**Assignment 4**

An environmental group would like to test the hypothesis that the mean mpg of cars manufactured in the US is less than that of those manufactured in Japan. Towards this end, they sampled n1=35 US and n2=28 Japanese cars, which were tested for mpg fuel efficiency. (As a caveat, assume that this is a random sample from a large population of US and Japanese cars, not a complete census). The data is reported in the following file csv file

<https://raw.githubusercontent.com/tmatis12/datafiles/main/US_Japanese_Cars.csv>

1. Does the mpg of both US cars and Japanese cars appear to be Normally distributed (use NPPs)?
2. Does the variance appear to be constant (use side-by-side boxplots)?
3. Transform the data using a log transform and repeat questions 1 and 2. Comment on the differences between the plots. Use the transformed data for the remaining questions
4. State the null and alternative hypothesis and test using a 0.05 level of significance.
   1. What are the sample averages for the log of the mpg of US and Japanese cars?
   2. State your conclusions

Submit both a rmd file and link to your html file in blackboard.