```
. clear

.
. /*
>   Back to Fan's Stata4Econ or other repositories:
>   - http://fanwangecon.github.io
>   - http://fanwangecon.github.io/Stata4Econ
>   - http://fanwangecon.github.io/R4Econ
>   - http://fanwangecon.github.io/M4Econ
>   - http://fanwangecon.github.io/CodeDynaAsset/
>   - http://fanwangecon.github.io/Math4Econ/
>   - http://fanwangecon.github.io/Stat4Econ/
>   - http://fanwangecon.github.io/Tex4Econ
>
>   Stata matrix basic generation and matrix slicing
>
>   1. Generate Matrix
>   2. Replace single cell values from matrix
>   3. Replace subset of matrix by row or column array
>   4. Row and Column Names
>   5. Retrieve matrix row and column values
>
> */
.
. ///--- Start log
> set more off

. capture log close

.
. cd "${root_log}"
C:\Program Files (x86)\Stata14

. global st_link "/matrix/define/basic"

. global curlogfile "~/Stata4Econ/${st_link}"

. log using "${curlogfile}" , replace
(note: file C:\Users\fan\Stata4Econ//matrix/define/basic.smcl not found)
────────────────────────────────────────────────────────────────────────────────────────
      name:  <unnamed>
       log:  C:\Users\fan\Stata4Econ//matrix/define/basic.smcl
  log type:  smcl
 opened on:   6 Oct 2019, 18:31:17

. log on
(log already on)

.
. ///-- Site Link: Fan's Project Reusable Stata Codes Table of Content
> di "https://fanwangecon.github.io/"
https://fanwangecon.github.io/

. di "https://fanwangecon.github.io/Stata4Econ/"
https://fanwangecon.github.io/Stata4Econ/

.
. ///-- File Title
> global filetitle "Stata Matrix Slicing, Select Subset of Matrix Values, Subset of Rows and Columns"

.
.
. ///--- Generate matrix with all 0
>         scalar it_rowcnt = 4

.         scalar it_colcnt = 6

.         scalar bl_fillval = 0

.         matrix mt_bl_estd = J(it_rowcnt, it_colcnt, bl_fillval)

.
. ///--- Give Matrix Row and Column Names
>         matrix rownames mt_bl_estd = hhfe vilfe provfe morecontrols

.         matrix colnames mt_bl_estd = reg1 reg2 reg3 reg4 reg5 reg6

.
. ///--- Assign value to matrix cell single
>         matrix mt_bl_estd[rownumb(mt_bl_estd, "hhfe"), colnumb(mt_bl_estd, "reg1")] = 1

.         matrix mt_bl_estd[2,2] = 3
```

.
. ///--- Assign value to 4th row, 3nd to 6th
>   matrix mt_bl_estd[4,3] = (9,8,7,6)

.
. ///--- Assign value to 4th column, 2nd 3rd values
>   matrix mt_bl_estd[2,4] = (-3\-44.3)

.
. ///--- Obtain value from matrix
>   scalar bl_hhfe_reg1 = mt_bl_estd[rownumb(mt_bl_estd, "hhfe"), colnumb(mt_bl_estd, "reg1")]

.   di bl_hhfe_reg1
1

.   di el(mt_bl_estd, rownumb(mt_bl_estd, "hhfe"), colnumb(mt_bl_estd, "reg1"))
1

.
. ///--- Select a column from matrix
>   matrix mt_bl_estd_colreg1 = mt_bl_estd[1..., colnumb(mt_bl_estd, "reg1")]

.   matrix list mt_bl_estd_colreg1

mt_bl_estd_colreg1[4,1]
                  reg1
        hhfe   **1**
        vilfe   **0**
       provfe   **0**
morecontrols   **0**

.
. ///--- Get Row and Column Names
>   global st_colnames : colnames mt_bl_estd

.   di "${st_colnames}"
reg1 reg2 reg3 reg4 reg5 reg6

.   global st_rownames : rownames mt_bl_estd

.   di "${st_rownames}"
hhfe vilfe provfe morecontrols

.
. ///--- Show Matrix
>   matrix list mt_bl_estd

mt_bl_estd[4,6]
                reg1   reg2   reg3   reg4   reg5   reg6
        hhfe   **1**   **0**   **0**   **0**   **0**   **0**
        vilfe   **0**   **3**   **0**   **-3**   **0**   **0**
       provfe   **0**   **0**   **0**   **-44.3**   **0**   **0**
morecontrols   **0**   **0**   **9**   **8**   **7**   **6**

.
. ///--- End Log and to HTML
> log close
       name: **<unnamed>**
        log: **C:\Users\fan/Stata4Econ//matrix/define/basic.smcl**
   log type: **smcl**
 closed on: **6 Oct 2019, 18:31:17**
───

. capture noisily {
.   log2html "${curlogfile}", replace title($filetitle (<a href="https://github.com/FanWangEcon/Stata4Econ/blob/master${st_li
> nk}.do">DO, more see: Fan and <a href="https://fanwangecon.github.io/Stata
> 4Econ">Stata4Econ))

HTML log file ~/Stata4Econ//matrix/define/basic.html created
. }

. ///--- to PDF
> capture noisily {
.   // translator query Results2pdf
.   translator set Results2pdf logo off
.   translator set Results2pdf fontsize 8
.   translator set Results2pdf pagesize letter
.   translator set Results2pdf lmargin 0.2
.   translator set Results2pdf rmargin 0.2
.   translator set Results2pdf tmargin 0.2
.   translator set Results2pdf bmargin 0.2
.   translate @Results "${curlogfile}.pdf", replace translator(Results2pdf)