File Reading

1. Read mtcars.csv file.
2. Understand about the data from mtcars.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. Use describe command to understand the statistical summary.

Data Frame slicing

7. Average miles per gallon (mpg) of all cars
8. Average mpg of automatic transmission cars
9. Average mpg of manual transmission cars
10. Average Displacement of cars with 4 gears
11. Average Horse power of cars with 3 carb
12. Average mpg of automatic cars with 4 gears
13. Average qsec of cars with mpg above average mpg and weight below average weight
14. Entire row of the vehicle which has the highest miles per gallon
15. Entire row of vehicle with the highest horsepower
16. Mileage and hp of car with highest weight
17. Calculate ratio of mpg to carb for each car and calculate the average of ratio
18. Weight of the car with the minimum displacement
19. Slice all columns of 3 gear cars
20. Slice mpg, displacement and hp columns of manual transmission cars
21. What is average mpg of 3, 4 and 5 gear cars. Save output as a list/array/series
22. What is average hp, average wt, average qsec, average vs for 3, 4 and 5 gear cars. Save output as a matrix or data frame

Isn't it painful to try Questions 21, 22 if there were several gear options or several columns?