Final Project Global Air Pollution

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Dataset: Global Air Pollution

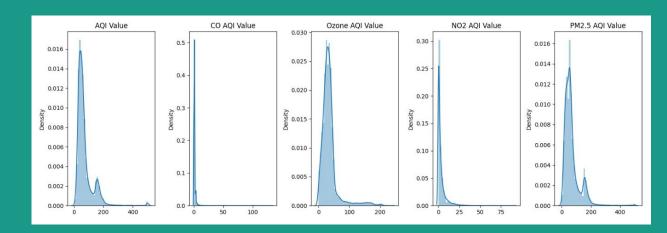
- Country: Name of the country
- City: Name of the city
- AQI Value : Overall AQI value of the city
- AQI Category : Overall AQI category of the city
- CO AQI Value : AQI value of Carbon Monoxide of the city
- CO AQI Category : AQI category of Carbon Monoxide of the city
- Ozone AQI Value : AQI value of Ozone of the city
- Ozone AQI Category : AQI category of Ozone of the city
- NO2 AQI Value : AQI value of Nitrogen Dioxide of the city
- NO2 AQI Category : AQI category of Nitrogen Dioxide of the city
- PM2.5 AQI Value : AQI value of Particulate Matter with a diameter of 2.5 micrometers or less of the city
- PM2.5 AQI Category: AQI category of Particulate Matter with a diameter of 2.5 micrometers or less of the city

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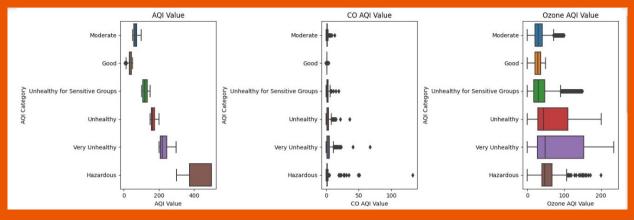
Air Pollution is contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere. Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Pollutants of major public health concern include particulate matter, carbon monoxide, ozone, nitrogen dioxide and sulfur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases and are important sources of morbidity and mortality.

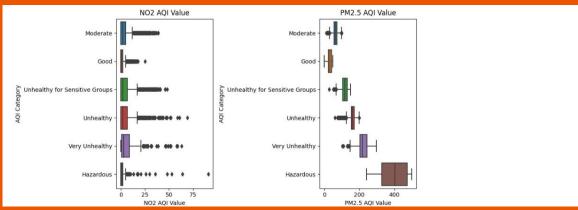
What causes PM2.5?

Displot by features

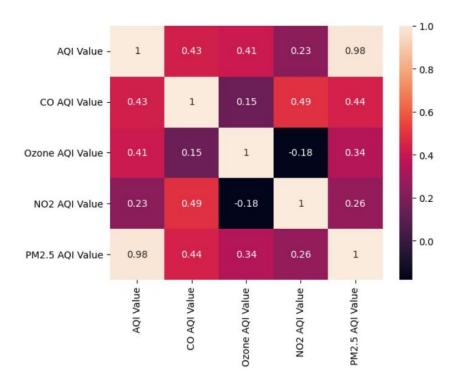


Boxplot by features and categories



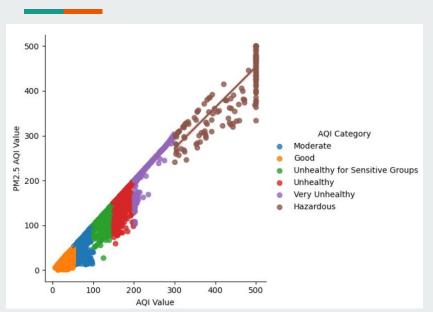


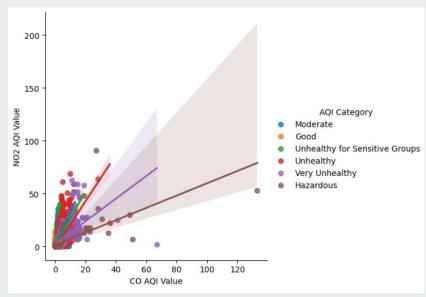
AQI Value and PM2.5 AQI Value are large gap among categories.



Correlation heatmap

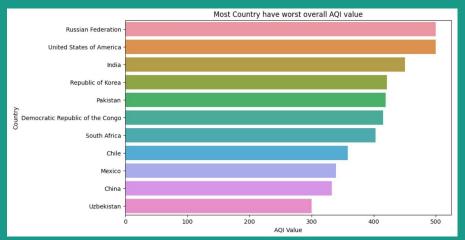
Correlation between AQI Value and PM2.5 AQI Value is 98%

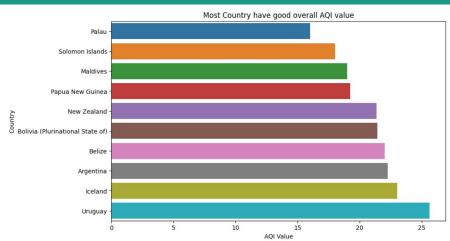




Lmplot between AQI Value and PM2.5 AQI Value with AQI Category

Lmplot between CO AQI Value and NO2 AQI Value with AQI Category





- It can be noticed that Russia has the most polluted air.
- However there is no such urgent task in Paula.