1) Choose one response variable from the Kyker data set and calculate the 95% confidence interval. Also, interpret the confidence interval (5 pts).

2) Choose a different response variable from the Kyker data set and test for a difference in the means between burned and unburned plots using a 2-sample t-test. Circle the correct P-value and interpret it (5 pts).

3) For the variable in #2, determine if your data follow a normal distribution using the Shapiro-Wilk test. Interpret the result of this test (5 pts).

4) For the variable in #2, test for a difference in the means between burned and unburned plots using a non-parametric Wilcoxon 2-sample test. Circle the correct P-value and interpret it (5 pts).

5) Choose 2 different response variables from the Kyker data set and test for a linear relationship between them. Interpret the correlation coefficient, r (5 pts).

6) For the variables in #5, perform a regression analysis, and determine if the independent variable (x) explains significant variation in the response variable (y). Also, interpret the coefficient of determination ($R^2$, 5 pts).

7) For the burned plots only, test for a difference in percent cover of life forms using an ANOVA. Also, perform Tukey’s multiple comparison test to examine for differences among plant life forms. Interpret the results of both tests (5 pts).
data one;
input Team Plot Trt BA Hgt Gaps Logs Snags;
cards;

ENTER DATA HERE

;

*Descriptive statistics;

proc means n mean std stderr;
var hgt;
run;

*Testing for normality;

proc univariate normal plot;
var hgt;
run;

*T-test & Folded F-test (std dev);

proc ttest;
class trt;
var hgt;
run;

*Non-parametric--Wilcoxon;

proc npar1way wilcoxon;
class trt;
var hgt;
run;

*Correlation;

proc corr;
var hgt BA;
run;

*Regression;

proc reg;
model hgt = BA;
run;

*ANOVA;

proc anova;
class trt;
model hgt = trt;
means trt/lsd tukey;
run;

quit;