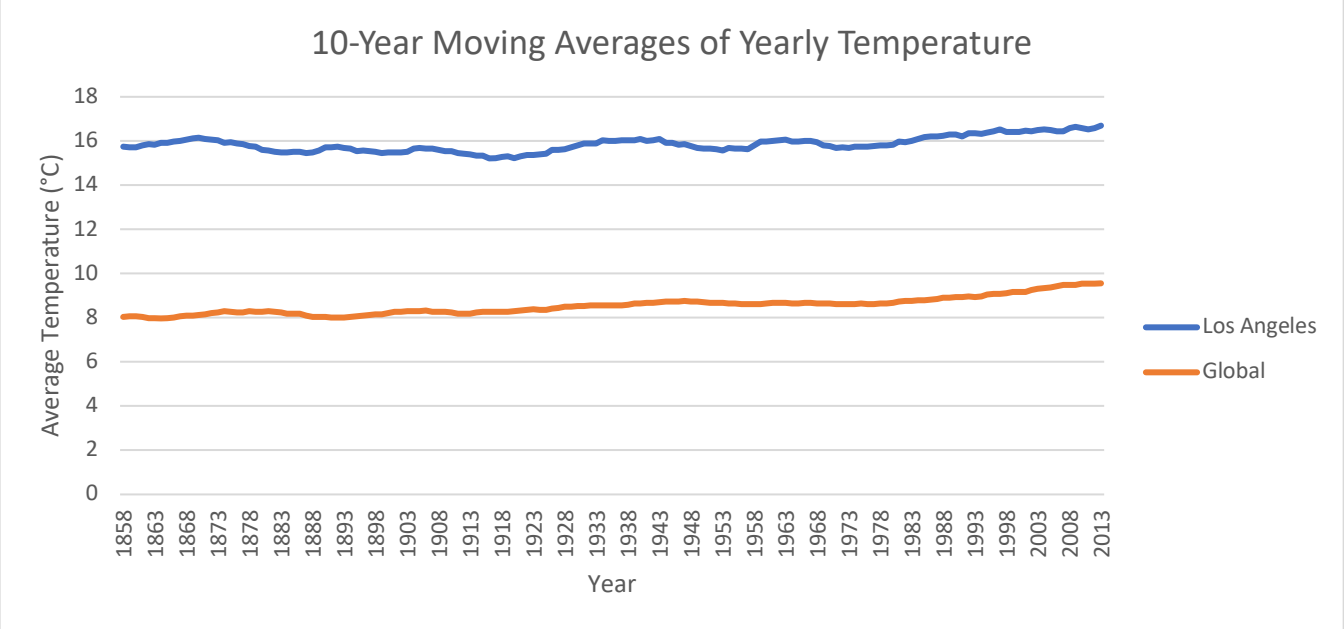
Project 1: Explore Weather Trends
In this project, I analyzed local and global temperature data to compare temperature trends between Los Angeles and the world from the years 1849 to 2013.

Extracting the Data
The following SQL commands were used to access the data from the database:

```
select global_data.year, global_data.avg_temp as "Global", city_data.avg_temp as "LA"
from global_data
inner join city_data on global_data.year = city_data.year
      where city_data.city = 'Los Angeles'      and city_data.country = 'United States'
```

This produced a table with the year, global average temperature, and Los Angeles average temperature.

Analyzing the Data
To calculate the 10-year moving average and create the line chart, I used Excel to open the csv files. The 10-year moving average was calculated by taking the average of the past 10 years. Since the data beings in the year 1849, the first year with a value for 10-year moving average was 1858. The line chart was then created with two separate data series displaying the moving averages for global temperature and LA temperature separately.



Results and Analysis
Some key observations from this analysis are:

- **Higher average temperatures in Los Angeles as compared to global temperatures.** The average temperature over the years 1858-2013 was 15.88° in Los Angeles, as compared to 8.513° worldwide.
- **More fluctuations in temperatures globally vs. Los Angeles.** Whereas the curve is mostly smooth for Los Angeles, the global curve shows slightly more variability.
- **An upward trend in yearly average temperatures in Los Angeles** The average temperature for the first 10 years of the data (1849-1858) was 15.746° for Los Angeles; for the last 10 years of the data (2004-2013), it was 16.696°. This represents a 6.03% increase.
- **An upward trend in yearly average temperatures globally.** The average temperature for the first 10 years of the data (1849-1858) was 8.065°; for the last 10 years of the data (2004-2013), it was 9.556°. This represents a 20.3% increase, appearing to suggest that the global temperature is rising faster than the local temperature in Los Angeles.