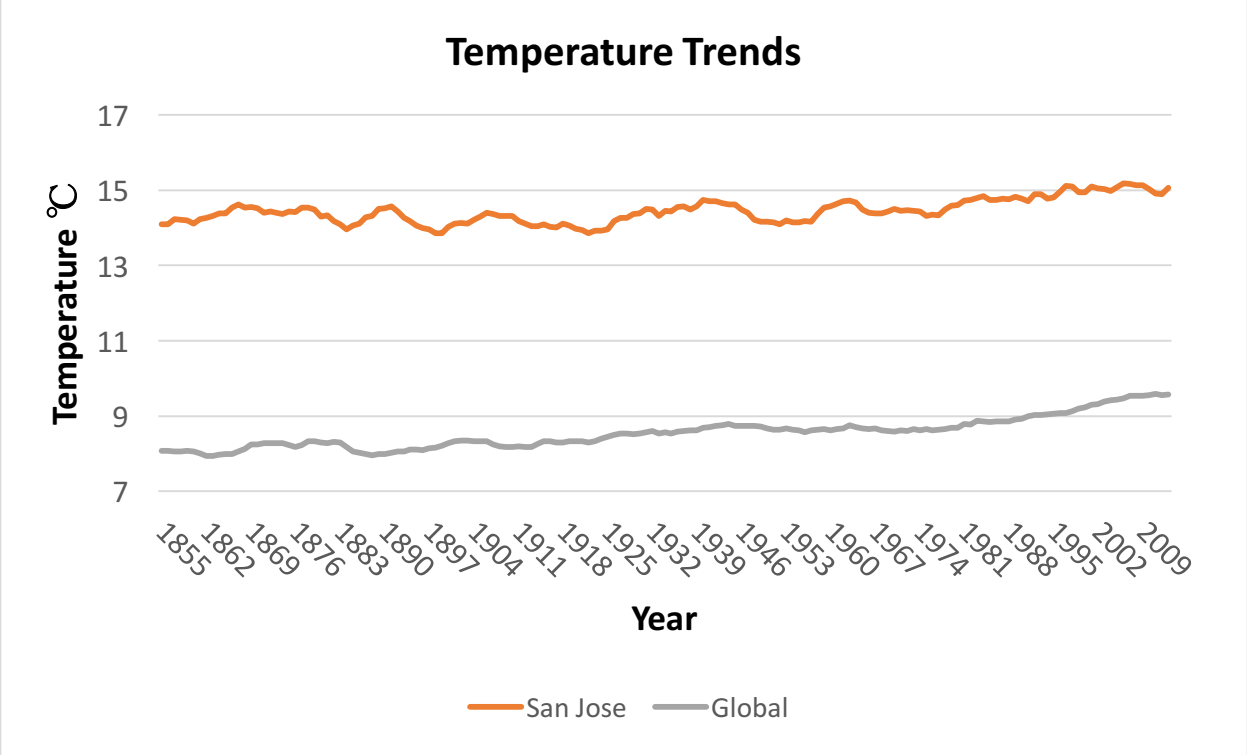
Outline of Steps Taken

The main tools I used to prepare the data for visualization were SQL and Microsoft Excel. SQL was used to retrieve the data I needed from the database, while Excel was used to prepare the data and create the chart. The SQL queries I used were as follows:

1) SELECT * FROM city_list;
2) SELECT year, avg_temp FROM city_data WHERE city = 'San Jose'
3) SELECT * FROM global_data WHERE year BETWEEN 1849 AND 2013;

With Excel, I chose to use a 7-year moving average, as I felt this would remove some data fluctuations, and make it easier to see trends in the data. My key consideration when visualizing the trends was what increments to use for the axes on the graph, as I wanted to use increments that would make it easier to see the data trends, and the similarities and differences between the two data sets.



Observations

1) San Jose is hotter on average compared to the global average, and this difference has been consistent over time.
2) Overall, both globally, and in San Jose, average temperatures are higher than they were in the previous two centuries.
3) In general, the changes in San Jose's temperatures are similar to the changes in the global average.
4) Looking at the line chart, it seems that when compared to the global average, San Jose experienced more fluctuations in temperature.