Person 1: Exploratory Data Analysis (EDA) Specialist

1. **Descriptive Statistics**:
    - What are the mean, median, and standard deviation of fine particle (PM 2.5) measurements across all neighborhoods? Identify any outliers.
2. **Distribution Analysis**:
    - Plot the distribution of SO2 emissions across different neighborhoods. Are there any neighborhoods with significantly higher or lower emissions?

Person 2: Temporal Analysis Specialist

1. **Time Series Trends**:
    - Analyze the trends in SO2 emissions over the years in Southeast Queens and Bensonhurst - Bay Ridge. Are there any noticeable increases or decreases?
2. **Seasonal Patterns**:
    - Identify seasonal patterns in the PM 2.5 data. Do pollution levels tend to be higher or lower in certain seasons?

Person 3: Spatial Analysis Specialist

1. **Geospatial Visualization**:
    - Create a map showing the PM 2.5 levels across all neighborhoods using the Geo Join ID. Highlight areas with the highest and lowest levels.
2. **Hotspot Identification**:
    - Identify neighborhoods that consistently show high levels of PM 2.5 and SO2 emissions. What patterns or clusters can you observe?

Person 4: Reporting and Dashboard Specialist

1. **Dashboard Design**:
    - Design a dashboard that includes key metrics and visualizations to effectively communicate trends in pollution levels and health impacts. What elements are essential for a clear and informative dashboard?
2. **Interactive Filters**:
    - Implement interactive filters in the dashboard to allow users to explore data by time period, geographic area, and pollutant type. How would you ensure the filters are user-friendly and insightful?

These tasks and questions will guide each team member in their analysis and help them contribute to a comprehensive understanding of the dataset and its implications for air quality and health in NYC.