AIR QUALITY ANALYSIS IN TAMILNADU

PHASE PROJECT 4

DONE BY : M.ABI

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()
```
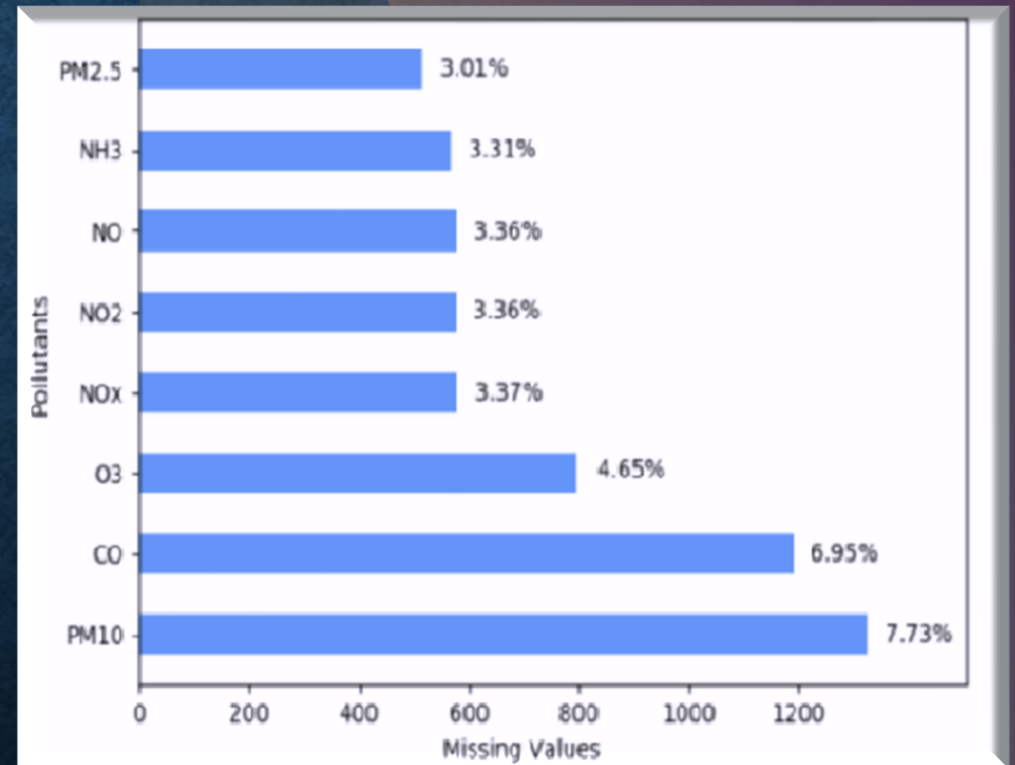
```
plt.title(f'Histogram of {parameter_name}')

plt.xlabel(parameter_name)

plt.ylabel('Frequency')

plt.show()
```

THANK YOU