(1) What things can you do to diagnose errors in your programs?

(2) Do errors always generate red ERROR lines in the log? If not, what kind of errors do not generate error messages?

(3) What other messages in the log should be reviewed?

(4) If your code appears to be correct, where else might you look?

(1) To diagnose errors in your program, one can make sure that:

-data types are valid and appropriate for function use, if not make sure to convert function types as needed

-assess both the log summary and error log to determine whether or not errors exist, note that although the error may not be shown in red, your code could’ve read incorrectly

-using training, review that the output data coordinates with what is expected prior to applying code to test data

-can also use scatter plot matrix to find outliers in outputs

(2) Errors do not always generate red ERROR lines in the log. Some examples, include but are not limited to: the sequence of commands was not correct (read into log lines to determine how SAS read your code) and poorly coded program (read into log lines to determine is any data was unnecessarily skipped or altered)

(3) Be mindful of warnings and notes listed in the log as these messages can point out places of error.

(4) Using online SAS syntax check or peer reviewers can benefit the SAS programmer in understanding the error in the code.