Row and Column Names for Table based on Arrays

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Generate Table with Row and Column Names based on Multiple Numeric Array

Two numeric arrays describe the column names, combine numeric arrays together to form string array which becomes table variable/column names.

```
close all;

% Generate Table 1
ar_fl_abc1 = [0.4 0.1 0.25 0.3 0.4];
ar_fl_abc2 = [0.4 0.1 0.2 0.3 0.4];
number1 = '123';
number2 = '456';
mt_data_a = [ar_fl_abc1' ar_fl_abc2'];

tb_test_a = array2table(mt_data_a);
cl_col_names_a = {['col' num2str(number1)], ['col' num2str(number2)]};
cl_row_names_a = strcat('rowA=', string((1:size(mt_data_a,1))));

tb_test_a.Properties.VariableNames = cl_col_names_a;
tb_test_a.Properties.RowNames = cl_row_names_a;
disp(tb_test_a);
```

```
            col123    col456
            ______    ______

    rowA=1    0.4       0.4
    rowA=2    0.1       0.1
    rowA=3   0.25       0.2
    rowA=4    0.3       0.3
    rowA=5    0.4       0.4
```

Include Row Names as a a String Cell Variable

```
% a and b must have the same row names
cl_st_varrownames = tb_test_a.Properties.RowNames;
tb_test_a = addvars(tb_test_a, cl_st_varrownames, 'Before', 1);

disp(tb_test_a);
```

```
            cl_st_varrownames    col123    col456
            _________________    ______    ______

    rowA=1      {'rowA=1'}          0.4       0.4
    rowA=2      {'rowA=2'}          0.1       0.1
    rowA=3      {'rowA=3'}         0.25       0.2
    rowA=4      {'rowA=4'}          0.3       0.3
    rowA=5      {'rowA=5'}          0.4       0.4
```

Include Row Names as a String Variable

```
% a and b must have the same row names
st_varrownames = string(cl_st_varrownames);
tb_test_a = addvars(tb_test_a, st_varrownames, 'Before', 1);

disp(tb_test_a);
```

	st_varrownames	cl_st_varrownames	col123	col456
rowA=1	"rowA=1"	{'rowA=1'}	0.4	0.4
rowA=2	"rowA=2"	{'rowA=2'}	0.1	0.1
rowA=3	"rowA=3"	{'rowA=3'}	0.25	0.2
rowA=4	"rowA=4"	{'rowA=4'}	0.3	0.3
rowA=5	"rowA=5"	{'rowA=5'}	0.4	0.4