Tables Order, Sort, Add, Rename and Drop Columns

back to Fan's Intro Math for Econ, Matlab Examples, or MEconTools Repositories

Given Table, Show Some Columns First

```
% Generate Table
it num cols = 4;
it num rows = 5;
mt_data = rand([it_num_rows, it_num_cols]);
tb_test = array2table(mt_data);
cl_col_names = strcat('col_', string((1:it_num_cols)));
cl_row_names = strcat('row_', string((1:it_num_rows)));
tb_test.Properties.VariableNames = matlab.lang.makeValidName(cl_col_names);
tb_test.Properties.RowNames = matlab.lang.makeValidName(cl_row_names);
rng(123);
mean = strcat('data=', string(rand([it_num_rows,1])));
sd = strcat('data=', string(rand([it_num_rows,1])));
tb_test_ori = addvars(tb_test, mean, sd);
% Move Variable
tb_test_varmove = movevars(tb_test_ori, {'mean', 'sd'}, 'Before', 'col_1');
% Display
disp(tb_test_ori);
```

col_1	col_2	col_3	col_4	mean	sd
0.34318	0.738	0.6344	0.32296	"data=0.69647"	"data=0.42311"
0.72905	0.18249	0.84943	0.36179	"data=0.28614"	"data=0.98076"
0.43857	0.17545	0.72446	0.22826	"data=0.22685"	"data=0.68483"
0.059678	0.53155	0.61102	0.29371	"data=0.55131"	"data=0.48093"
0.39804	0.53183	0.72244	0.63098	"data=0.71947"	"data=0.39212"
	0.34318 0.72905 0.43857 0.059678	0.34318 0.738 0.72905 0.18249 0.43857 0.17545 0.059678 0.53155	0.34318	0.34318 0.738 0.6344 0.32296 0.72905 0.18249 0.84943 0.36179 0.43857 0.17545 0.72446 0.22826 0.059678 0.53155 0.61102 0.29371	0.34318

disp(tb test varmove);

	mean	sd	col_1	col_2	col_3	col_4
row_1	"data=0.69647"	"data=0.42311"	0.34318	0.738	0.6344	0.32296
row_2	"data=0.28614"	"data=0.98076"	0.72905	0.18249	0.84943	0.36179
row_3	"data=0.22685"	"data=0.68483"	0.43857	0.17545	0.72446	0.22826
row_4	"data=0.55131"	"data=0.48093"	0.059678	0.53155	0.61102	0.29371
row_5	"data=0.71947"	"data=0.39212"	0.39804	0.53183	0.72244	0.63098

Rename Table Columns

Rename the first Column, rename the 'sd' column, then rename the 3rd and 4th Columns. Note for multiple column renaming, use parenthesis, but for single column renaming, use bracket.

```
tb_test_varmove.Properties.VariableNames{1} = 'RenameMean';
tb_test_varmove.Properties.VariableNames{'sd'} = 'RenameSDCol';
tb_test_varmove.Properties.VariableNames([3 4]) = {'3rd' '4th'};
```

disp(tb_test_varmove);

	RenameMean	RenameSDCo1	3rd	4th	col_3	col_4
row_1	"data=0.69647"	"data=0.42311"	0.34318	0.738	0.6344	0.32296
row_2	"data=0.28614"	"data=0.98076"	0.72905	0.18249	0.84943	0.36179
row_3	"data=0.22685"	"data=0.68483"	0.43857	0.17545	0.72446	0.22826
row_4	"data=0.55131"	"data=0.48093"	0.059678	0.53155	0.61102	0.29371
row_5	"data=0.71947"	"data=0.39212"	0.39804	0.53183	0.72244	0.63098

Remove Table Column

Remove columns from the Table

```
tb_test_varmove_drop = removevars(tb_test_varmove, {'3rd', 'col_3'});
disp(tb_test_varmove_drop);
```

	RenameMean	RenameSDCo1	4th	col_4	
row_1	"data=0.69647"	"data=0.42311"	0.738	0.32296	
row_2	"data=0.28614"	"data=0.98076"	0.18249	0.36179	
row_3	"data=0.22685"	"data=0.68483"	0.17545	0.22826	
row_4	"data=0.55131"	"data=0.48093"	0.53155	0.29371	
row_5	"data=0.71947"	"data=0.39212"	0.53183	0.63098	