

1. Extract data from a database using SQL:

```
1 select *  
2 from city_data  
3 where city='Los Angeles' and country='United  
   States';
```

```
1 select * from global_data;
```

2. Open csv file with Excel

3. Calculate moving averages of LA temperature in Excel

a. set interval equals to 6

b. year range is from 1849 to 2013

Calculate moving averages of global temperature in Excel

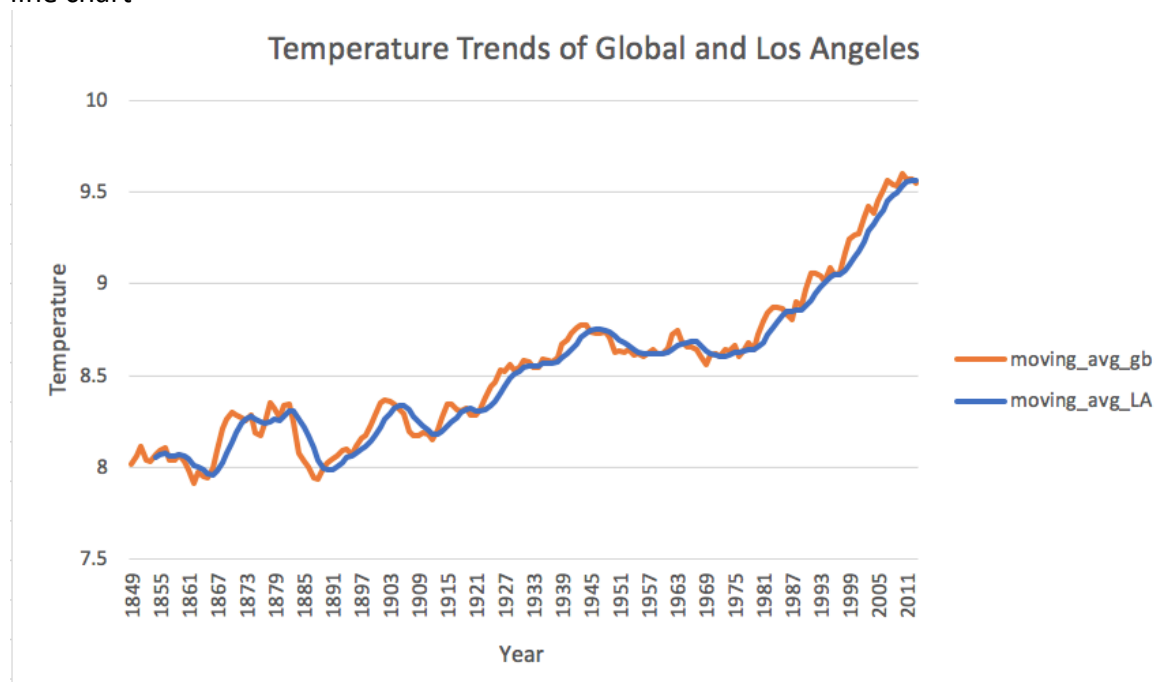
c. set interval equals to 6

d. year range set is also from 1849 to 2013 because the year range of global temperature is wider than that of LA temperature

The key concerns when deciding how to visualize the trends are following:

- how many intervals I should set
- what the year range I should select
- how to set the bounds and units of vertical axis in order to discriminate lines of global and my city's temperature

4. line chart



5. observations:

- Their overall trends are almost same, but the trend of my city's temperature is a little bit lagging from that of global temperature.
- On average my city is cooler than the global average, but some time it is not.
- The overall trends tell us that the world is getting hotter, but there exist some periods of time over last hundred years when the temperature went down like around from 1885 to 1891.
- The change of my city's temperature is the same as that of global temperature because the trends of their temperatures are same.