- **An outline of steps taken to prepare the data**

SQL is used to pull the data and calculate the moving average temperature for 10 years

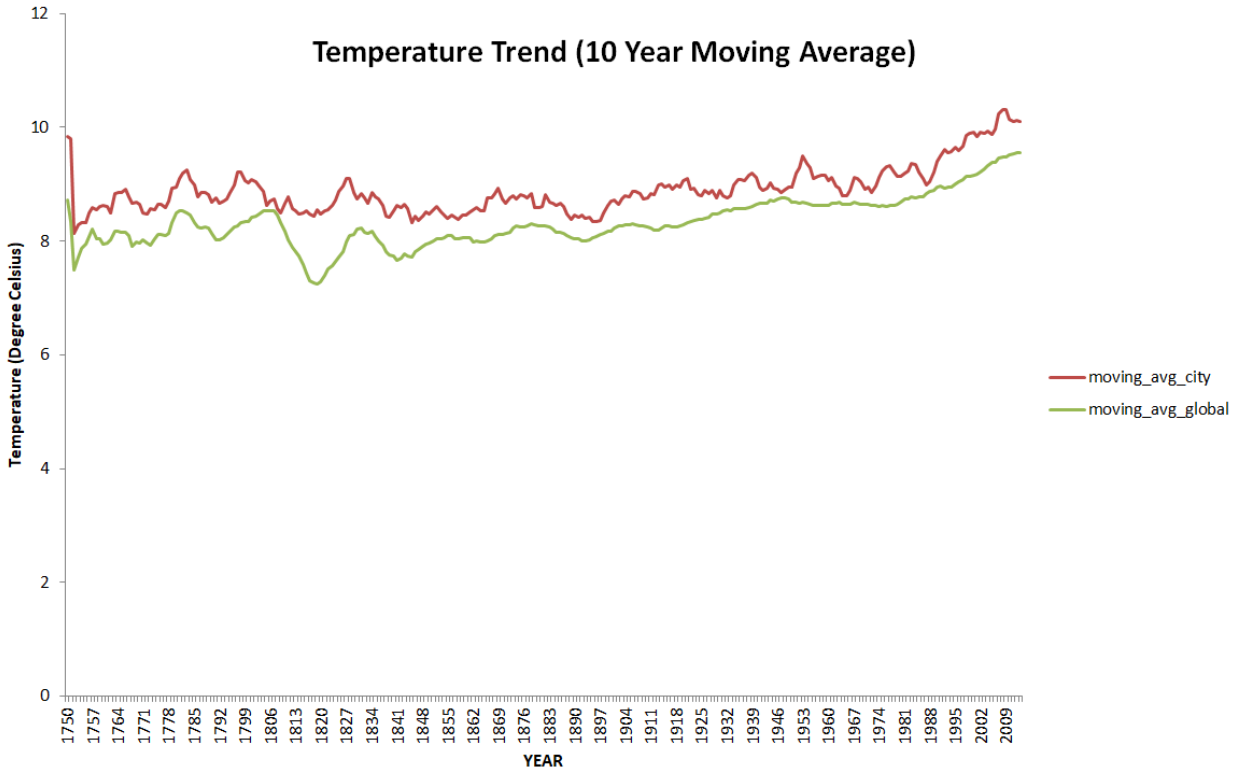
```
select c.year,c.city,c.avg_temp as city_temp, g.avg_temp as global_temp ,
round(avg(c.avg_temp) over(order by c.year asc rows between 10
preceding  and current row),2) as moving_avg_city,
round(avg(g.avg_temp) over(order by c.year asc rows between 10
preceding  and current row),2) as moving_avg_global from city_data c
join global_data g
on
c.year = g.year
where c.city= 'Berlin'
```

year	city	city_temp	global_temp	moving_avg_c	moving_avg_global
1750	Berlin	9.83	8.72	9.83	8.72
1751	Berlin	9.75	7.98	9.79	8.35
1752	Berlin	4.84	5.78	8.14	7.49
1753	Berlin	8.72	8.39	8.29	7.72
1754	Berlin	8.49	8.47	8.33	7.87
1755	Berlin	8.26	8.36	8.32	7.95
1756	Berlin	9.62	8.85	8.5	8.08
1757	Berlin	9.15	9.02	8.58	8.2
1758	Berlin	8.25	6.74	8.55	8.03
1759	Berlin	9.04	7.99	8.6	8.03
1760	Berlin	8.99	7.19	8.63	7.95
1761	Berlin	9.47	8.77	8.6	7.96
1762	Berlin	8.53	8.61	8.49	8.02
1763	Berlin	8.62	7.5	8.83	8.17
1764	Berlin	8.91	8.4	8.85	8.17
1765	Berlin	8.54	8.25	8.85	8.15
1766	Berlin	8.87	8.41	8.91	8.16
1767	Berlin	8.14	8.22	8.77	8.1
1768	Berlin	8.03	6.78	8.67	7.9

- **Calculate the moving average**

  Moving average is calculated for 10 years

- **<u>Line chart with local and global temperature trends</u>**



Below mentioned are the observations about the similarities and/or differences in the trends :

- Global temperatures are slightly less as compared to Berlin.
- The temperatures for Berlin as well as global have increased marginally in the last 250 years of data
- The lowest temperatures found for Global (7.24 deg C) around 1819, whereas for Berlin (8.15 deg C) around 1752.
- The global temperature remained consistent until the year 1957, but after 1957 increased. there seems to be a lot of change in temperature.