# AIR QUALITY ANALYSIS IN TAMILNADU

PHASE PROJECT 4

DONE BY : A.AARTHI

GUIDED BY : Mrs.B.MOOHAMBIGAI

# INTRODUCTION

- The term air quality refers to the degree to which the air in a particular place is free from pollutants.
- Air pollutants are substances present in the atmosphere at concentrations above their normal background levels which can have a measurable effect on humans, animals and vegetation.

# AIM

- To create data visualizations using data visualization libraries for the Air quality analysis in Tamilnadu.( Ex : Matplotlib,Seaborn)

# DATASET

- https://tn.data.gov.in/resource/location-wise-daily-ambient-air-quality-tamil-nadu-year-2014

# CODE

Python

```
import pandas as pd
# Replace 'your_dataset.csv' with the actual path to the downloaded CSV file_path =
'your_dataset.csv’
# Read the dataset into a Pandas DataFrame
df = pd.read_csv(file_path)
# Explore the dataset
# For example, you can display the first few rows of the dataset:print(df.head())
# You can perform various operations on the DataFrame, like filtering, aggregating, and
visualizing the data.
```

# Example: Filtering data for a specific location (replace 'YourLocation' with the desired location)location_data = df[df['Location'] == 'YourLocation']print(location_data)

# Example: Basic data analysisprint("Summary Statistics:")print(df.describe())

# Example: Data visualization (you may need to install additional libraries like Matplotlib or Seaborn)import matplotlib.pyplot as plt

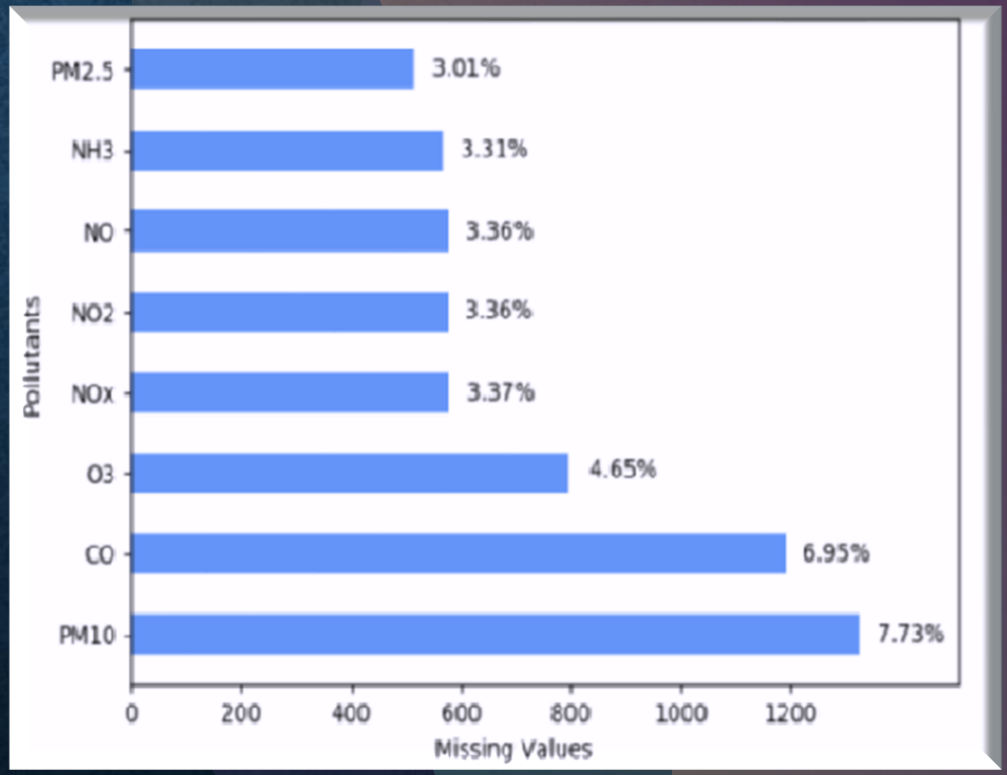
# Plotting a histogram of a specific parameter (replace 'ParameterName' with the desired parameter)

parameter_name = 'ParameterName'df[parameter_name].plot

(kind='hist', bins=20)

plt.title(f'Histogram of {parameter_name}')plt.xlabel(parameter_name)plt.ylabel('Frequency')plt.show()

```
plt.title(f'Histogram of {parameter_name}')
plt.xlabel(parameter_name)
plt.ylabel('Frequency')
plt.show()
```



# THANK YOU