INSTRUCTIONS:
   a) Write your name on the first page of your homework (-1 pt if lacking)
   b) Submit a pdf (with file name that includes your name or initials to ensure that we grade what you created (-1 pt if lacking)
   c) Provide your code in an Appendix, organized so that we can relate it to questions.
   d) *For each question*:
   e) Include a summary output table and graphs, and a short written answer that clearly answers the question, based on the results.

Problems:
   1. Medley and Clements (1998 – see dataset called zinc.txt) studied diatom diversity grouped by different concentrations of zinc in various Rocky Mountain streams. Use their data to perform a One Way ANOVA of species diversity as a function of different levels of zinc. Present your results in a standard analysis of variance table and a linear model output, show a graph, and discuss the statistical and biological meaning of your findings [2 points].

   2. Swearingen and Holt (1976 – see dataset called barley.txt) performed an experiment with 4 different varieties of barley to determine whether varieties differed significant in yields. Use a randomized-block ANOVA to test their hypothesis, present your results in a standard analysis of variance table and a linear model output, show a graph, and discuss the statistical and biological meaning of your findings [4 points].

   3. A study was conducted (possum.txt) to test the hypothesis that opossums that had invaded urban Victoria (British Columbia) were larger than opossums from other locations in their native range (e.g., SE US, and other locations), as they appeared to frightened people. Are Victoria's opossums actually bigger than those on the mainland, when measured as:
   (a) skull width (skullW), and
   (b) total length (totalL)?
   Present your results in standard analysis of variance tables and linear model outputs, show graphs, and discuss the statistical and biological meaning of your findings [4 points].