**V506 Lab 2 Exercise – Fall 2024**

1. Install package “tidyverse” and load into library.
2. Set you working directory using base R or here.
3. Download the autos data from Canvas and save it to your working directory, you should import it using read.csv as a new data frame called “autos”. This file contains the variables indicated below. Confirm that the variables listed below are the same as what you imported using the names() or colnames() function.
4. Display the structure of the dataset and the summary statistics.
5. Create a new variable calculating the Price / MPG in a new data frame called “autos2”.
6. Merge the “autos2” variable to “autos” using the function cbind().
7. Filter the data frame to show only the cars with price greater than or equal to $100,000.
8. Create a scatterplot using the variables “MaxSpeed” and “price”. The title of the plot is “Price and Maximum Speed by Car Model”.
9. Compute the mean, median, variance and standard deviation of the variable MaxSpeed.
10. Save the “autos2” data frame as an R data file.

**Auto Data Set**

Car Time1 MaxSpeed MPG

Price Time2 Brake Domestic