# Explore Weather Trends
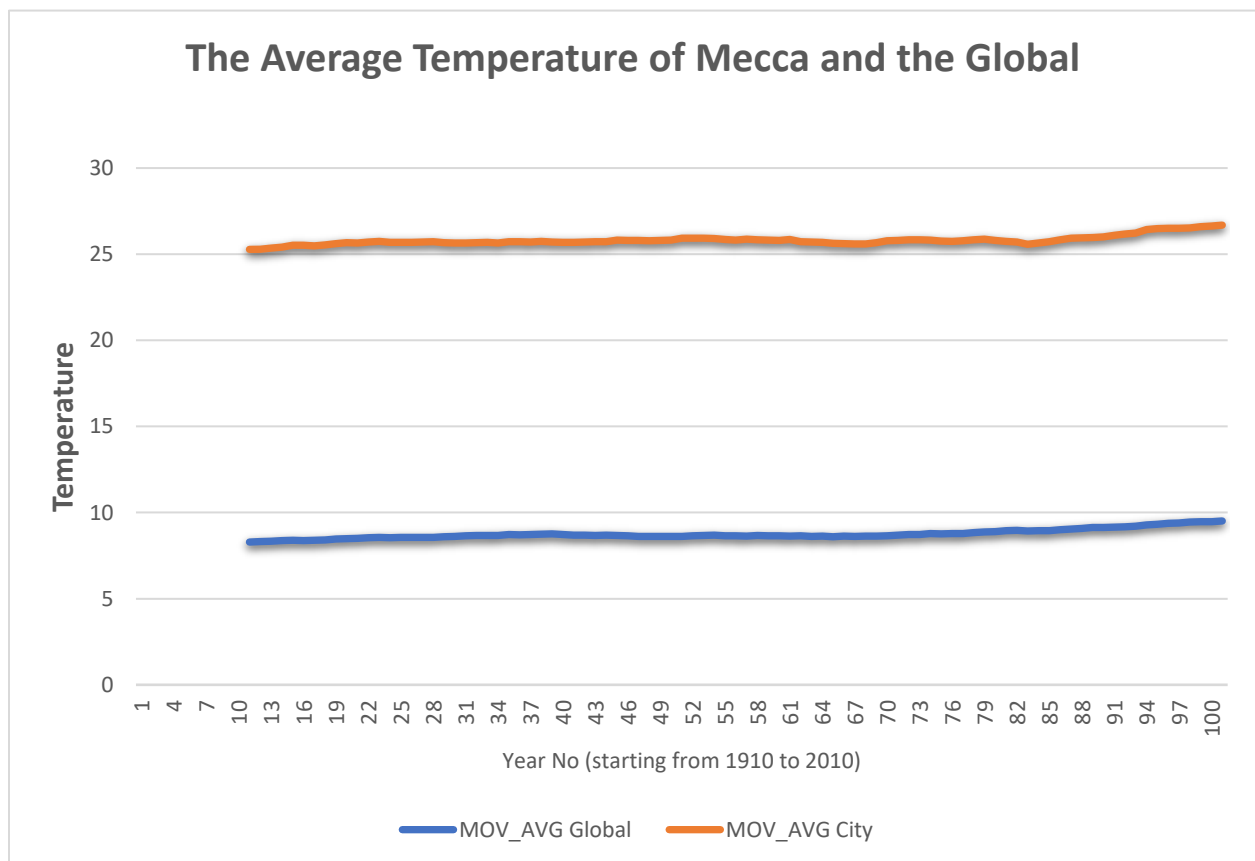
1- I extracted data from the database of global_data table and city_data table using the following query
   SELECT c.year AS year, c.city city, c.avg_temp avg_temp FROM city_data c
   WHERE c.city = 'Mecca' AND c.avg_temp IS NOT NULL
   ORDER BY year
   SELECT * FROM global_data
   WHERE avg_temp IS NOT NULL
   ORDER BY year

2- I merged the two csv files in the command line prompt and chose a period of 100 years from 1910 to 2010 to compare trends locally and globally

3- I calculated the moving average for the first ten years till 2010 in Excel using =AVERAGE function

4- I plotted the following line chart for the moving average in Mecca, the nearest city where I live from and the global moving average, I discovered four observations from the following graph in the next page

the four observations:

• My city's average temperature is hotter than the global temperature

• Overall, my city's average temperature is almost triple the global's average temperature

• For the last ten years, there has been an increase in the temperature for the Mecca and global, it's getting hotter for both

• At year no.83 (1991) there was a decrease in Mecca whereas the global temperature had an increase for the same year