Name : Ahmad Alsohail – Email: <a href="mailto:ahmadalsohail@gmail.com">ahmadalsohail@gmail.com</a>

## The SQL queries I used:

1. To get the data of my City (Riyadh):

SELECT \*
From city\_data
WHERE city = 'Riyadh'

2. To get the global data:

SELECT \*
FROM global data

#### What tools did I use?

I used Excel for analyzing and calculate moving average.

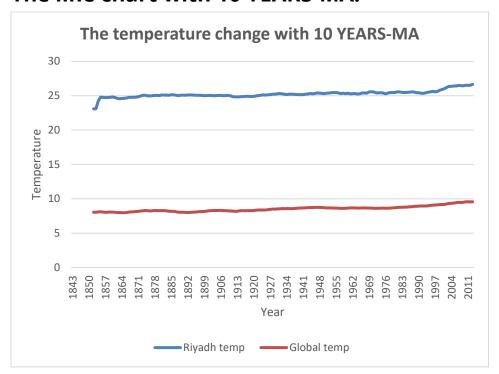
## Calculating moving average:

I used 10 years MA for smoother line chart. And I used the command =AVERAGE(D2:D11) on Excel.

# What were the key considerations when deciding how to visualize the trends?

First thing I consider is deciding the moving average which I decide it to be 10 YEARS Moving Average.

#### • The line chart with 10 YEARS-MA:



### • Observations:

# 1. Is Riyadh becoming hotter?

Riyadh Temperature is hotter than the global average temperature, and the difference has been almost constant over the time except between 1951-1955 and between 1995-2013.

#### 2. Compare:

the change in Riyadh temperature was little except from 1951 to 1955 where it changed Significantly and also from 1995 until 2013

while the change in the global temperature wasn't big most of the years but it was also growing a little, until 1980 where it starts to grow Significantly.

#### 3. What does the overall trend look like?

The world is becoming hotter in both the global temp and Riyadh temp.

Where it starts in Riyadh as 23.073 in 1951 and became 26.65 in 2013

And the global starts with 8.045 in 1951 and became 9.556.

### 4. in what year was the highest temperature:

in Riyadh the highest temperature was clearly in 2013, and for the global temperature it is also in 2013, which proves that the whole world today has become hotter than before.