 upward.
4. According to the chart above, both the city and global temperature trends are getting hotter.
5. As seen in the chart, there was a consistency both in the city temperature and global temperature trends between 1920-1940.

## **CONCLUSION**

After analysing all the data, it was observed that the world is getting hotter and Lagos is really hot.