PROJECT 01

Tools used – Microsoft Excel,SQL

Calculation-For the given data I have decided to take the moving average for first 10 values of the data. To do so I first take the average of first 10 values in excel using =AVERAGE(A2:A11) and drag the formula down to the next cell.

Key Considerations- For visualization I make sure that the year and average temperature are aligned for both city and global dataset.

STEPS IN ANALYSIS

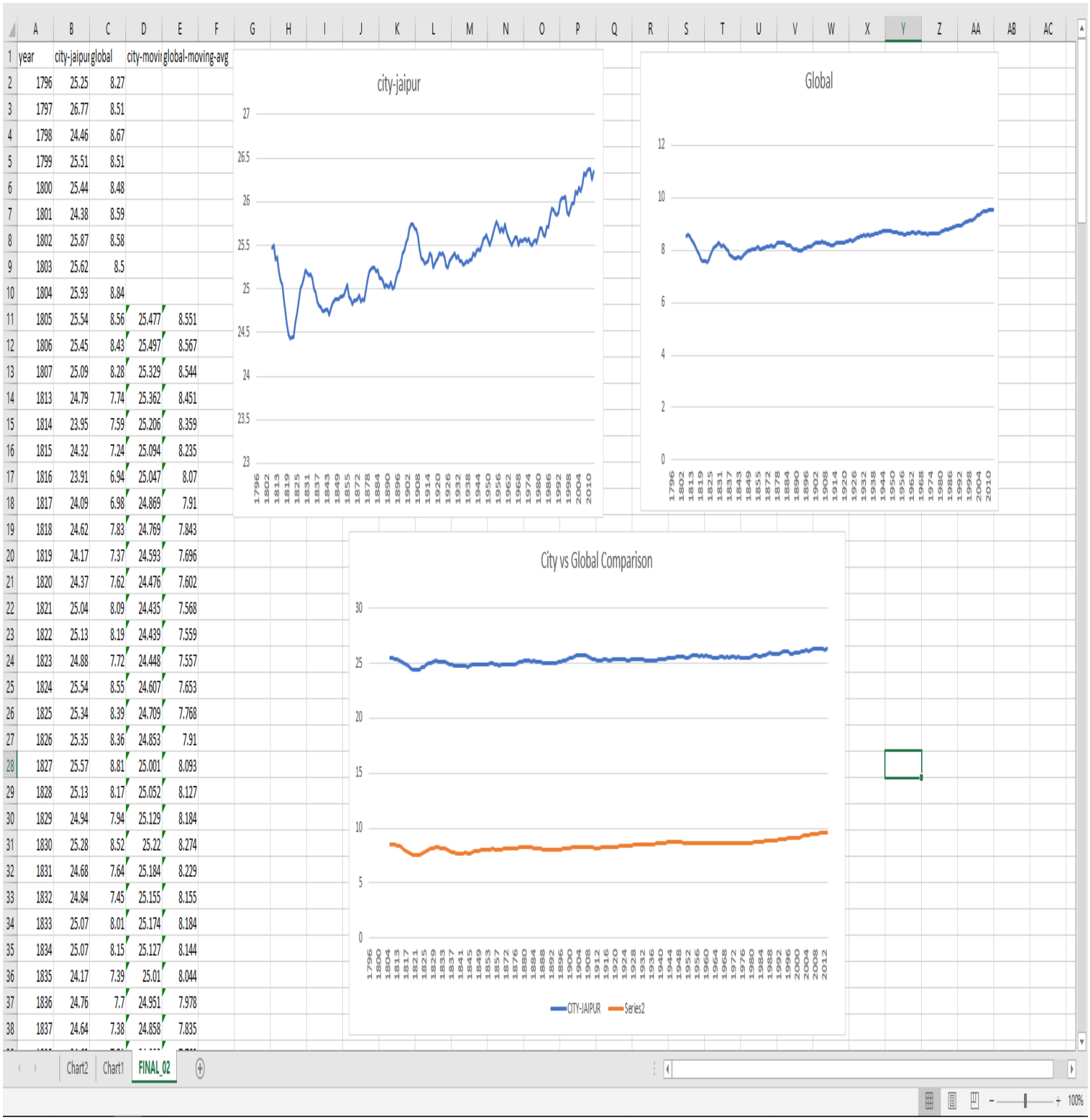
STEP 1- Writing SQL queries to fetch the average temperature of my city and global average temperature.

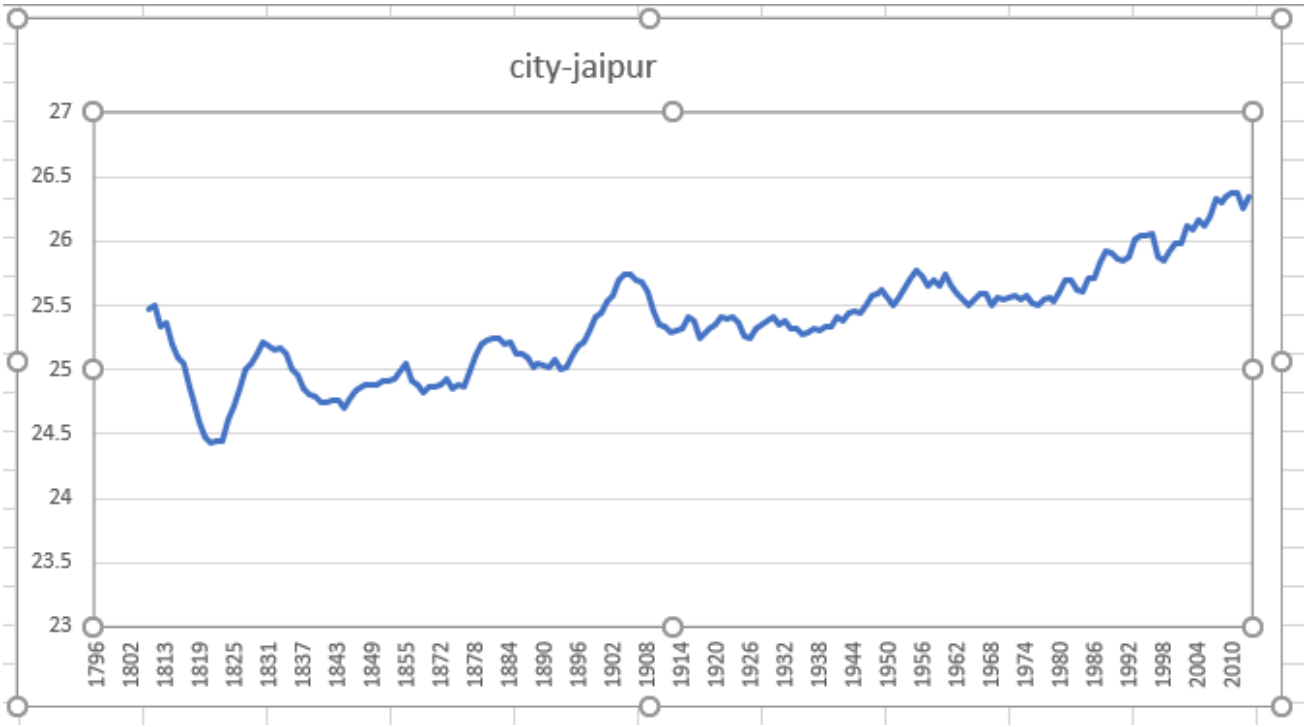
Following are the queries I execute

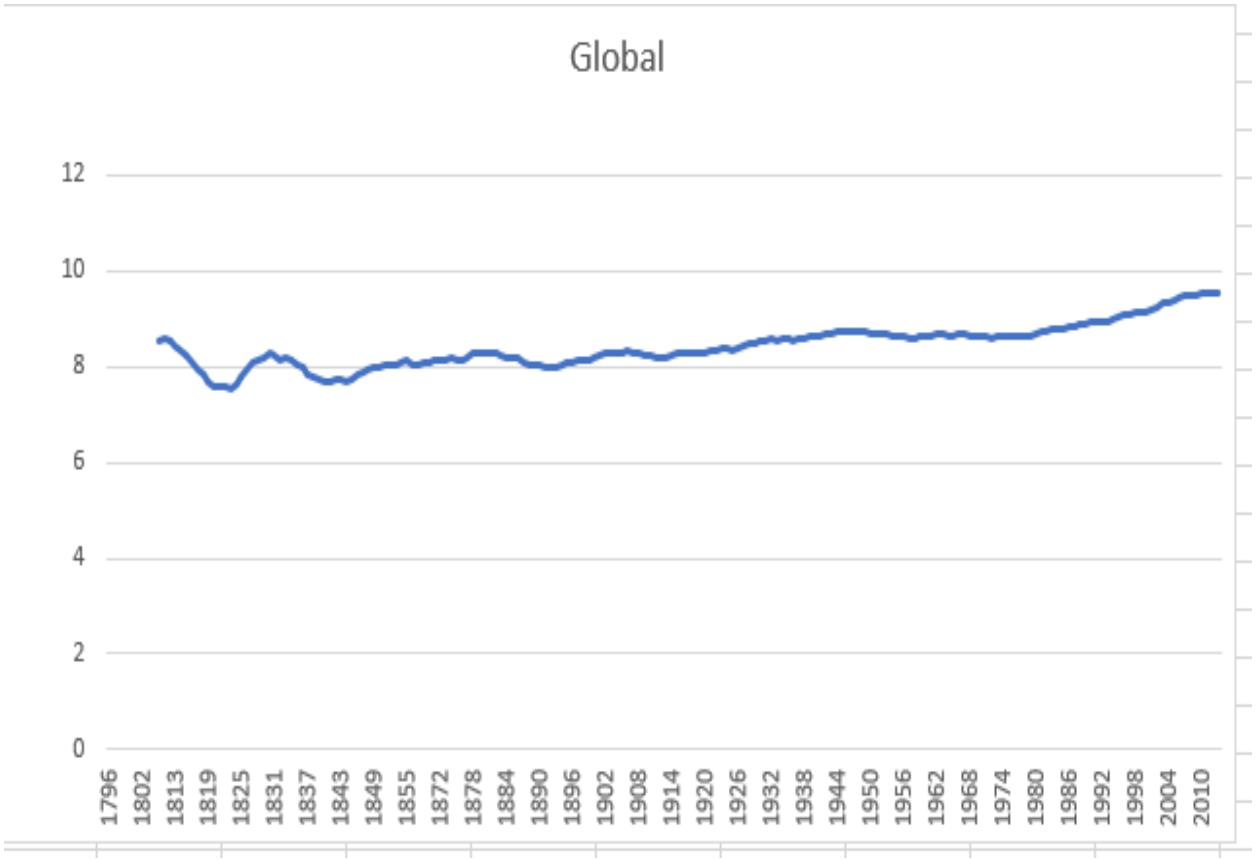
```
SELECT city

FROM city_list

WHERE country='India';


SELECT year , avg_temp

FROM city_data

WHERE city='Jaipur';


SELECT year,avg_temp

FROM global_data;
```

STEP 2- Export TO CSV

STEP 3- Calculating moving averages and then plotting




city-jaipur
27
26.5
26
25.5
25
24.5
24
23.5
23
1796
1802
1813
1819
1825
1831
1837
1843
1849
1855
1872
1878
1884
1890
1896
1902
1908
1914
1920
1926
1932
1938
1944
1950
1956
1962
1968
1974
1980
1986
1992
1998
2004
2010


Global
12
10
8
6
4
2
0
1796
1802
1813
1819
1825
1831
1837
1843
1849
1855
1872
1878
1884
1890
1896
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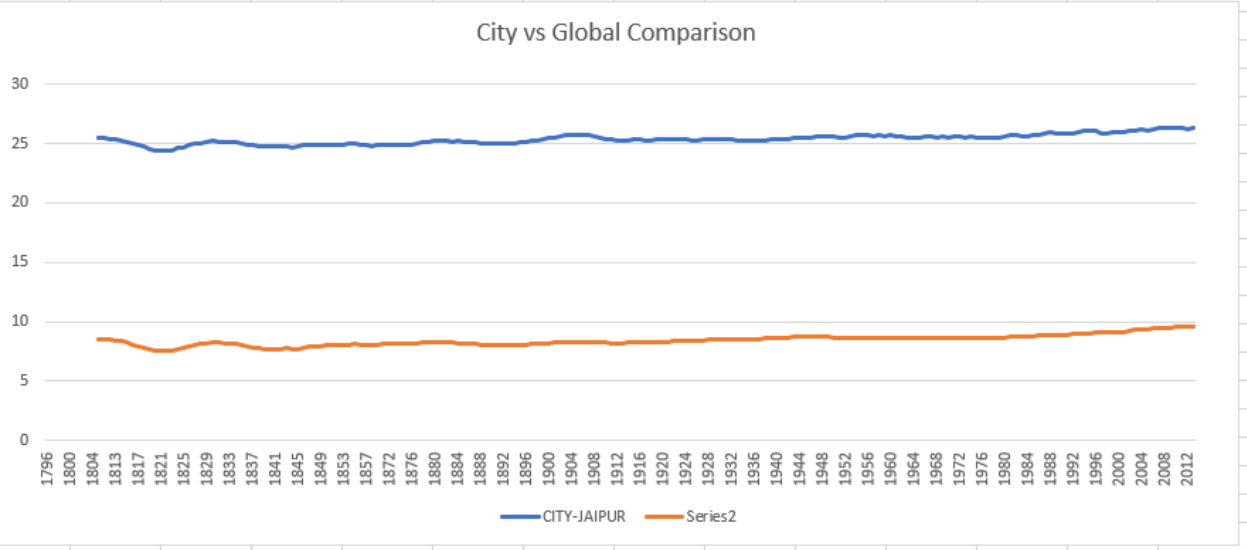

OBSERVATIONS

1.The average temperature of globe has increased with time.

2. Jaipur city has more average temperature then the global average temperature.

3. The trend in the temperature is increasing with time and starting from 8.27 in 1796 to 9.61 in 2015.

4. The difference between global temperature and Jaipur temperature is also consistent over time as we can se in the above figure