Question:

As we know air pollution is very big issue in today’s world especially in India, we will looking at air pollution data at <https://www.kaggle.com/shrutibhargava94/india-air-quality-data>  and do analysis of the air pollution. We will looking at following questions.

1. Find out the top 3 polluting states in 2015
2. Analysis the trend for these top polluting states over the years
3. Analysis the trend for Bangalore as well over the past years
4. Predict the pollution levels for one of these top states for coming Diwali

A.

1. Delhi ranked highest in NO2,PM2.5 and RSPM so is the most polluted state all over

2. Haryana has highest Nitrogen Dioxide level

3. Mizoram is least polluted w.r.t. NO2,SO2 and RSPM.

4. Mizoram and Nagaland least polluted w.r.t. NO2 and SO2.

5. Delhi and Uttar Pradesh have highest levels of RSPM.

6. Air pollution of north Indian states is much more than that of South Indian states.

7. We will look at trends over the years for Delhi, Haryana, Uttar Pradesh as they seem to be top polluting states

B. and C.

1. NO2 and RSPM levels for Delhi has increased over time from 1990 levels while SO2 and SPM levels have come down.

2. For Haryana NO2 levels have increased while RSPM level have decreased by large extent in 2015.

3. In UP, there have been lot of variation in SPM but the average value in 2015 is more than 1990 while SO2 and NO2 levels have remain similar over the period.

4. For Bangalore, SPM levels have increased over the period of time while SO2 and NO2 levels have remain more or less similar.

D.

Following points from the prediction plots

- RSPM levels for the period October-December 2017 in Delhi is 6 times than the permissible limit which is very dangeous

- SPM levels are aso very high more than 6 times the limit

- NO2 levels for the period October-December 2017 in Delhi are relatively better are just above the limit

- SO2 levels well within the permissible limits