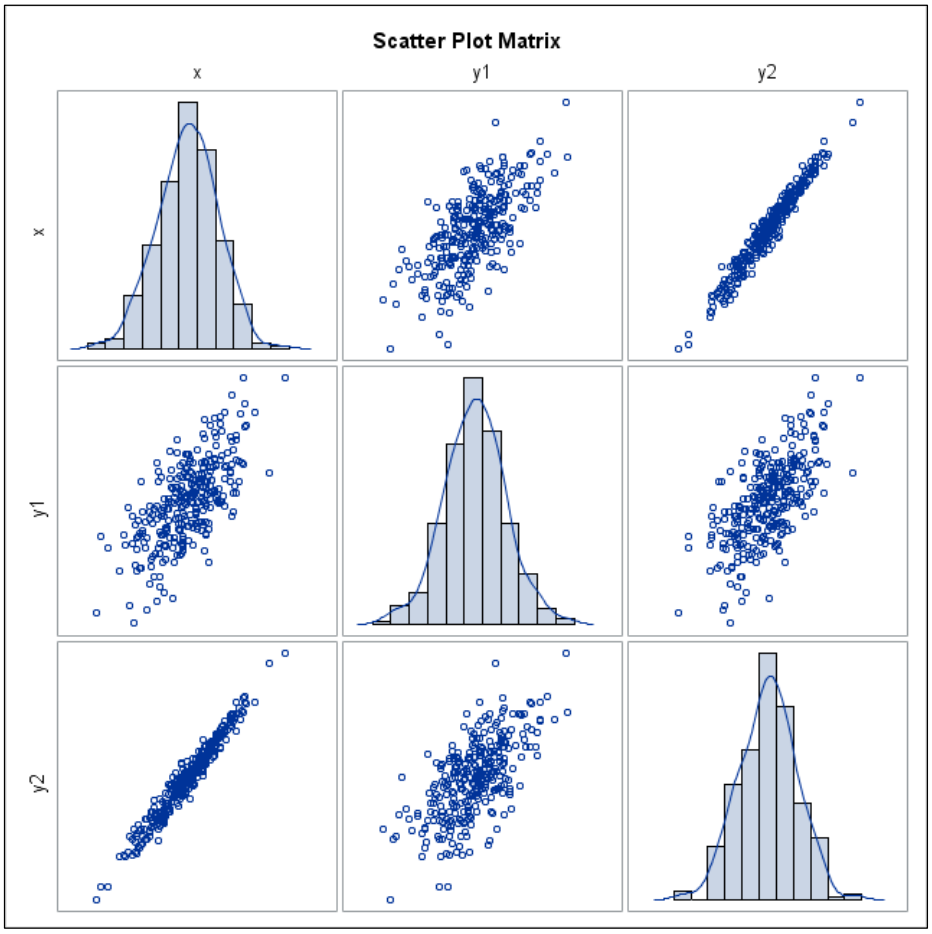
Exercise

1. Using PROC SGSCATTER

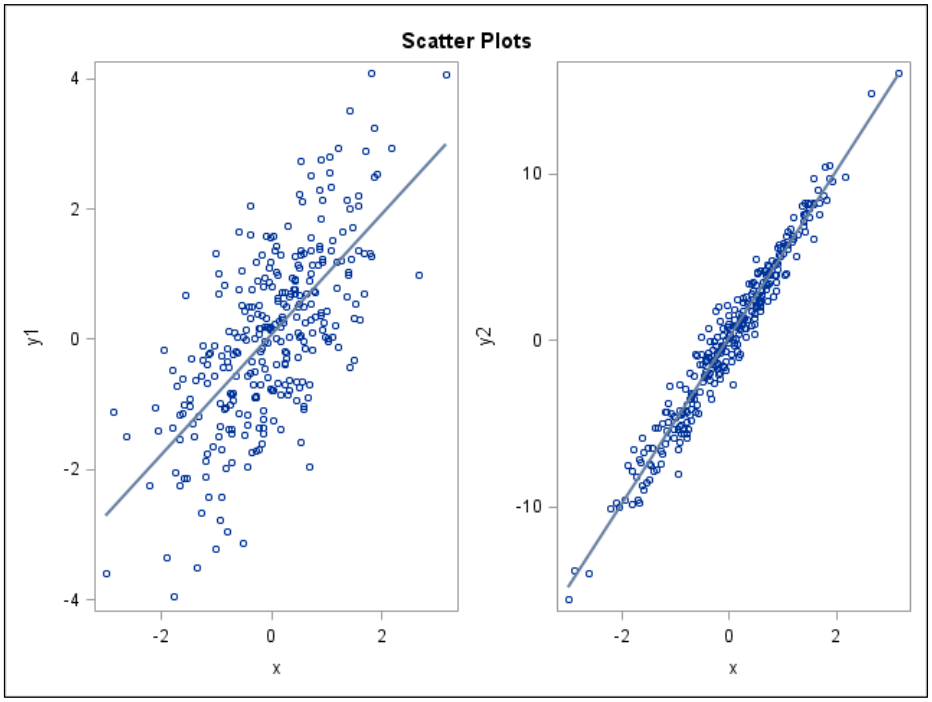
a. Create a data table with 300 observations and a seed of 123.

1) Let **X** be the deviates from the standard normal distribution.
2) Produce a variable **Y1**, which is **X** plus standard normal deviates.
3) Produce another variable such that **Y2** is 5***X** plus standard normal deviates.

b. Use PROC SGSCATTER to create a scatter plot matrix of **X**, **Y1**, and **Y2**. Include histograms and kernel density estimates on the diagonal. (Hint: Look up the DIAGONAL= option in the MATRIX statement of the SGSCATTER procedure.)



c. Use PROC SGSCATTER to create side-by-side scatter plots of **Y1** by **X** and **Y2** by **X** with the PLOT statement. Add the regression line to both plots with the REG option.



d. Use PROC SGSCATTER and the COMPARE statement to create the same scatter plot with shared axes.