

Row Mean Threshold

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Overview

This script calculates the mean of each row, creating a new spreadsheet with a column of row means, and a column indicating whether the mean is greater than (or less than) a specified threshold. This script will only work for spreadsheets containing binary, integer, or real (continuous) data.

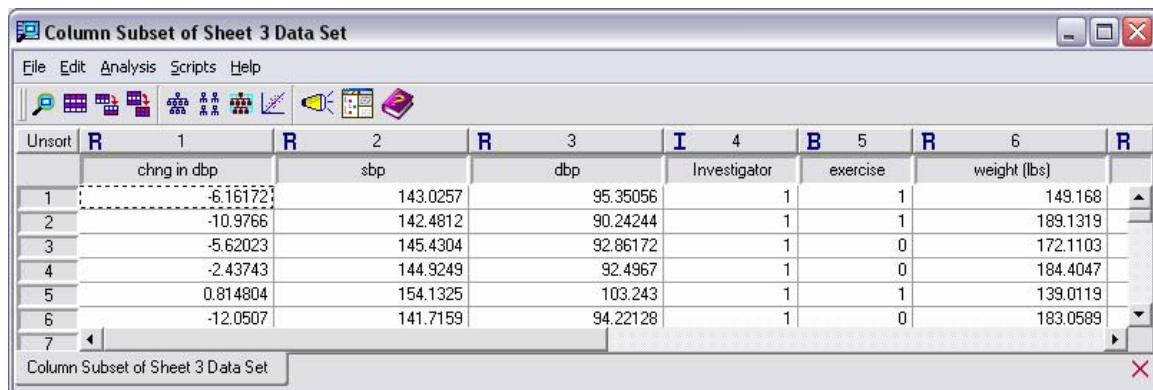
Recommended Directory Location

A good directory location for saving this script would be:
C:/HelixTree/scriptsHT/user/Spreadsheet/Scripts/.

When saved to this folder, the script will be accessible from the spreadsheet **Scripts** menu.

Using the Script

To use this script, open a spreadsheet containing binary (B), integer (I), or real (R) column types. Column types are indicated by a capital letter at the top of each column in the spreadsheet (see Figure 1).



	R	R	R	I	B	R	R
	1	2	3	4	5	6	
	chg in dbp	sbp	dbp	Investigator	exercise	weight (lbs)	
1	-6.16172	143.0257	95.35056	1	1	149.168	
2	-10.9766	142.4812	90.24244	1	1	189.1319	
3	-5.62023	145.4304	92.86172	1	0	172.1103	
4	-2.43743	144.9249	92.4967	1	0	184.4047	
5	0.814804	154.1325	103.243	1	1	139.0119	
6	-12.0507	141.7159	94.22128	1	0	183.0589	
7							

Figure 1. Spreadsheet with real, binary and integer columns.

Select the Row Mean Threshold script from the spreadsheet menu location where it was stored. Or, from the project viewer, select **Tools->Run Script** to open a dialog to browse for the script location.

Running the script will first prompt you to enter a threshold value (Figure 2).

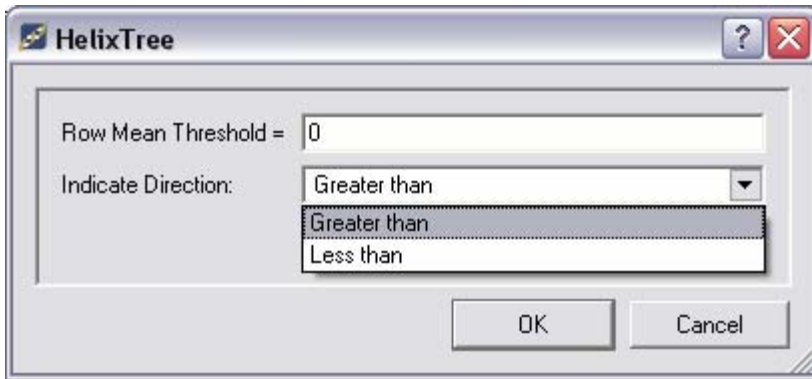


Figure 2.

You can also specify the direction of the threshold. If you specify **Greater than**, a row mean greater than the threshold will result in a '1'; a row mean less than or equal to will result in '0'. If you specify **Less than**, a row mean less than the threshold will result in a '1'; a row mean greater than or equal to the threshold will result in '0'.

Next you will be asked if you would like to specify a Mean Column header (Figure 3).

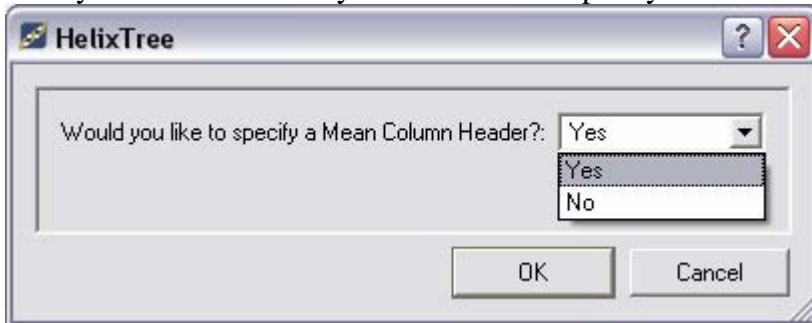


Figure 3.

If you choose 'Yes', you will be prompted to enter a Mean Column header name (Figure 4).

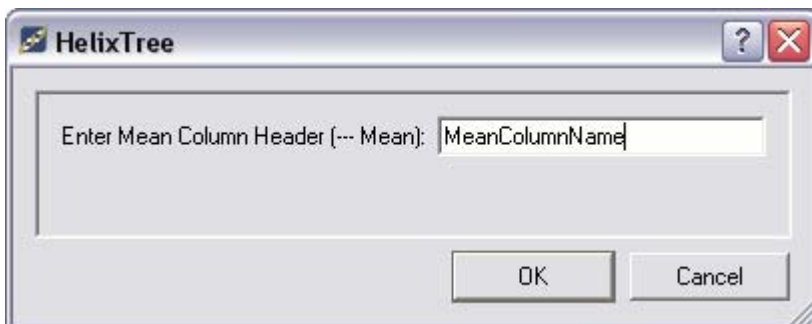
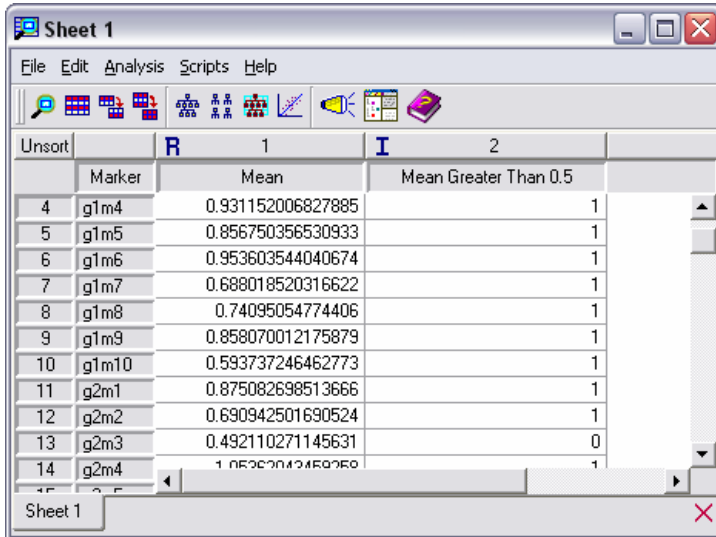


Figure 3. Specifying a Mean Column header name.

Click **OK**. A new spreadsheet will be created (Figure 2) with two columns, the first containing the mean for a given a row and the second a binary value indicating whether

the row mean is greater than the threshold value (or less than depending on what you've specified).



The screenshot shows a spreadsheet window titled "Sheet 1" with a menu bar (File, Edit, Analysis, Scripts, Help) and a toolbar. The spreadsheet data is as follows:

Unsort	R	1	I	2
	Marker	Mean		Mean Greater Than 0.5
4	g1m4	0.931152006827885		1
5	g1m5	0.856750356530933		1
6	g1m6	0.953603544040674		1
7	g1m7	0.688018520316622		1
8	g1m8	0.74095054774406		1
9	g1m9	0.858070012175879		1
10	g1m10	0.593737246462773		1
11	g2m1	0.875082698513666		1
12	g2m2	0.690942501690524		1
13	g2m3	0.492110271145631		0
14	g2m4	1.05327043459250		1

Figure 4. Output spreadsheet.