**Final Project: Code for Climate**

Write a program that reads in data from an air quality sensor for a day and calculates and plots data relevant to air quality for the day.

Requirements:

1. The program will ask input from the user on which day the user wants to analyze the air quality data
2. It will then load the csv file for the day chosen.
3. It will find out the average concentrations for particulate matter (both PM2.5 and PM10) for the day.
4. It will use the equation provided in the **AQI Technical Assistance** Document (Page 9 – 11) and calculate the Air Quality Index (AQI) for the day.
5. It will plot the variation of PM2.5 or PM10 concentrations hour-by-hour basis for that day.
6. Optional: The program will plot how the temperature and relative humidity varied hourly through the day
7. Optional: The program will report the maximum and minimum temperature and the hour of the day when the temperature reached maximum and minimum value.
8. Once you are done with your project – find at least one other person in the team to test the code as a user.
9. Make sure you document the program well by using appropriate comments.
10. Work on your **final\_project\_aqi.ipynb** file and push it back to github once done.
11. Use the features of Python you have learnt so far, e.g., use of modules, functions, loops, lists, etc.

Note: Read the pages 9 – 11 of the document provided. It also has examples of how to calculate AQI.