How well can programmers predict the number of days required to complete a large project? At the start of one of these large projects, an investigator took 24 programmers and asked them to predict how many programmer days would be required. After the project was finished, the prediction errors were calculated (actual minus predicted programmer days). The investigator is interested in the effect of type of programmer experience (small systems only, both small and large systems) or amount of experience (less than 5 years, 5-10 years, more than 10 years). The data is given in Problem 19.20 on page 620/871 of textbook.

1. Use PROC GLM to run a one-way ANOVA and answer the following questions:
   (a) Does Factor A (type of experience) have a significant effect? What is the p-value of your test?
   (b) Describe the effect of Factor A on the response by interpreting the output of LSMEANS statement.

2. Use PROC GLM to run a two-way ANOVA without interaction and answer the following questions:
   (a) Does Factor A (type of experience) have a significant effect? What is the p-value of your test?
   (b) Describe the effect of Factor A on the response by interpreting the output of LSMEANS statement.

3. Use PROC GLM to run a two-way ANOVA with interaction and answer the following questions:
   (a) Do the two factors interact?
   (b) Does Factor A (type of experience) have a significant effect? What is the p-value of your test?
   (c) Describe the effect of Factor A on the response by interpreting the output of LSMEANS statement.