```
. clear

. macro drop _all

.
. /*
> 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/REconTools
> - http://fanwangecon.github.io/M4Econ
> - http://fanwangecon.github.io/Tex4Econ
> - http://fanwangecon.github.io/CodeDynaAsset/
> - http://fanwangecon.github.io/Math4Econ/
> - http://fanwangecon.github.io/Stat4Econ/
>
> Generate loops in Stata
>
> */
.
. ///--- Start log
> set more off

. capture log close _all

. cd "${root_log}"
C:\Users\fan\Documents\Dropbox (UH-ECON)\Project Emily Minority Survey\Data2020

. global st_link "/prog/basics/fs_label"

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

. global st_logname "stata_fs_label"

. log using "${curlogfile}" , replace name($st_logname)
(note: file C:\Users\fan/Stata4Econ//prog/basics/fs_label.smcl not found)
-------------------------------------------------------------------------------
      name:  stata_fs_label
       log:  C:\Users\fan/Stata4Econ//prog/basics/fs_label.smcl
  log type:  smcl
 opened on:   7 May 2020, 20:47:06

. log on $st_logname
(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 "Labeling Stata Variables, and Get Label and all Value Labels from Variables"

.
. ///--- Load Data
> set more off

. sysuse auto, clear
(1978 Automobile Data)

.
```

```
. ////////////////////////////////////////////////////////////////////////////
> ///--- Labeling
> ////////////////////////////////////////////////////////////////////////////
>
. label variable make "Make and Model from the mtcars dataset"

.
. label define foreign_lab 0 "domestic made" 1 "foreign made", modify

. label values foreign foreign_lab

.
. ////////////////////////////////////////////////////////////////////////////
> ///--- Get Label Values
> ////////////////////////////////////////////////////////////////////////////
>
. ///--- Variable Labels show
> labelbook foreign_lab, d
```

---

value label **foreign_lab**

```
     values                                    labels
      range:  [0,1]                      string length:  [12,13]
          N:  2                    unique at full length:  yes
       gaps:  no                     unique at length 12:  yes
 missing .*:  0                              null string:  no
                                 leading/trailing blanks:  no
                                      numeric -> numeric:  no
 definition
          0   domestic made
          1   foreign made

  variables:  foreign
```

```
.
. ///--- Get Variable Label and Values hard-coded
> local st_var_label : variable label foreign

. local st_foreign_val_0_lab : label foreign_lab 0

. local st_foreign_val_1_lab : label foreign_lab 1

.
. di "st_var_label:`st_var_label'"
st_var_label:Car type

. di "st_foreign_val_0_lab:`st_foreign_val_0_lab'"
st_foreign_val_0_lab:domestic made

. di "st_foreign_val_1_lab:`st_foreign_val_1_lab'"
st_foreign_val_1_lab:foreign made

.
. ///--- Get Variable Label and Values more Automated
> /*
> For automated value printing etc:
> Given Variable Name:
> 1. get the label of the variable
> 2. get all value labels
> 3. get the number of observation each value of categorical
> 4. generate string based on these
> */
.
. * 0. Var name
. global st_var "foreign"
```

```
. * 1. get variable label
. local st_var_label : variable label ${st_var}

. global st_var_label "`st_var_label'"

. * 2. all values of foreign label
. local st_var_val_lab_name: value label ${st_var}

. levelsof ${st_var}, local(ls_var_levels) clean
0 1

. di "`st_var_val_lab_name'"
foreign_lab

. di "`ls_var_levels'"
0 1

. * 3. Number of Observations from Each category
. tab ${st_var}, matcell(mt_obs)
```

Car type	Freq.	Percent	Cum.
domestic made	52	70.27	70.27
foreign made	22	29.73	100.00
Total	74	100.00	

```
. * 4. all label values
. global st_var_val_labs ""

. local it_ctr = 0

. foreach it_foreign_lvl of numlist `ls_var_levels' {
  2.         local foreign_lvl_lab : label `st_var_val_lab_name' `it_foreign_lvl'
  3.         di "`it_foreign_lvl':`foreign_lvl_lab'"
  4.         local it_ctr = `it_ctr' + 1
  5.         if (`it_ctr' > 1 ) {
  6.                 global st_var_val_labs "${st_var_val_labs}, "
  7.         }
  8.         global it_cate_obs = el(mt_obs, `it_ctr', 1)
  9.         global st_var_val_labs "${st_var_val_labs}`it_foreign_lvl'=`foreign_lvl_lab' [N=${it
 10. }
0:domestic made
1:foreign made

.
. * 4. final outputs
. di "${st_var_label}"
Car type

. di "For Outcome ${st_var_label}: ${st_var_val_labs}"
For Outcome Car type: 0=domestic made [N=52], 1=foreign made [N=22]

. global slb_table_varinfo "${st_var_label} (${st_var_val_labs}, NA excluded from Regression)"

. di "${slb_table_varinfo}"
Car type (0=domestic made [N=52], 1=foreign made [N=22], NA excluded from Regression)

.
. ///--- End Log and to HTML
> log close _all
      name:  stata_fs_label
       log:  C:\Users\fan/Stata4Econ//prog/basics/fs_label.smcl
  log type:  smcl
 closed on:   7 May 2020, 20:47:06
-------------------------------------------------------------------------------

. capture noisily {
.         log2html "${curlogfile}", replace title($filetitle (<a href="https://github.com/FanWang
> f="https://fanwangecon.github.io/">Fan</a> and <a href="https://fanwangecon.github.io/Stata4Eco

HTML log file ~/Stata4Econ//prog/basics/fs_label.html created
```

```
. }

.
. ///--- to PDF
> capture noisily {
.         translator set Results2pdf logo off
.         translator set Results2pdf fontsize 10
.         translator set Results2pdf pagesize custom
.         translator set Results2pdf pagewidth 8.27
.         translator set Results2pdf pageheight 11.69
.         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)
```