Unrestricted Attribute Appraisal

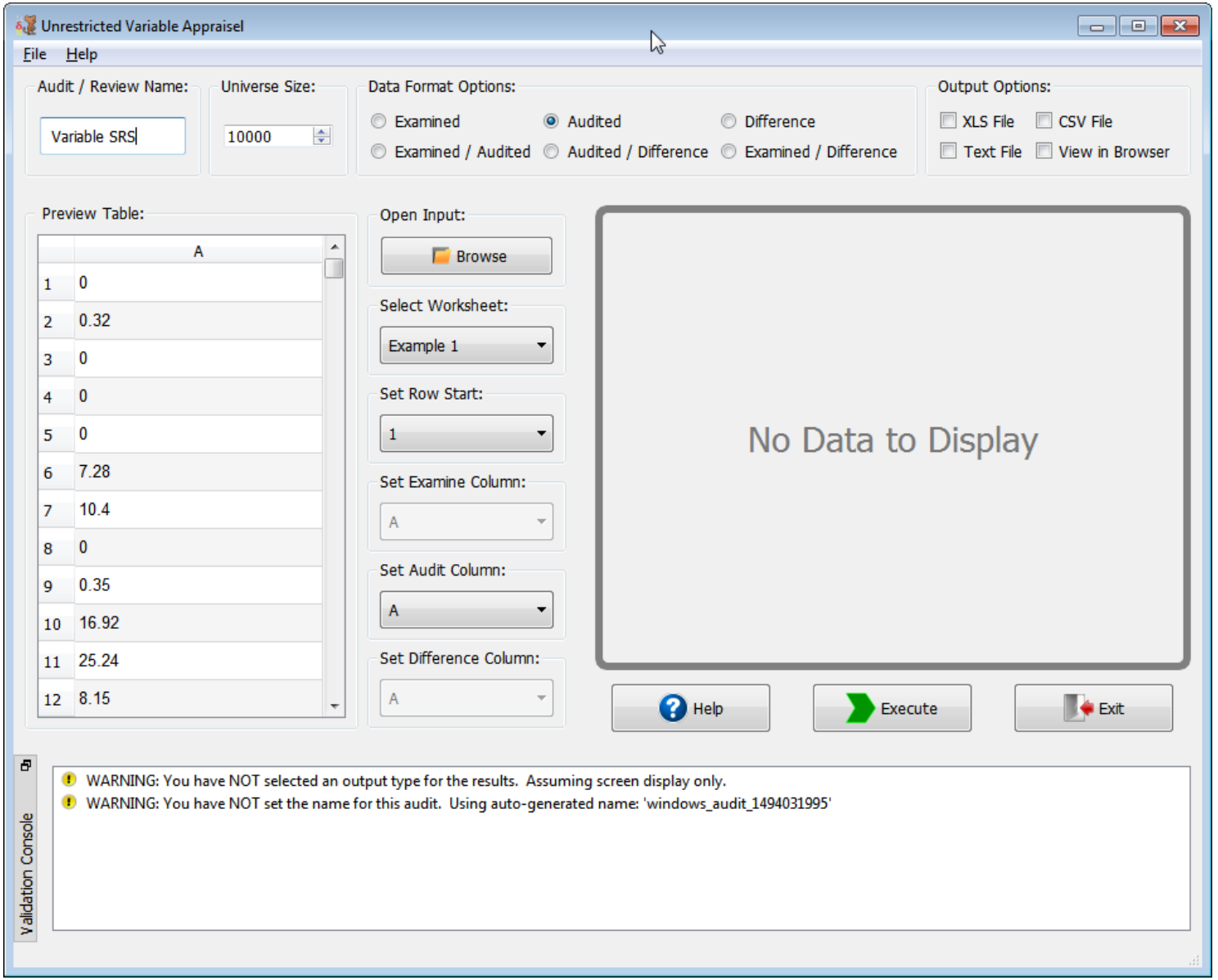
User Guide

Revision 1 – May 5, 2017

Purpose

This program performs a variable appraisal on a data file previously created by the user based on information gathered from an unrestricted random sample. Variable sampling is used to estimate quantitative characteristics. For each sampling unit the user obtains one or more numeric pieces of information about an event or item. The user has the option of obtaining and appraising from one numeric piece of information per sample item (e.g., Examined amount) to as many as three pieces of information per sample item (i.e., Examined, Audited and Difference amounts). If the user decides to appraise all three pieces of information, only two of the pieces of data may be entered and the third will be calculated by the program. The variable appraisal program assumes that some variation exists between values. If no variation exists, then there is no need to run this appraisal program.

Input Screen



NOTE: This example is for illustrative purposes only. The sample size may not conform to the organization's minimum sample size standards.

Audit/Review Name

This program allows the user to enter a brief description of the audit or purpose of the evaluation.

Universe Size

The universe size is the total number of items from which the sampled items were selected. This number will be used in estimating universe parameters. The maximum size is 2,147,483,647.

Format of Input File

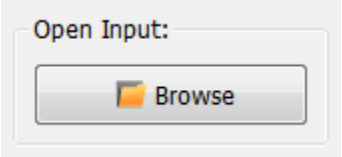
Prior to executing this program, the user must create a data file that contains certain identifying data and one or two pieces of information for each sample unit selected. Each data line consists of a line number for that sampling unit followed by the first piece of information (a numeric value) the user wants to appraise (i.e., examined, audited, or difference value). If two or more pieces of information will be appraised and the examined amount is one of the values, then the examined amount must be the first piece of data entered for each sampling unit. If only the audited and difference amounts are being appraised, then the audited amount must be the first piece of data entered. The second piece of information may be the numeric difference between the examined value and the amount accepted by the user or the audited amount if the examined amount was the first piece of data entered.

Supported Input Formats

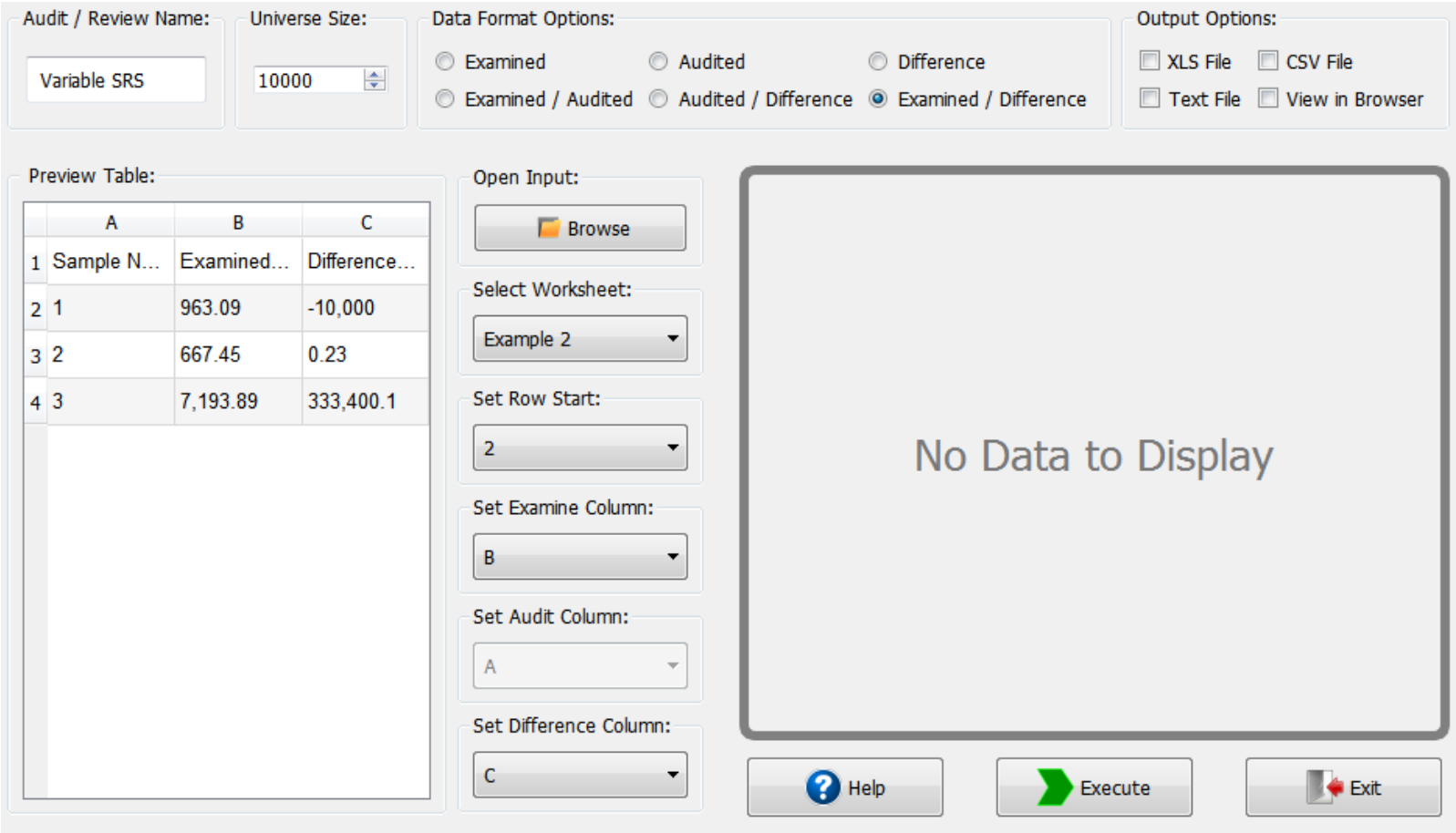
Description	Extension
Microsoft Excel 97 – 2003 file format	.xls
Microsoft Excel 2007 and higher file format	.xlsx
Data Interchange file format	.dif
Comma separated values file format	.csv
Space/tab separated values file format	.ssv, .txt or .dat

Specify Input File

Click on the “Browse” button under the “Open Input” group. This will show a “File Open” dialog box to select input file.



After loading a file the read-only preview table will be populated. You can use the Set Row Start and Set (Audit, Examine, Difference) Column drop –downs to select the proper data ranges. In the example below the “Examined / Difference” data format type is selected which causes the “Set Audit Column” drop-down to be disabled. After row and columns are selected, the function is ready to be executed.



Validation Console

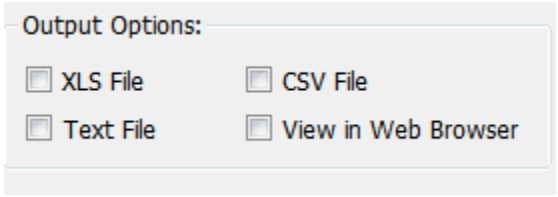
This form provides a method of error/exception prevention by displaying up-to-date warning and error messages. Execution may continue when only warnings exist but will be blocked by errors until they are fixed. When neither errors nor warnings are detected the validation console is hidden.

Menu / Keyboard Shortcuts

Menu	Keyboard	Description
File -> New Window	**Alt + N**	**Create a new instance of the program**
File -> Recently Used	**Alt + R**	**Load previous successful runs**
File -> Import Input Data	**Alt + I**	**Loads file dialog to select input data**
File -> Execute	**Alt + E**	**Execute Function**
File -> Exit	**Alt + Q**	**Exit Program**
Help -> About	**Alt + A**	**Show "About" dialog**
Help -> Help Topics	**Alt + H**	**Show this help document**

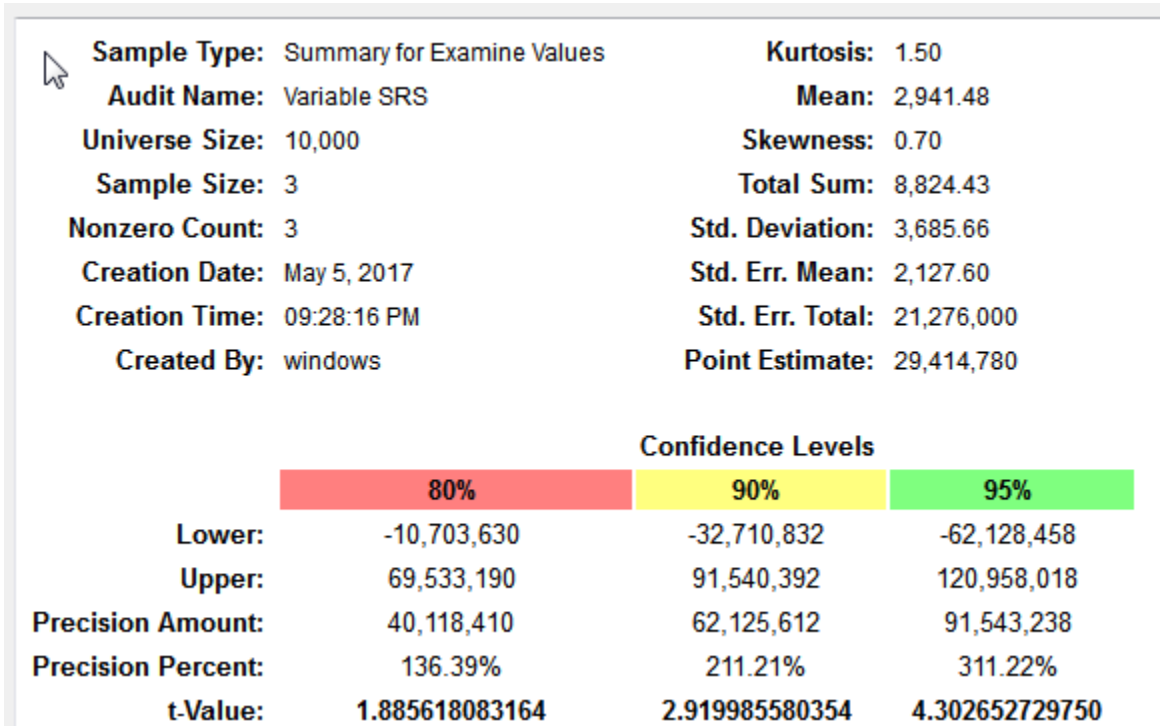
Output Options

The program supports four output types (If the user selects XLS, CSV or Text File then the "Save As" dialog will appear):



1) CSV (.csv extension) – Comma separated values
2) XLS (.xls extension) – Microsoft Excel 97+ output format
3) Text (.txt extension) – Evenly spaced readable text file
4) View in Web Browser (HTML) – Opens the output results into default web browser for viewing

Program Output



Sample Type:	Summary for Examine Values	**Kurtosis:**	1.50
Audit Name:	Variable SRS	**Mean:**	2,941.48
Universe Size:	10,000	**Skewness:**	0.70
Sample Size:	3	**Total Sum:**	8,824.43
Nonzero Count:	3	**Std. Deviation:**	3,685.66
Creation Date:	May 5, 2017	**Std. Err. Mean:**	2,127.60
Creation Time:	09:28:16 PM	**Std. Err. Total:**	21,276,000
Created By:	windows	**Point Estimate:**	29,414,780

	Confidence Levels		
	80%	**90%**	**95%**
Lower:	-10,703,630	-32,710,832	-62,128,458
Upper:	69,533,190	91,540,392	120,958,018
Precision Amount:	40,118,410	62,125,612	91,543,238
Precision Percent:	136.39%	211.21%	311.22%
t-Value:	**1.885618083164**	**2.919985580354**	**4.302652729750**

For the examined, adjusted, and difference sections of the output, the following pieces of information will be displayed. The precision information is given at the two-sided 80%, 90%, and 95% confidence levels.

(**NOTE**: The output format structure will be the same regardless of output option selected)

Mean: The average value for the sample items appraised. It is obtained by summing the items in the sample and dividing the result by the number of items in the sample

Universe: The quantity of the items from which the sample was drawn. The results of the sample will be projected to the universe using this value.

Standard Deviation: A measurement of the variation of the sample items about the average value (mean).

Standard Error (Mean): A measurement of the variation of the estimated universe means with respect to all possible estimated means for this universe and sample size.

Standard Error (Total): A measurement of the variation of the estimated universe total with respect to all possible estimated totals for this universe and sample size.

Kurtosis: A measure of the peakedness or flatness of the frequency distribution of the sample values.

Point Estimate: A single estimate for the universe total based on the sample mean multiplied by the universe size.

Skewness: A measure of the symmetry of the frequency distribution of the sample items. Accounting universes are usually right-skewed (majority of items have a low value while a few items have a high value)

Confidence Level: The confidence (80%, 90%, 95%) associated with the ability of the corresponding interval to contain the true mean (or universe total).

Precision Amount: A measurement of the closeness of the sample estimate of the universe total and the corresponding unknown universe value. The precision amount is calculated by multiplying the standard error by the universe size and multiplying the result by the appropriate factor ("t" value) corresponding to the desired confidence level.

Precision Percentage: The result of dividing the precision amount by the point estimate and stating the result as a percentage.

t-Value Used: The t- percentile value used to construct the confidence interval.

Lower Limit (Total/Percent): The lower boundary of the confidence interval. The limit is shown as both a number and percentage of the universe. The confidence levels are 80%, 90%, and 95%.

Upper Limit (Total/Percent): The upper boundary of the confidence interval. The limit is shown as both a number and percentage of the universe. The confidence levels are 80%, 90%, and 95%.