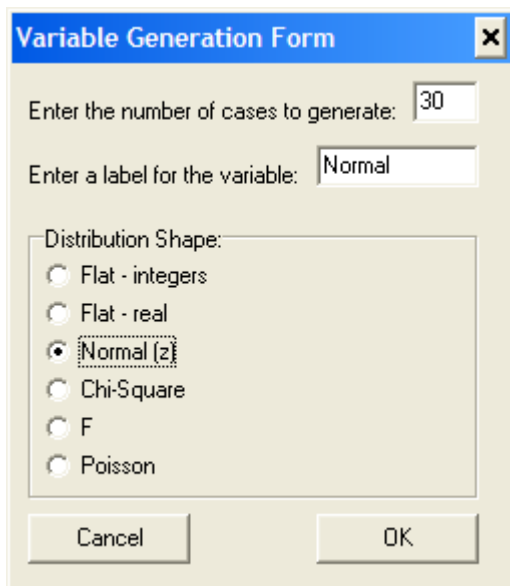


## Generate One of Six Theoretical Distributions

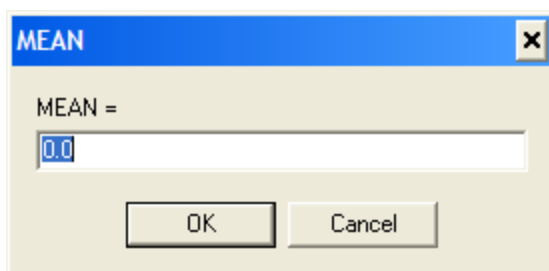
Your LazStats package contains this procedure which permits you to generate random values from several theoretical distributions such as a flat distribution, normal distribution (Gaussian), etc. You may want to create such data in your data grid simply to plot such values for educational purposes or to experiment with statistical procedures in which the assumption of normality is violated. In any event, one can have some fun! The specification form below is seen when this procedure is selected. A snap-shot of the values entered in the data grid is also presented.



The 'Variable Generation Form' dialog box has a blue title bar with a close button. It contains two text input fields: 'Enter the number of cases to generate:' with the value '30' and 'Enter a label for the variable:' with the value 'Normal'. Below these is a 'Distribution Shape:' section with a list of radio buttons: 'Flat - integers', 'Flat - real', 'Normal (z)' (which is selected), 'Chi-Square', 'F', and 'Poisson'. At the bottom are 'Cancel' and 'OK' buttons.

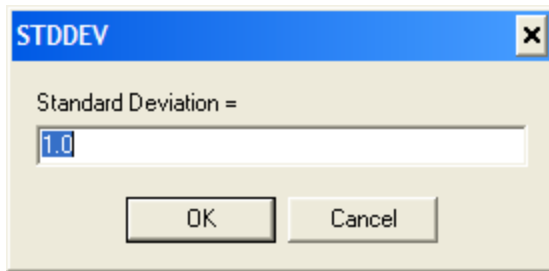
**Figure 1 Theoretical Distribution Data Generation Dialog**

When you have entered the number of cases to generate, a name for the generated variable and clicked a button for the type of distribution you click the OK button. In the case of nearly every selection you will be shown additional dialogs in which you specify parameters for the distribution. In our example we have selected the normal distribution. The following prompts are then displayed:



The 'MEAN' dialog box has a blue title bar with a close button. It contains a text input field labeled 'MEAN =' with the value '0.0'. At the bottom are 'OK' and 'Cancel' buttons.

**Figure 2 Prompt for the Mean of Generated Normal Curve Data**



**Figure 3 Prompt for the Standard Deviation of Generated Data**

You can accept the prompt values or click on the value box and enter your own values. When you click the OK button for the last prompt the data are created in the data grid.