

Select Subset of Rows and Columns

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Generate a Table

```
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;
% 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);
% 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);
tb_test_a = addvars(tb_test_a, ["a", "b", "cc", "aa", "b"], 'Before', 1);
disp(tb_test_a);
```

	Var1	st_varrownames	cl_st_varrownames	col123	col456
rowA=1	"a"	"rowA=1"	{'rowA=1'}	0.4	0.4
rowA=2	"b"	"rowA=2"	{'rowA=2'}	0.1	0.1
rowA=3	"cc"	"rowA=3"	{'rowA=3'}	0.25	0.2
rowA=4	"aa"	"rowA=4"	{'rowA=4'}	0.3	0.3
rowA=5	"b"	"rowA=5"	{'rowA=5'}	0.4	0.4

Select Rows if ColX is Equal to Something

Select a subset of rows based on the variable value in one column

```
% select the rows where Var1="b"
disp(tb_test_a(strcmp(tb_test_a.Var1, "b"),:));
```

	Var1	st_varrownames	cl_st_varrownames	col123	col456
rowA=2	"b"	"rowA=2"	{'rowA=2'}	0.1	0.1
rowA=5	"b"	"rowA=5"	{'rowA=5'}	0.4	0.4

```
% select the rows where col123=0.4
disp(tb_test_a(tb_test_a.col123==0.4,:));
```

	Var1	st_varrownames	cl_st_varrownames	col123	col456
rowA=1	"a"	"rowA=1"	{'rowA=1'}	0.4	0.4

rowA=5	"b"	"rowA=5"	{ 'rowA=5' }	0.4	0.4
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