R Self-Quiz

Please try to answer the following questions in under 1 hour.

- Download and install R from the Comprehensive R Archive Network. Make sure to choose a version that is appropriate for your computing platform (Windows, Mac, or Unix/Linux)
- Download the dataset available located on this web page and load it into R with the read.csv function. Assign the output of read.csv to an object named dataset.
- What are the column names of the data frame?
- What are the row names of the data frame?
- Extract the first 6 rows of the data frame and print them to the console
- How many observations (i.e. rows) are in this data frame?
- Extract the last 6 rows of the data frame and print them to the console
- How many missing values are in the "Ozone" column of this data frame?
- What is the mean of the "Ozone" column in this dataset? Exclude missing values (coded as NA) from this calculation.
- Extract the subset of rows of the data frame where Ozone values are above 31 and Temp values are above 90.
- Use a for loop to create a vector of length 6 containing the mean of each column in the data frame (excluding all missing values).
- Use the apply function to calculate the standard deviation of each column in the data frame (excluding all missing values).
- Calculate the mean of "Ozone" for each Month in the data frame and create a vector containing the monthly means (exclude all missing values).
- Draw a random sample of 5 rows from the data frame