Data Extraction:
I used the SQL workspace provided in the Udacity interface to export the data of the local and global temperatures. The following queries were used to extract the data:

1. select * from city_list
   where country = 'India'

Then I analysed the data to find the closest city to me which was Jaipur

2. select * from city_data
   where city = 'Jaipur'

3. select * from global_data

Moving Average:
I had to use a 12 year moving point average because the data from 1858 to 1868 (11 years) for Jaipur city was missing. Anything smaller than a 12 year moving average (MA) would have given me an error in the average and the graph could not have been plotted correctly in that case. Even after using a 12 year MA there are some anomalies in the graph. Perhaps if we use a 20 year MA, that could have been reduced.

Observations:

1. I stay in Jaipur city and when you compare the Jaipur (local) average temperatures with the global average temperatures it clearly shows that Jaipur is far more significantly hotter than the global temperatures.
2. Given the data and its authenticity we can certainly say that the difference in the global temperatures and local temperatures have been fairly constant.
3. The temperatures in both the global level and local level have certainly gone up. If we compare the recorded local and global temperature in 1796 and the one in 2013, there is an increase of over 1 degree Celsius. This trend can be seen if you compare the MA as well of the respective years.
4. The temperature trend seems consistent over the past 100 years with the temperature only going higher rather than cooling or being stable for both global and local data.
5. The big dip that we see in the local data chart from the year 1865 to 1875 is because of the reason that the data is missing for the years 1858 to 1868 which affects the MA. Taking the slope of the line chart from the past and future years into consideration, we can assume that the anomaly follows the same trend and that there is not much deviation.
6. The rate of increase of global temperatures is slightly higher than the rate of increase of the local temperatures.

Line Charts:

I have used **Google Sheets** to plot the line chart and calculate the moving averages.