The first project has completed by going through the following steps:

Step1: Writing several SQL queries to extract the data which will be used in data analysis.

1- **This query was to check the nearest city to my city in Saudi Arabia.**

```
SELECT *
FROM city_list
WHERE country = 'Saudi Arabia'
```

Output: List of cities which are in Saudi Arabia and Riyadh was the nearest.

2- **This query for extracting the Riyadh city data.**

```
SELECT *
FROM city_data
WHERE city = 'Riyadh'
```

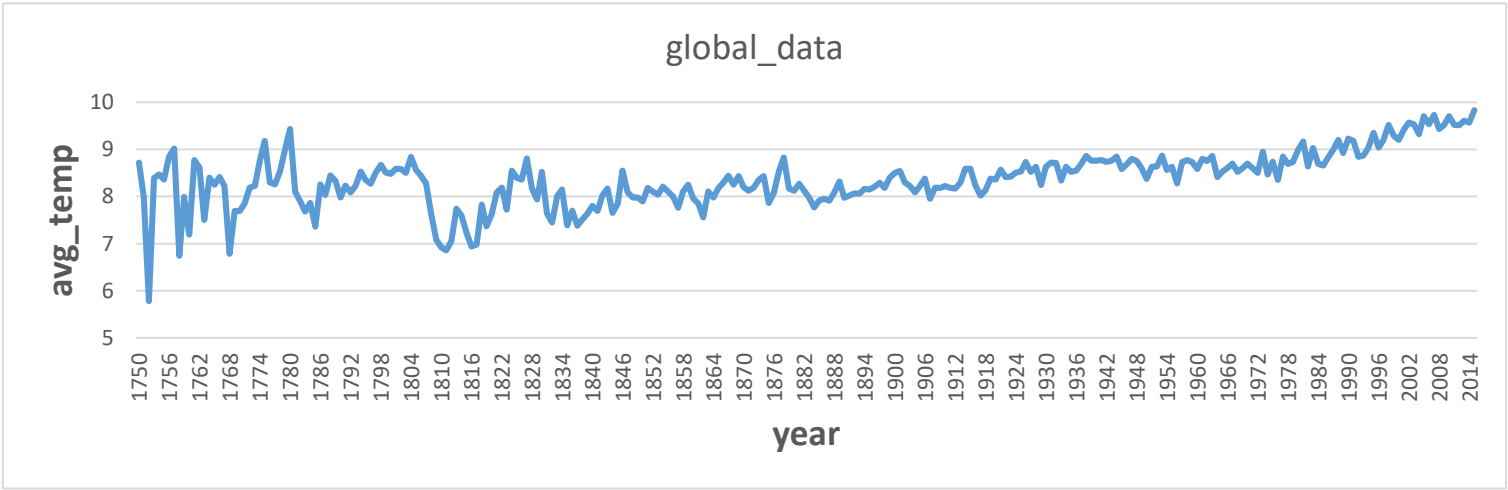
Output: The average temperature of Riyadh for each year.

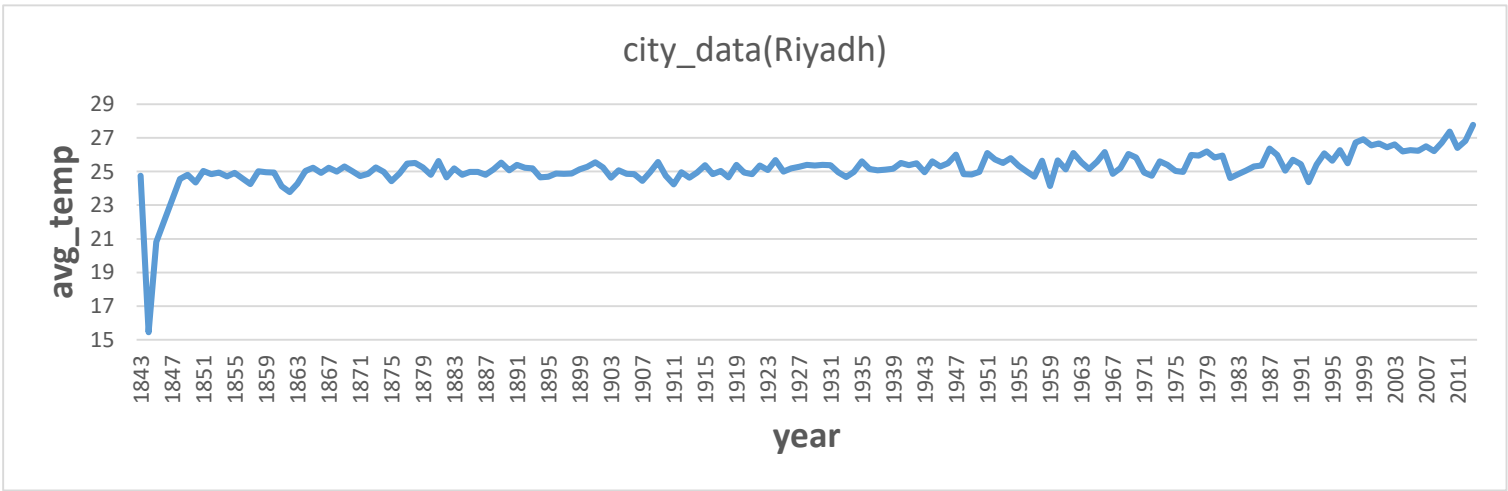
3- **Last query for extracting the global data.**

```
SELECT *
FROM global_data
```

Output: The average temperature of global for each year.

Step2: Visualizing the data with line charts in Excel.

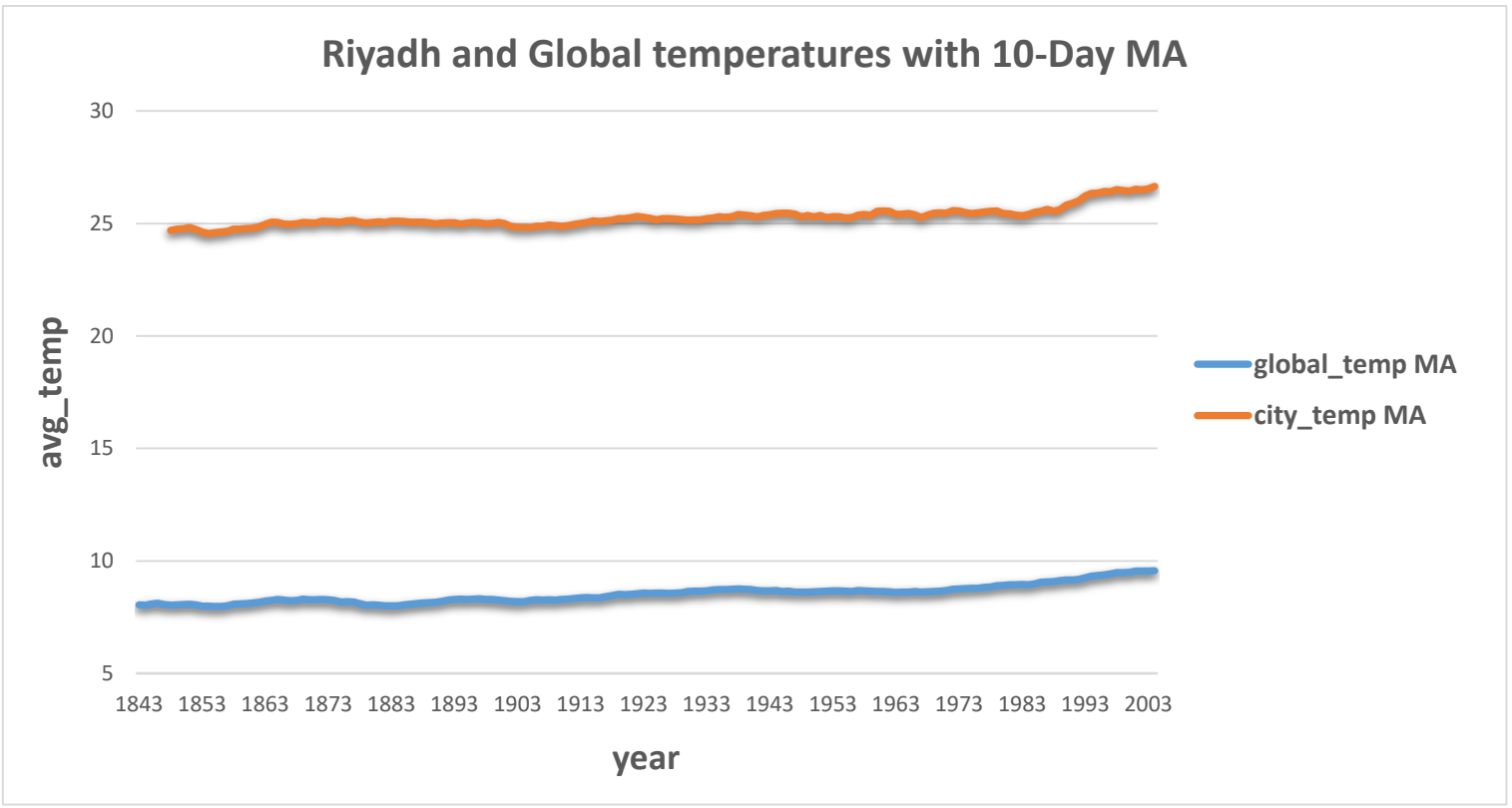




Step3: Calculate the moving average (MA) for both global data and city data, then combine them in one line chart.

10-Day MA calculated for both data and this is the way:

- Create new column in Excel for global_data spreadsheet named (global_temp MA) and for city_data spreadsheet named (city_temp MA).
- Write in 10th cell [=AVERAGE (Select the first ten cells in avg_temp)] for both global and city data.
- Select the two new columns (MA) and create the line chart.



Observations:

- Riyadh city is hotter than the average of global cities.
- The temperatures in both Riyadh city and global cities are increased over time.
- The temperatures in both Riyadh city and global cities are increased slowly.
- In the previous 25 years, the indicator has raised in Riyadh city much more than global.