

Using SQL to export data

SQL Query to export data

```
select city_data.year,city_data.avg_temp city_temp, global_data.avg_temp global_temp from  
city_data
```

```
inner join global_data on global_data.year=city_data.year
```

```
where city_data.city='Boston';
```

Using Python to calculate moving average and draw line chart

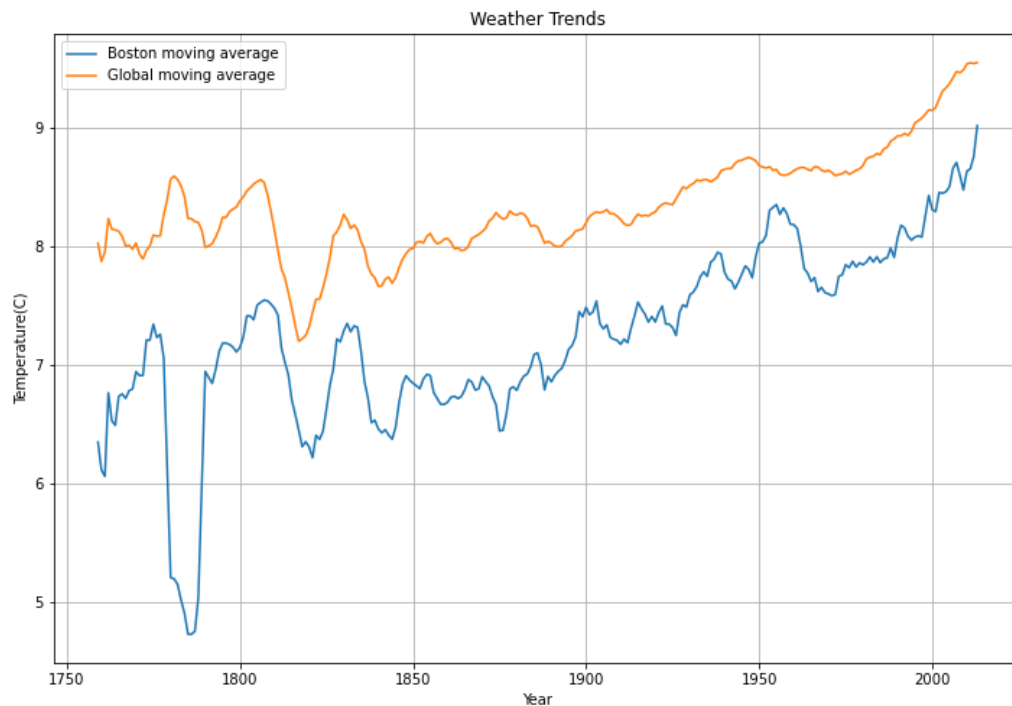
I've tried moving average of 2,3,10, it seems the chart becomes smooth when I use 10.

Calculate moving average of Boston temperature

```
df['moving average_city'] = df.iloc[:,1].rolling(window=10).mean()
```

```
df['moving average_global'] = df.iloc[:,2].rolling(window=10).mean()
```

Draw line chart



Observations

'''

1. Boston is cooler compared to global average, but the difference is becoming smaller.
2. Generally speaking, both the global temperature and Boston temperature are increasing.
3. Both the global temperature and Boston temperature are increasing faster after 1950.
4. Boston temperature has a greater deviation than global temperature during 1750-2015.

'''