File Reading

1. Read airquality.csv file. Note: you may have to use double slash for path ("data\\airquality.csv") as '\a' is an escape character.
2. Understand about the data from airquality.pdf

Data Frame properties and quality check

3. How many rows in the data?
4. How many columns in the data?
5. What are the column names?
6. How many null values in Ozone column (Note: nans are treated as nulls. There is a pandas function to catch nulls)

Data Frame slicing

7. Slice from airquality a dataframe which only has rows with valid entries for Solar.R. Remove rows which has null values in Solar.R column
8. What is the average value of Ozone column?
9. What is the average value of Solar.R on days with temperature above average temperature?
10. Slice only records of 15th day of each month
11. Slice records of 6th and 8th month alone
12. What is the average ozone values of the days where both Solar.R and Temperature are above their averages?

For loops

13. Calculate average values of Ozone, Solar, Wind and Temperature and save in a list/array/series
14. Calculate month-wise average Ozone and save in a list/array/series
15. Calculate month-wise average Ozone, Solar, Wind and Temperature and save in a matrix/data frame. [Hint: nested for loop?]