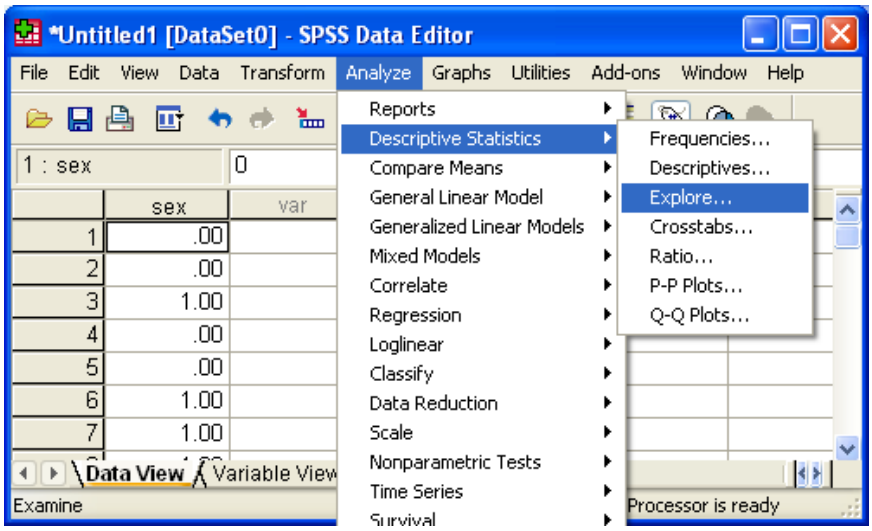
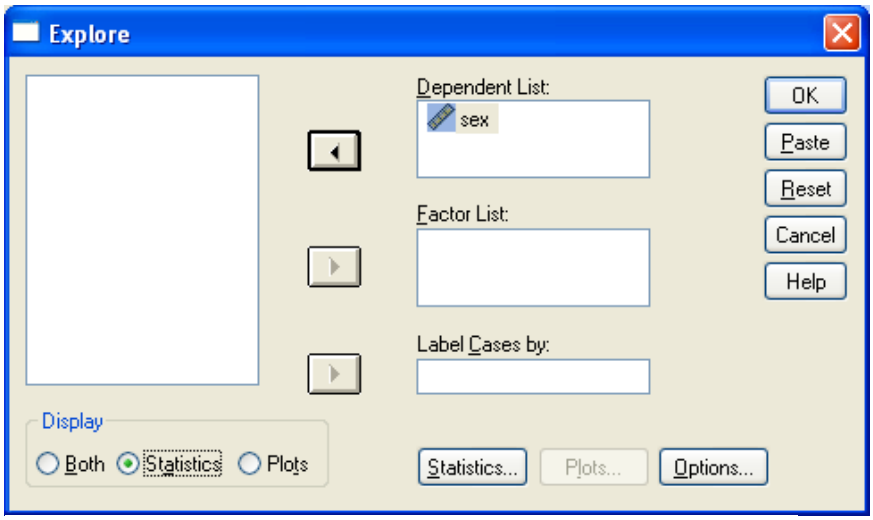
Confidence Interval Estimation for Proportion

If the data is coded as 1 or 0, then the confidence interval estimate for mean would be a good approximate for the confidence interval estimate for the proportion of 1's in the population. (A small sample is used for demonstration purpose. The procedure would work better for large sample.)

Data: 0, 0, 1, 0, 0, 1, 0, 1, 1, 1, 1, 0, 1, 0, 1, 0, 0, 1, 1, 1, 1, 1 (1=Male; 0=Female)



Be sure your data is coded as 1 or 0.
Step 1: Click on **Analyze** and select **Descriptive Statistics** and select **Explore**…



Step 2: Select **Sex** variable and put it in the **Dependent List** box and click **OK**.

Descriptives

			Statistic	Std. Error
sex	Mean		.6000	.11239
	95% Confidence Interval for Mean	Lower Bound	.3648	
		Upper Bound	.8352	
	5% Trimmed Mean		.6111	
	Median		1.0000	
	Variance		.253	
	Std. Deviation		.50262	
	Minimum		.00	
	Maximum		1.00	
	Range		1.00	
	Interquartile Range		1.00	
	Skewness		-.442	.512
	Kurtosis		-2.018	.992

Interpretation:
The estimated percentage of male is **60%**. A good estimate for the 95% confidence interval using SPSS Explore option for estimating the percentage of male (coded as 1) in the population would be **(36.48%, 83.52%)**.