Data Preparation:

Using SQL command to find out the nearest city which found out to be **Riyadh**:

```
select *

from city_list
```

After that, looking for **Riyadh** data from city_data table, I used SQL command:

```
select *

from city_data

where city_data.city = 'Riyadh'
```

at last I downloaded the **global data**:

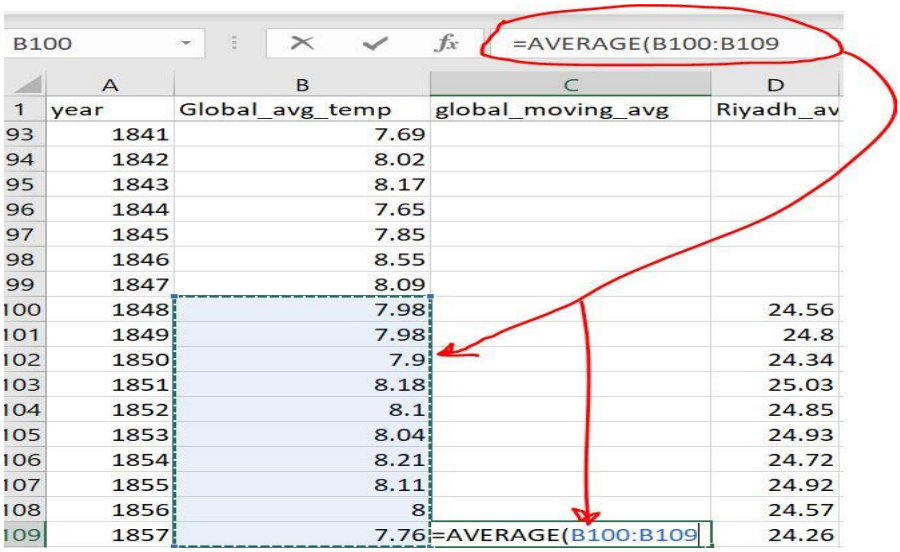
```
select *

from global_data
```

all as **csv** then open them in **Excel**.

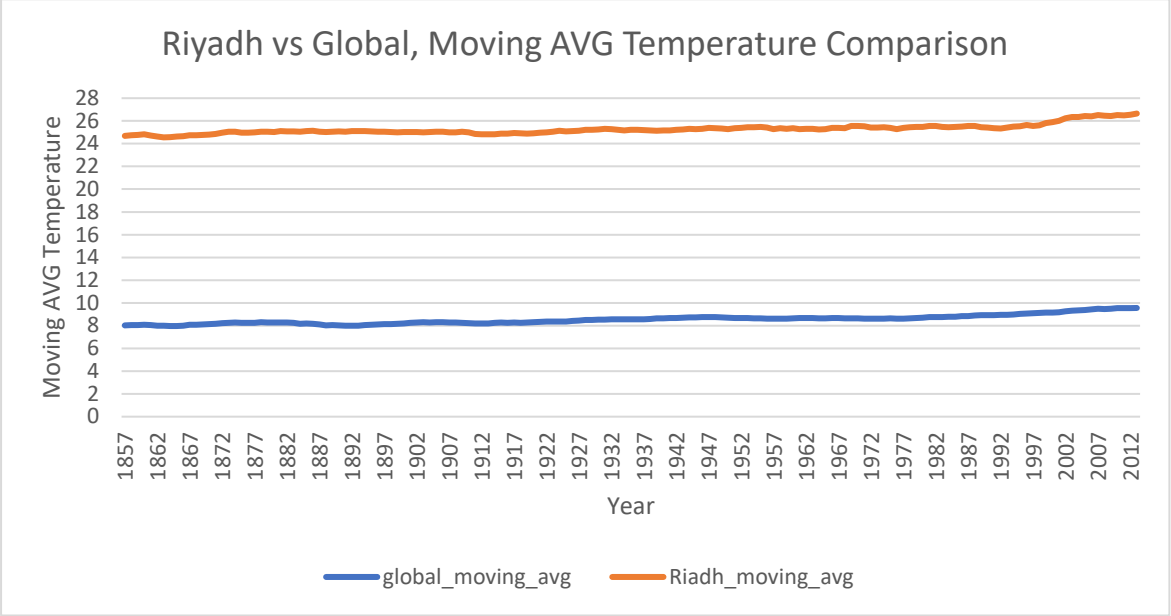
Moving Average Calculation:

Riyadh temperature records are available from **1848 to 2013**, so, this is where we will compare with global temperature.

I first used the AVERAGE function on the B100 to B109 cells (AVERAGE(B100:B109)), which is the global avg temp for the years 1848 to 1857, and then dragged the formula down



To have the moving average temperature, we will do the comparison for moving average **per 10 years**



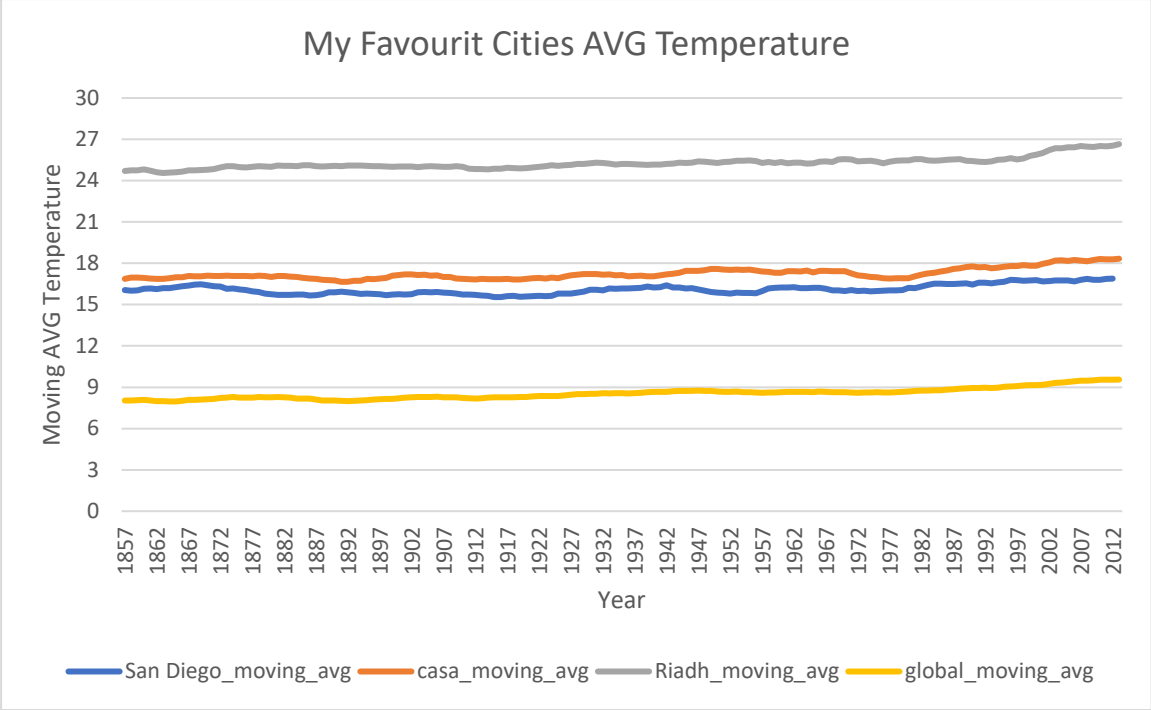
Observations:

1- Riyadh is **hotter than the global temperature** with about **16 degrees** over the years.
2- The difference in temperature is almost stable, **always 16 degrees**
3- The **global temperature is increasing with low amount over the years**. Global temperature for decade of 1857 is about 8 degrees, it reaches up to 9.5 for the decade of 2013 (**1.5 degrees increase**)
4- **Riyadh temperature is also the same**, for decade of 1857 is about 24.5 degrees, it reaches up to 26.5 for the decade of 2013 (**2 degrees increase**)

Finally:

I picked **two of my favorite cities in two different continents** and compared them with my hometown and global data.

San Diego looks less affected with temperature change.


My Favourit Cities AVG Temperature
Moving AVG Temperature
30
27
24
21
18
15
12
9
6
3
0
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
San Diego_moving_avg
casa_moving_avg
Riadh_moving_avg
global_moving_avg