

The 1<sup>st</sup> Project Of Data Analysis Nano Degree

# **Udacity**

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### Summary:

In this project I analyze and compare the temperature trends in local city (Mecca) to global temperature trends

#### 1. Data extraction:

I used SQL code to extract:

1.1 To show cities

Select \* from city list

1.2 To extract data of Nearest city (Mecca):

Select \* from city\_data

Where city = 'Mecca'

1.3 To extract global data:

Select \* from global\_data

## 2. Data wrangling:

In city data of Mecca there was missing values of the average temperature between 1846 and 1860. I decided to remove all the data that have missing values which are the data of 15 years.

## 3. Data manipulation

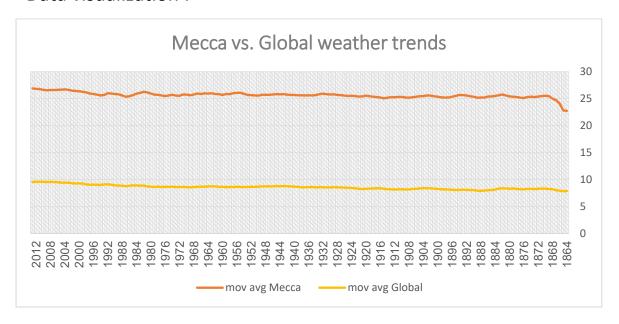
I used Microsoft Excel to deal with data and represent it , the moving average was calculated for 5 years so we can observe the pattern .

I calculate 5 years moving average using excel formula

- = AVERAGE (B2:B6)
- = AVERAGE (C2:C6)

Where is column B is Mecca average temperature and column C is Global average temperature .

### Data visualization:



#### Observation:

- both Mecca and Global temperature seems to constantly increasing but, there is more ups and downs in Mecca temperature .
- Mecca temperature is higher than the average of the global  $\boldsymbol{.}$
- Mecca average temperature is between 21 to 27 degree Celsius On other hand Global average temperature is between 8 to 10 degree, Mecca is nearly 3 times hotter than global average.

