## **Questions for Analysis**

## **Basic Level Questions:**

- 1. What is the air quality data recorded in the city of "New York"?
- 2. What was the air quality in "Los Angeles" on "2024-08-01"?
- 3. How many entries exist for each city in the dataset?
- 4. What is the maximum PM2.5 level recorded for each city?
- 5. Are there any records with missing PM10 values?

## Intermediate Level Questions:

- 1. What are the average PM2.5, PM10, NO2, and SO2 levels for each city?
- 2. On which dates was the PM2.5 level above 100 in "Mumbai"?
- 3. What are the average PM2.5 and PM10 levels by country, sorted in descending order?
- 4. What is the correlation between temperature and PM2.5 levels by city?
- 5. Which city had the highest average NO2 levels in July 2024?

## **❖** <u>Hard Level Questions</u>:

- 1. What is the trend in PM2.5 levels over time in "Beijing"? Show monthly averages for the past year.
- 2. Which are the top 5 cities with the highest average PM2.5 levels over the last 6 months?
- 3. How does wind speed affect PM10 levels in different cities? Compare days with wind speeds above and below 15 km/h.
- 4. Are there any days in "Dubai" where PM2.5 and PM10 levels spiked by more than 50% compared to the previous day?