

Named Tables with Random Data

back to [Fan's Intro Math for Econ](#), [Matlab Examples](#), or [MEconTools Repositories](#)

Generate A Table with M Variables

Generate a numeric table with random varlues and a string column

```
% Numeric Matrix
it_num_cols = 4;
it_num_rows = 5;
mt_data = rand([it_num_rows, it_num_cols]);

% Generate Table
tb_test = array2table(mt_data);

% Generate Row and Column Names
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);

% Generate two string variable
rng(456);
cl_st_var1 = strcat('data=', string(rand([it_num_rows,1])));
cl_st_var2 = strcat('data=', string(rand([it_num_rows,1])));
tb_test = addvars(tb_test, cl_st_var1, cl_st_var2);

% Display Table
disp(tb_test);
```

| | col_1 | col_2 | col_3 | col_4 | cl_st_var1 | cl_st_var2 |
|-------|---------|---------|-----------|---------|----------------|----------------|
| row_1 | 0.43568 | 0.4688 | 0.18092 | 0.14604 | "data=0.24876" | "data=0.60411" |
| row_2 | 0.38527 | 0.57 | 0.11816 | 0.54272 | "data=0.16307" | "data=0.8857" |
| row_3 | 0.57571 | 0.6457 | 0.24273 | 0.8571 | "data=0.78364" | "data=0.75912" |
| row_4 | 0.14609 | 0.72334 | 0.0081834 | 0.20021 | "data=0.80852" | "data=0.18111" |
| row_5 | 0.68659 | 0.68067 | 0.36007 | 0.13463 | "data=0.62563" | "data=0.15017" |