1. **What tools did you use for each step**

SQL to pull query for global & city level data

select * from global_data

select * from city_data where city = 'Delhi'

2. **Moving averages calculated are used in the line chart**

I used Google sheets to calculate moving average and calculated moving average using the formula below

For example – For 7 day moving average, row E – column E8 - using the formula

=AVERAGE(D2:D8)
where column D is avg_temp_city

The **correlation** between avg_temp_city and avg_temp_global was 0.76

Key observations

- Overall global trend shows that the temperature globally has increased more rapidly in comparison to city level data
- Average temperature data for my city has stayed quite consistent, however, it has become hotter over time
- The world is getting hotter and the trend seem to have changed more rapidly after 1990. The average global temperature data showed an increasing trend
- Global temp data seemed to fluctuate more in comparison to city level data

Key considerations – How to visualize trends

- Use 2 different y-axis to plot the data
- Use **yearly** data info from global data as city level data was missing for some years and did not have the same amount of yearly data info as global temperature data

Temperature Data