CMU MSP 36602 quadTest.sas HW Due 10 PM April 23

Create a macro that can be used as a quick test for non-linearity of one (quantitative) independent variable in a linear regression (PROC GLM). This is done by running two regressions, one without and one with the specified quadratic term. The macro must be flexible enough to handle any names for the x and y variables and also allow additional terms in the model (separated by quantitative and categorical). There is no printed output; instead, the macro creates a SAS dataset with a user-specified name that contains specific information from both models. Work from the template quadTest.sas and turn in only the file **quadTest.sas**. Do *not* include any uncommented test code.

Hints:

1) The syntax for quadratic term is x*x and x|x can be used to indicate both the main effect and quadratic term. Categorical variables are indicated by the CLASS statement in PROC GLM.
2) For both models, use ODS OUTPUT to save the table with the parameter estimates as a SAS dataset. Delete these datasets at the end of the macro.
3) The most efficient way to change the columns of a data set is to use the RENAME and KEEP data set options on the SET statement (i.e., as the data is being read in).
4) For the SQL step to combine the two datasets holding the parameters, you will want to do a LEFT join from the quadratic to the linear datasets, but specify the parameters in the order stated in the template. You will need a CREATE DATASET clause to send the output to a dataset.