VISHNU INSTITUTE OF TECHNOLOGY

(Autonomous)

(Approved by AICTE, Accredited by NBA & NAAC and permanently affiliated to JNTU Kakinada)

BHIMAVARAM – 534202

2023 – 2024

DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

VISHNU
UNIVERSAL LEARNING

AIR QUALITY INDEX

A Mini Project

submitted in partial fulfillment of the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND BUSINESS SYSTEMS

Submitted by

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Under the esteemed guidance of

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Assistant professor

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CERTIFICATE

This is to certify that the project entitled “AIR QUALITY INDEX" , is being submitted by N.SAI VARUN , MOHAMMED ADHIL , M.PAVAN, A. BHADRA KUMAR,K.MANIKANTA,CH.ADARSH bearing registration number 22PA1A5741 , 22PA1A5755 , 22PA1A5732 ,23PA5A5701,23PA5706, 23PA5A5703 submitted in fulfillment for the award of the degree of “BACHELOR OF TECHNOLOGY” in “COMPUTER SCIENCE AND BUSINESS SYSTEMS” is a record of bonafide work carries out by them under my guidance and supervision during the academic year 2023 - 2024 and it has been found worthy of acceptance according to the requirements of university.

Internal Guide

Mrs Venkata Naga Rani Bandaru

Assistant Professor

Head of the Department

Mrs. M. Sri Lakshmi

HOD & Professor

CONTENTS

INTRODUCTION

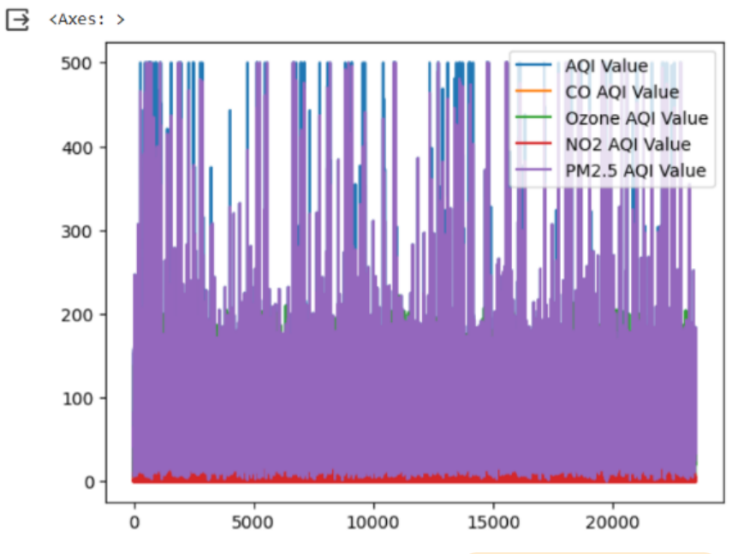
Mini-project description – “AIR QUALITY INDEX”

An air quality index(AQI) is an indicator developed by government agencies to communicate the public how polluted the air currently is or how polluted it is forecast to become. As air pollution levels rise, so does the AQI, along with the associated public health risk. Children, the elderly and individuals with respiratory or cardiovasculary problems are typically the first groups affected by poor air quality.

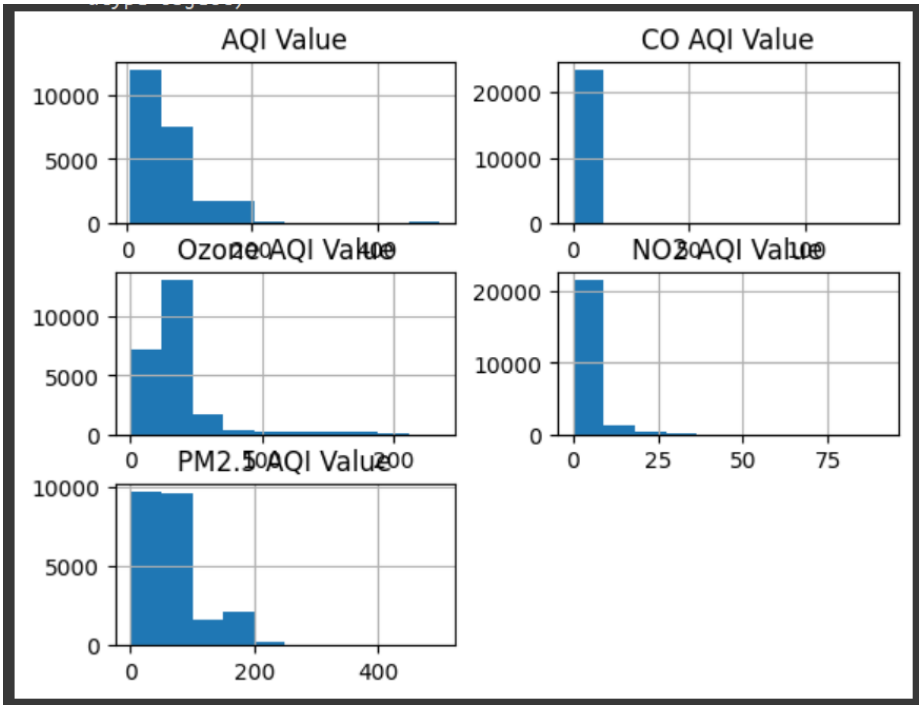
CODING

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
df=pd.read_csv("/content/drive/MyDrive/global air pollution dataset.csv.zip")
df.plot()
```

OUTPUT :



Country	City	AQI Value	AQI Category	CO AQI Value	CO AQI Category	Ozone AQI Value	Ozone AQI Category	NO2 AQI Value	NO2 AQI Category	PM2.5 AQI Value	PM2.5 AQI Category
Russian Federation	Praskoveya	51	Moderate	1	Good	36	Good	0	Good	51	Moderate
Brazil	Presidente Dutra	41	Good	1	Good	5	Good	1	Good	41	Good
Italy	Priolo Gargallo	66	Moderate	1	Good	39	Good	2	Good	66	Moderate
Poland	Przasnysz	34	Good	1	Good	34	Good	0	Good	20	Good
France	Punaauia	22	Good	0	Good	22	Good	0	Good	6	Good



index: 1 to 5

Country: India

City: ONGOLE

AQI Value: 20 to 25

AQI Category: good

CO AQI Value: 13 to 15

CO AQI Category: good

Ozone AQI Value: 12 to 18

Ozone AQI Category: good

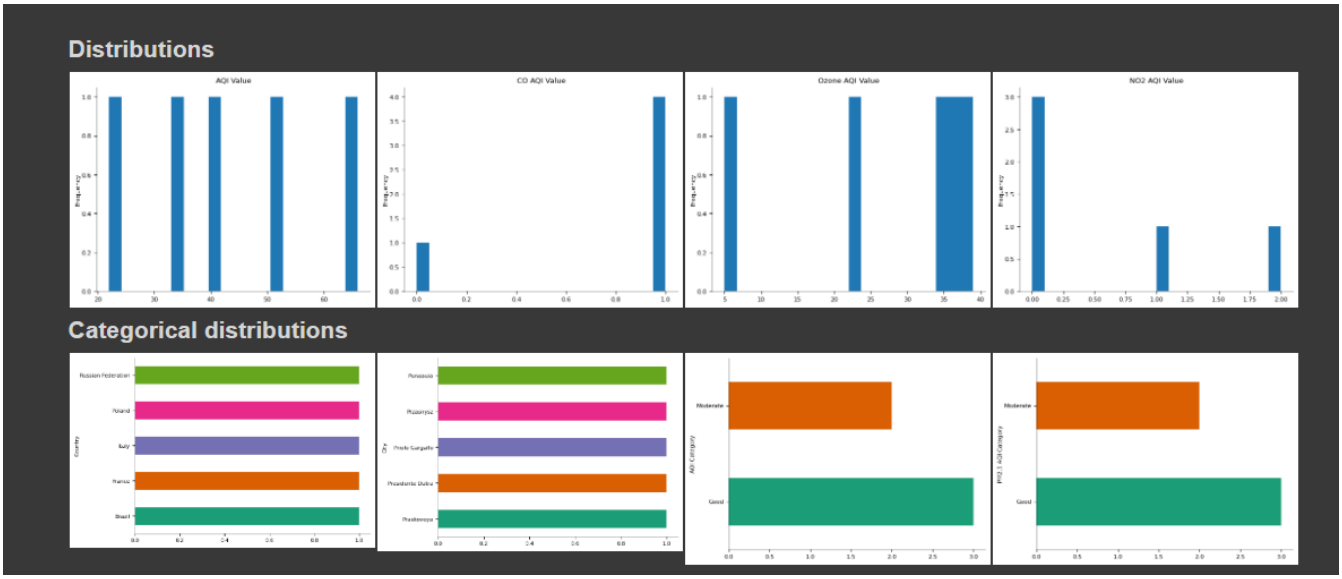
NO2 AQI Value: 15 to 19

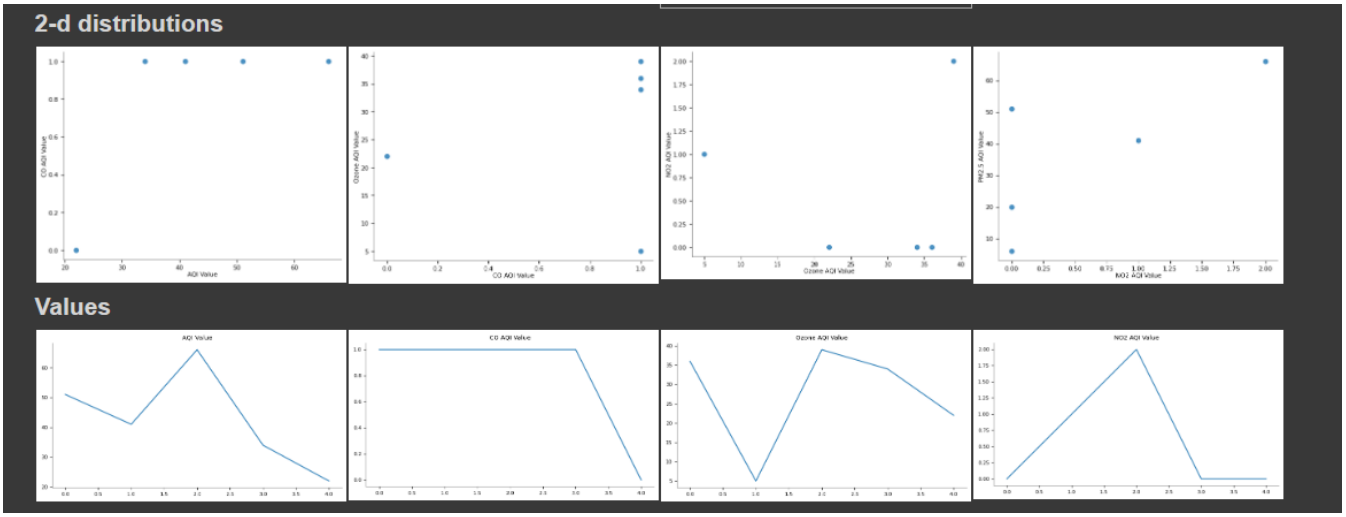
NO2 AQI Category: good

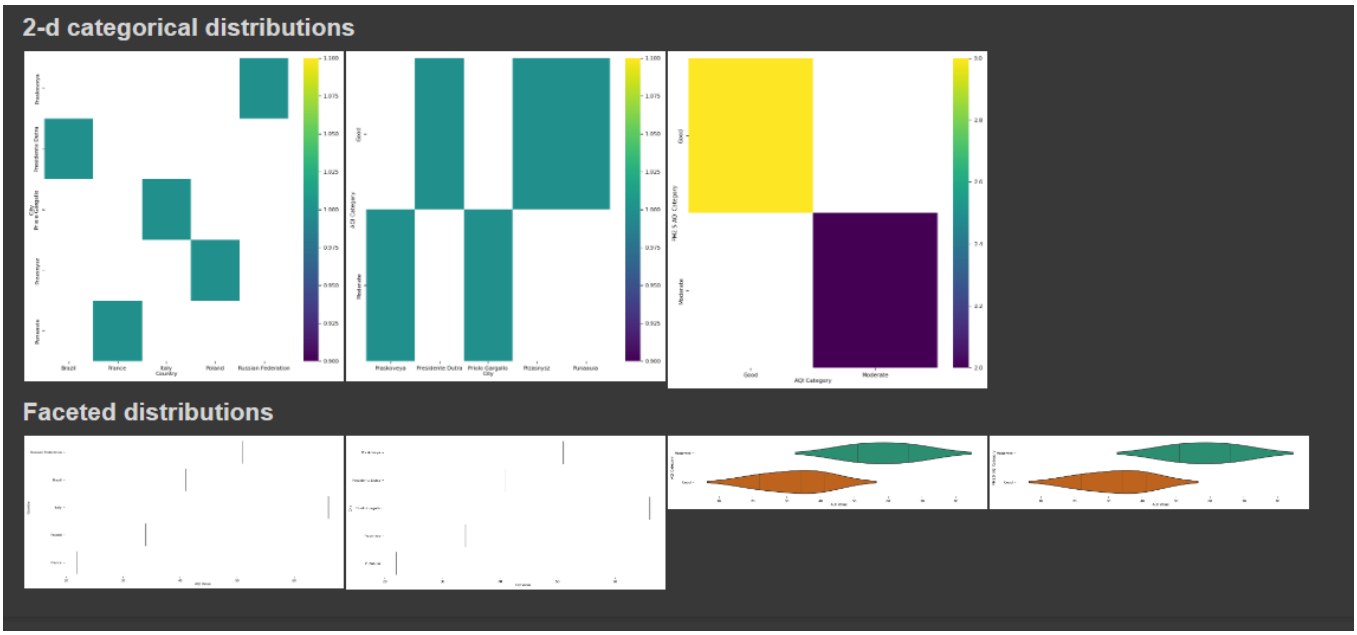
PM2.5 AQI Value: 30 to 34

PM2.5 AQI Category: good

Search by all fields:







CONCLUSION :

We are hereby completed the project "AIR QUALITY INDEX" using python.