## **Air Quality Index:**

This dashboard represents air quality index of four major cities of Pakistan over a year. The data contains measure of PM 2.5 which is a major indicator for air quality index. The data starts from 29 April 2019 and ends at 20 April 2020. Donut chart in this dashboard represents average mean values for each of the cities. The bar chart indicates mean values for each city in different months. This represents mean value for PM 2.5 along the year so helps us indicate which month is potentially hazardous with respect to Air Quality Index. The line chart indicates the trend for air quality index along whole year. This helps us point out trend for each city along whole year and definitely points out maximum and minimum value there is. The gauge chart represents overall mean value for whole year. So instead of indicating mean value of each city like the donut chart, gauge chart indicate mean value for whole timeline.

The maximum value appears to be in the month of December if we closely look at line chart. If we observe bar chart for month of December, it looks like that December has the highest mean value. This is very insight observation which indicates that during winters, Air Quality Index tends to increase. This might be due to high burning of fossil fuels during winters. Also in winters, due to fog, the dust particles tend to settle down and agglomerate. That may also be one of the reason of increased PM 2.5 concentration in winters. Lahore has highest mean average value. This is because Lahore is most populous city after Karachi. The reason Karachi is not on the top is because of its geographic location. Karachi is close to the sea therefore sea breezes are common. Due to this high speed wind, Air Quality Index tends to decrease. This concludes my analysis of Air Quality Index.