

Importing the libraries

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

Reading the data sets

```
global_temperature = pd.read_csv('global_data.csv')
city_temperature = pd.read_csv('local.csv')
```

Viewing the top 5 rows of each data set

```
global_temperature.head()
```

```
↗
```

	year	avg_temp
0	1750	8.72
1	1751	7.98
2	1752	5.78
3	1753	8.39
4	1754	8.47

```
city_temperature.head()
```

```
↗
```

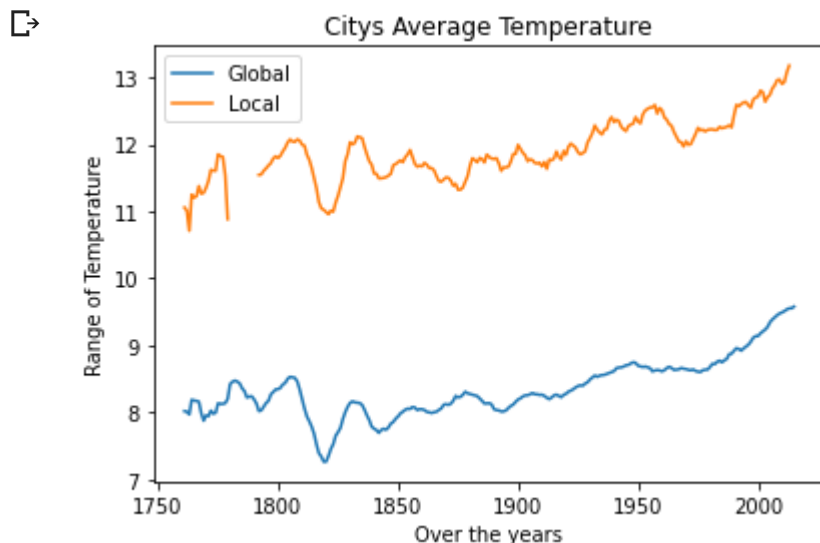
	year	city	country	avg_temp
0	1743	Washington	United States	5.34
1	1744	Washington	United States	13.88
2	1745	Washington	United States	4.00
3	1746	Washington	United States	NaN
4	1747	Washington	United States	NaN

Finding out the moving averages for Global Data and Local Data

```
global_moving_average = global_temperature['avg_temp'].rolling(12).mean()
local_moving_average = city_temperature['avg_temp'].rolling(12).mean()
```

Plotting Graphs

```
plt.plot(global_temperature['year'],global_moving_average,label='Global')
plt.plot(city_temperature['year'],local_moving_average,label='Local')
plt.legend()
plt.xlabel("Over the years")
plt.ylabel("Range of Temperature")
plt.title("Citys Average Temperature")
plt.show()
```



Inference: 1) Over here we have plotted the graph of moving average and tried to draw a comparisic data values and tried to understand the difference. 2) The local temperatures aare represented by tl temperature is represented by blue line 4) The local teperature increases continuously as time incre few years in between 5) The global temperature increases continously with time 6) Global teperatur in the period 1800-1850 7) The local temperature is very high as compared to the global temperatu temperature is much higher than the current global temperature

