ASSIGNMENT 2

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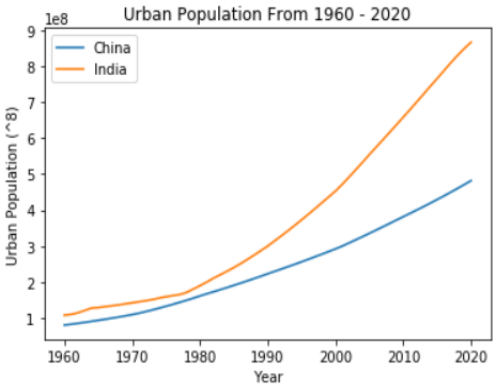
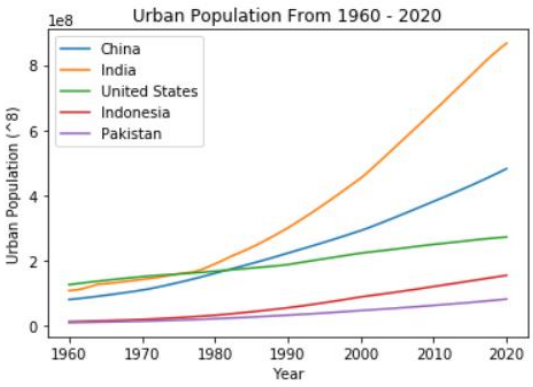
URBAN POPULATION GROWTH AND CO2 EMISSION ANALYSIS

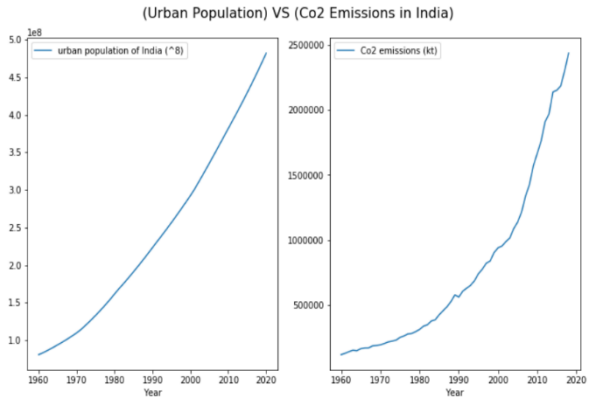
This report presents the findings obtained from the World Bank's statistical information management and analysis database which is a vast data set containing information such as CO2 emissions, population growth, agricultural activities etc obtained in different countries during the period 1960 to 2020. The data obtained were unbalanced due to the fact that there were null values and so that the data has been cleaned and only the data needed were selected for applying proper visualization techniques.

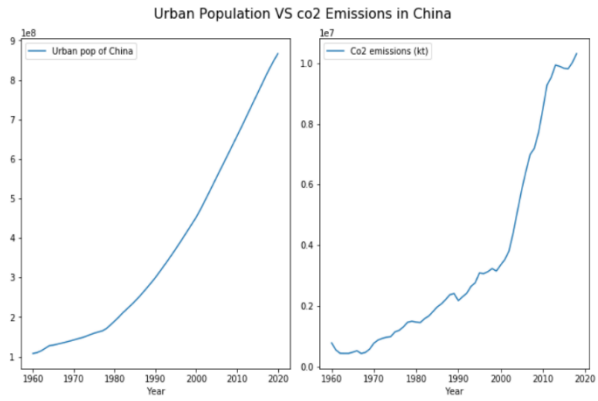
After going through the data set, I thought to explore more on the growth of urban population in different countries. At first the urban population growth in China and India is compared and turns out India has the highest growth in urban population over the decades. Also, while researching on the 5 most populated countries (i.e, China, India, United States, Indonesia, Pakistan) China and India tops the list. During this analysis one of the major findings that I came across was that India emerges as the most populated country in the world and has the highest growth rate compared to other countries. The findings of this analysis are shown below.





For doing the second task, that is to find any correlation, I've considered the urban population growth and its effect on CO2 emissions. The aim is to find if there is any relation between population growth and CO2 emissions in kilo ton and for that China and India are being considered for analysis. The analysis is done individually on China and India and according to the trend, it is proven that there is a direct relationship between the urban population growth and CO2 emissions. This is highly supported by the Pearsons value of 0.9762, which is close to 1 and proves the correlation.





In conclusion, this report concentrated on two main things, firstly, with the proper data manipulation and visualization techniques it was able to find the rate of urban population growth in India and the other five populated countries. Second and the major finding of this paper lend support to the assertion that the growth rate in urban population is one of the main causes of increase in carbon dioxide emissions over the past decades. This observation can in turn help people be more aware about the society that they are living in.