Explore Weather Trend Project(Udacity)

Steps:

1- Extracting data from the data base about my city temperature (Riyadh), and global temperature
   a. Extract city Data query:

```
select *
from city_data
where city = 'Riyadh'
```

   b. Extract global data query:

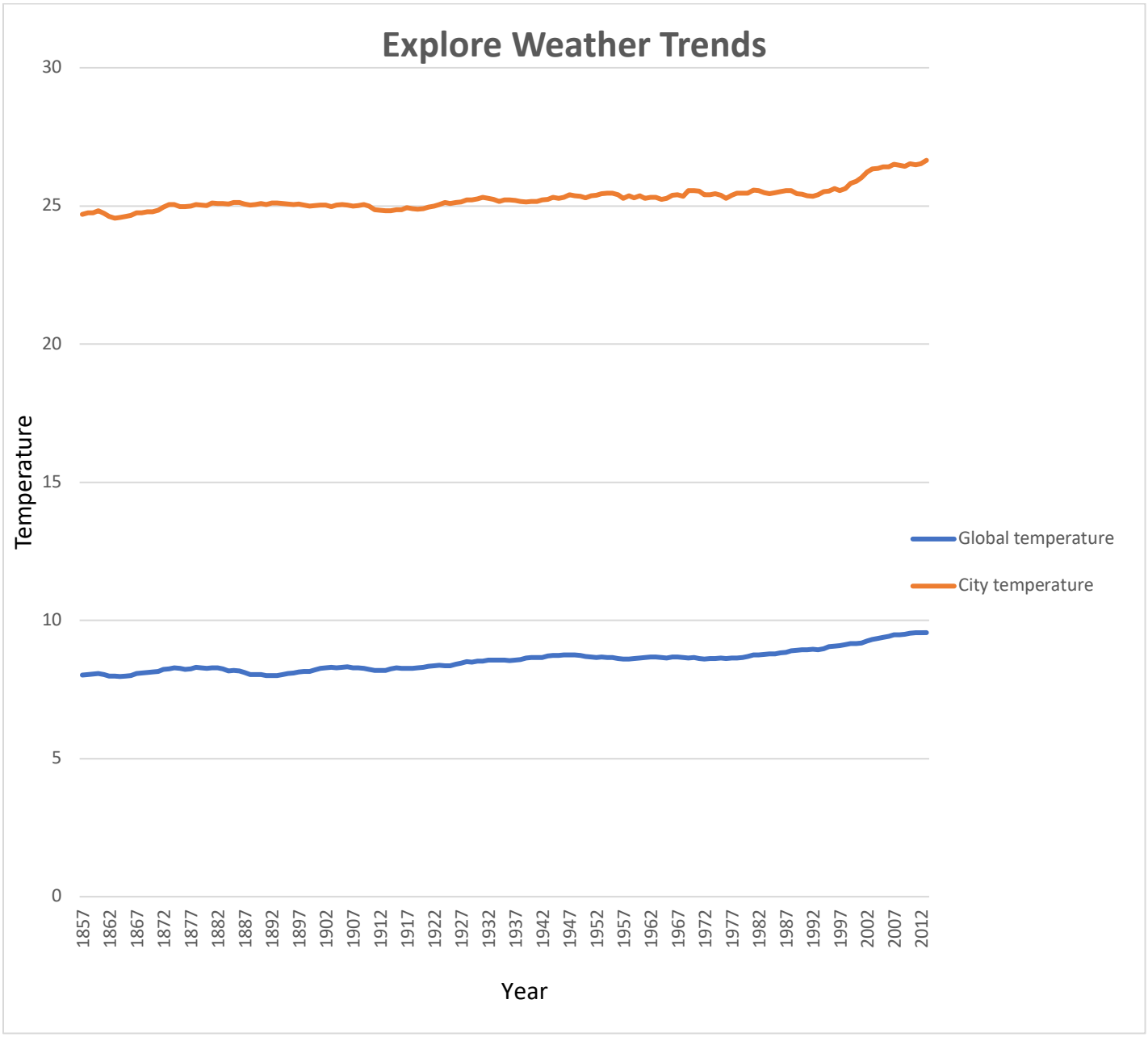
```
Select *
From global_data
```

2- Cleaning City temperature file and make the first year in city file the first year in the global temperature file. So we can compare right.
3- After that we gather the two files into one file.
4- Next, we do the moving average(y=10).
5- Building a line chart.

Sample:

	A	B	C	D	E	F
1	year	city	average_global_temp	average_city_temp	ma_global	ma_city
2	1848	Riyadh	7.98	24.56		
3	1849	Riyadh	7.98	24.8		
4	1850	Riyadh	7.9	24.34		
5	1851	Riyadh	8.18	25.03		
6	1852	Riyadh	8.1	24.85		
7	1853	Riyadh	8.04	24.93		
8	1854	Riyadh	8.21	24.72		
9	1855	Riyadh	8.11	24.92		
10	1856	Riyadh	8	24.57		
11	1857	Riyadh	7.76	24.26	8.026	24.698
12	1858	Riyadh	8.1	25.01	8.038	24.743
13	1859	Riyadh	8.25	24.95	8.065	24.758
14	1860	Riyadh	7.96	24.94	8.071	24.818
15	1861	Riyadh	7.85	24.13	8.038	24.728
16	1862	Riyadh	7.56	23.77	7.984	24.62
17	1863	Riyadh	8.11	24.28	7.991	24.555

Line chart:


Explore Weather Trends
30
25
20
15
10
5
0
Temperature
1857
1862
1867
1872
1877
1882
1887
1892
1897
1902
1907
1912
1917
1922
1927
1932
1937
1942
1947
1952
1957
1962
1967
1972
1977
1982
1987
1992
1997
2002
2007
2012
Year
Global temperature
City temperature

My Observation:

1- My city temperature in hooter than the global temperature and the difference is consistent over time.
2- All my city and the global temperature are getting hooter especially they both in 2013 has the maximum moving average (Globally: 9.55), (Riyadh: 26.65).
3- All my city and global temperature was in minimum moving average (Globally: 7.96 in 1864), (Riyadh: 24.55 in 1863).
4- My city temperature has more fluctuations than the global temperature.
5- My city temperature's rate in getting hooter is faster than the global temperature's rate.
6- Average temperature of all time globally is 8.55
7- Average temperature of all time in Riyadh is 25.30