

Extract the data :

First, I looked up the database to pick a city near me. To do that, I executed the following query:

```
select * from city_list where country='Saudi Arabia'.
```

The resulted records showed that two cities Riyadh and Mecca. Based on my current location, the nearest city is Mecca. Therefore, I wrote the next query to extract all related records for Mecca from city-data table.

```
select * from city_data where city='Mecca'
```

After that, I extracted the global temperature by executing the following query:

```
select * from global_data
```

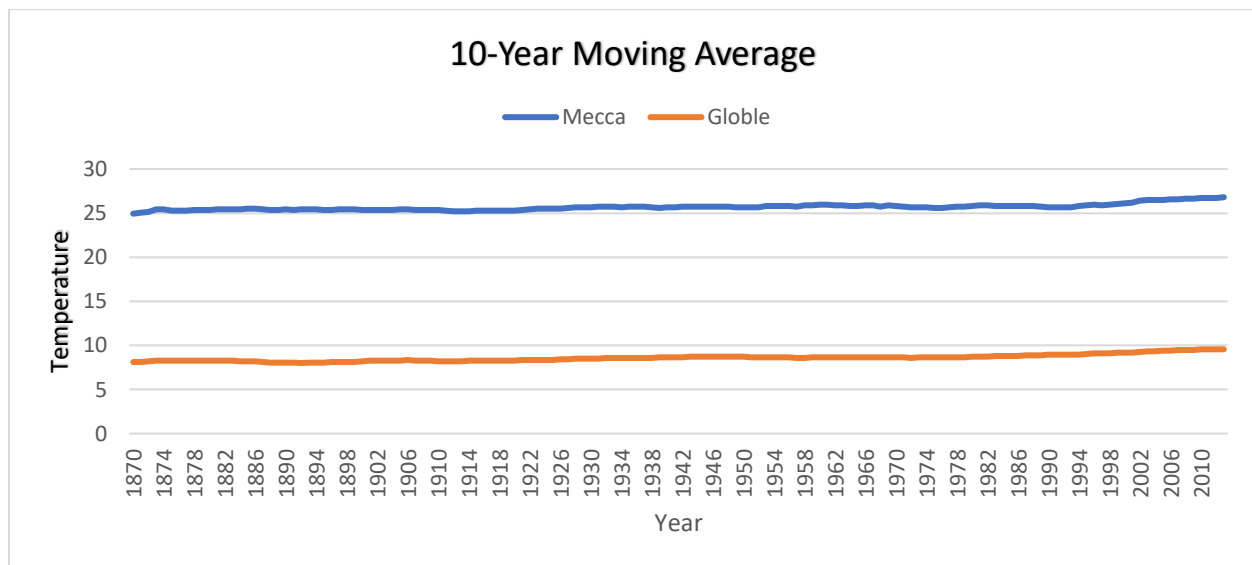
Then I found that years in Global table is starting form 1750. Also, there is some miss values in Mecca table from 1846 to 1860. I started to collect data from 1861. So, I wrote these queries to have the right number of years.

```
select * from global_data where year >= 1861
```

```
select * from city_data where year >= 1861 and city='Mecca'
```

Creating a line chart:

I use Excel to calculate the moving average. To understand the trends between mecca and global temperatures, I chose to calculate the moving average based on 10-year period. Then, I created the following line chart.



Observations:

When we look at the average temperatures, we can notice that Mecca had the hotter temperatures than the global temperatures. Also, Mecca temperatures were steady over the time. Global temperatures were slightly changing over time going up and down but Mecca had small changes in the temperature which started at 2002 which getting more hotter. Overall, the global temperatures getting hotter from 2006.