Exercise

1. **Plotting Chi-Square Random Numbers**

    a. Create a data table with 1000 random deviates from a chi-square distribution with 20 degrees of freedom and a seed of 123.

    b. Use PROC SGPLOT to plot a histogram of the data.

    1) Alter the appearance of the plot by setting the BINWIDTH= option to 1.

    2) Add both a normal and kernel density estimate.

    3) Add the title 'My Random Chi-Square Distribution'.

    4) Add the X-axis title 'Random Chi-Square Deviates'.

    5) Use X-axis limits of 5 and 40.

    6) Request the frequency instead of the percent by providing the option SCALE=COUNT in the HISTOGRAM statement.