```
. 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/
>
>    1. define variables through delimit
>    2. define string with quotes
>    3. run regression, and use defined string as labels for rows in esttab
>    4. replace all occurances of elements in strings
>
> */
.
. ///--- 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/define/fs_strings"

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

. global st_logname "stata_fs_strings"

. log using "${curlogfile}" , replace name($st_logname)
(note: file C:\Users\fan/Stata4Econ//prog/define/fs_strings.smcl not found)
─────────────────────────────────────────────────────────────────────────────
      name:  stata_fs_strings
       log:  C:\Users\fan/Stata4Econ//prog/define/fs_strings.smcl
  log type:  smcl
 opened on:  10 May 2020, 17:11:03

. 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 "Stata string delimit, string with quotes, string regression labels, etc."

.
. ////////////////////////////////////////////////////////////////////////////
> ///--- String Operations
> ////////////////////////////////////////////////////////////////////////////
>
```

```
. ///=== Search and Replace Text in Substring
>
. * replace quote in string
. di subinstr(`"dataVar1 " dataVar2"',`"""',"",.)
dataVar1  dataVar2


.
. * Replace quotes in string
. di subinstr(`" "dataVar1 dataVar2 " "dataVar2 dataVar3" "',`"""',"",.)
 dataVar1 dataVar2  dataVar2 dataVar3


.
. * Replace & with /& in long string
. global scd ""

. global scd "${scd} Conditions: PA=(& el\_i\_mand\_talk\_m2a != -999 & S\_han !=.);"

. global scd "${scd} PB=(& el\_i\_mand\_talk\_m2a != -999 & S\_han == 0);"

. global scd "${scd} PC=(& el\_i\_mand\_talk\_m2a != -999 & S\_han == 1);"

. global scd "${scd} common=(S\_han !=. & AgeCloseYr\_i\_G1 <= 30 & H\_age <= 44"

. global scd "${scd} & (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full == 0)"

. global scd "${scd} & (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full == 0)"

. global scd "${scd} & (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full == 0)"

. global scd "${scd} & (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full == 0)"

. global scd "${scd} & (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full == 0)"

. global scd "${scd} & (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full == 0)"

. global scd "${scd} & (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full == 0)"


.
. global scd = subinstr("${scd}","&","\&",.)

. di "${scd}"
 Conditions: PA=(\& el\_i\_mand\_talk\_m2a != -999 \& S\_han !=.); PB=(\& el\_i\_mand\_talk\_m2a
> S\_han == 1); common=(S\_han !=. \& AgeCloseYr\_i\_G1 <= 30 \& H\_age <= 44 \& (vE\_schCloseYr\
> l >= 1998 | vE\_schCloseYr\_full == 0) \& (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full
> ) \& (vE\_schCloseYr\_full >= 1998 | vE\_schCloseYr\_full == 0) \& (vE\_schCloseYr\_full >= 199
> vE\_schCloseYr\_full == 0)


.
. * Replace dash
. local tableRefName = "a_b_c"

. local tableRefName = subinstr("`tableRefName'","_","",.)

. di "`tableRefName'"
abc


.
. * replace pound
. local instrCap = "_d1_l1#_d1_l2 _d2_l2#_d2_l4"

. local cinstrCapF = subinstr(word("`instrCap'",1),"#"," ",.)

. di "`cinstrCapF'"
_d1_l1 _d1_l2


.
. ////////////////////////////////////////////////////////////////////////////
. ///--- String Definitions and Regressions
> ////////////////////////////////////////////////////////////////////////////
> ///--- Load Data
> set more off
```

```
. sysuse auto, clear
(1978 Automobile Data)


.
. ///--- Define Multiple Variables as global in delimit
>          #delimit;
delimiter now ;
.          global vars_rhs "
>                  mpg
>                  ib1.rep78
>                  headroom trunk
>                  weight
>              ";

.          #delimit cr
delimiter now cr
.
.          di `"$vars_rhs"'
                 mpg                        ib1.rep78                       headroom trunk                      wei

.
. ///--- Define String with Quotes
>          #delimit;
delimiter now ;
.          global st_coef_label "
>                  mpg "mpg variable"
>                  1.rep78 "BASE GROUP CONSTANT = rep78 is 1"
>                  2.rep78 "rep78 is 2"
>                  3.rep78 "rep78 is 3"
>                  4.rep78 "rep78 is 4"
>                  5.rep78 "rep78 is 5"
>                  headroom "headroom variable"
>                  trunk "this is the trunk variable"
>                  weight "and here the weight variable"
>              ";

.          #delimit cr
delimiter now cr
.
.          di `"$st_coef_label"'
                 mpg "mpg variable"                  1.rep78 "BASE GROUP CONSTANT = rep78 is 1"
> is 3"                  4.rep78 "rep78 is 4"                  5.rep78 "rep78 is 5"
> runk variable"                  weight "and here the weight variable"

.
. ///--- Describe and Summarize
>          d $rhs_vars_list, f

Contains data from C:\Program Files (x86)\Stata14\ado\base/a/auto.dta
  obs:            74                          1978 Automobile Data
 vars:            12                          13 Apr 2014 17:45
 size:         3,182                          (_dta has notes)
```

variable name	storage type	display format	value label	variable label
make	str18	%-18s		Make and Model
price	int	%8.0gc		Price
mpg	int	%8.0g		Mileage (mpg)
rep78	int	%8.0g		Repair Record 1978
headroom	float	%6.1f		Headroom (in.)
trunk	int	%8.0g		Trunk space (cu. ft.)
weight	int	%8.0gc		Weight (lbs.)
length	int	%8.0g		Length (in.)
turn	int	%8.0g		Turn Circle (ft.)
displacement	int	%8.0g		Displacement (cu. in.)
gear_ratio	float	%6.2f		Gear Ratio
foreign	byte	%8.0g	origin	Car type

```
Sorted by: foreign
```

. summ $rhs_vars_list

Variable	Obs	Mean	Std. Dev.	Min	Max
make	0				
price	74	6165.257	2949.496	3291	15906
mpg	74	21.2973	5.785503	12	41
rep78	69	3.405797	.9899323	1	5
headroom	74	2.993243	.8459948	1.5	5
trunk	74	13.75676	4.277404	5	23
weight	74	3019.459	777.1936	1760	4840
length	74	187.9324	22.26634	142	233
turn	74	39.64865	4.399354	31	51
displacement	74	197.2973	91.83722	79	425
gear_ratio	74	3.014865	.4562871	2.19	3.89
foreign	74	.2972973	.4601885	0	1

.
. ///--- Run Regression
>
.   eststo clear

.   eststo, title("reg1"): regress price $vars_rhs if foreign == 0

Source	SS	df	MS
Model	265270208	8	33158776
Residual	212697489	39	5453781.76
Total	477967697	47	10169525.5

Number of obs = 48
F(8, 39) = 6.08
Prob > F = 0.0000
R-squared = 0.5550
Adj R-squared = 0.4637
Root MSE = 2335.3

price	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
mpg	92.54338	163.0892	0.57	0.574	-237.3357	422.4224
rep78						
2	1582.106	1987.532	0.80	0.431	-2438.058	5602.269
3	1832.208	1869.079	0.98	0.333	-1948.361	5612.776
4	921.8792	2015.345	0.46	0.650	-3154.542	4998.3
5	4172.732	2681.573	1.56	0.128	-1251.261	9596.725
headroom	-436.3395	519.777	-0.84	0.406	-1487.688	615.0087
trunk	-76.14985	136.1647	-0.56	0.579	-351.5689	199.2692
weight	4.610868	1.053809	4.38	0.000	2.479338	6.742399
_cons	-10261.73	6562.752	-1.56	0.126	-23536.15	3012.686

(**est1** stored)

.   eststo, title("reg2"): regress price $vars_rhs if foreign == 1
note: 1b.rep78 identifies no observations in the sample
note: 5.rep78 omitted because of collinearity

Source	SS	df	MS
Model	77099791.3	6	12849965.2
Residual	21555563.2	14	1539683.09
Total	98655354.6	20	4932767.73

Number of obs = 21
F(6, 14) = 8.35
Prob > F = 0.0006
R-squared = 0.7815
Adj R-squared = 0.6879
Root MSE = 1240.8

price	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
mpg	41.78335	69.31091	0.60	0.556	-106.8738	190.4405
rep78						
1	0	(empty)				
3	866.061	1060.461	0.82	0.428	-1408.402	3140.524
4	1367.986	686.8411	1.99	0.066	-105.1419	2841.114
5	0	(omitted)				
headroom	-237.1521	660.3787	-0.36	0.725	-1653.524	1179.219
trunk	155.15	94.41051	1.64	0.123	-47.34039	357.6404
weight	5.747012	1.259762	4.56	0.000	3.045091	8.448933
_cons	-9844.945	4889.272	-2.01	0.064	-20331.39	641.4998

(**est2** stored)

```
.
.          esttab, title("regtest") ///
>                mtitle ///
>                coeflabels($st_coef_label) ///
>                varwidth(50)
```

regtest
───
                                                        (1)   (2)
                                                       reg1   reg2
───
mpg variable   92.54   41.78
                                                     (0.57)   (0.60)

BASE GROUP CONSTANT = rep78 is 1   0   0
                                                        (.)   (.)

rep78 is 2   1582.1
                                                     (0.80)

rep78 is 3   1832.2   866.1
                                                     (0.98)   (0.82)

rep78 is 4   921.9   1368.0
                                                     (0.46)   (1.99)

rep78 is 5   4172.7   0
                                                     (1.56)   (.)

headroom variable   -436.3   -237.2
                                                    (-0.84)   (-0.36)

this is the trunk variable   -76.15   155.2
                                                    (-0.56)   (1.64)

and here the weight variable   4.611***   5.747***
                                                     (4.38)   (4.56)

_cons   -10261.7   -9844.9
                                                    (-1.56)   (-2.01)
───
N   48   21
───
t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001
```

```
.
. ///--- End Log and to HTML
> log close _all
       name:  stata_fs_strings
        log:  C:\Users\fan/Stata4Econ//prog/define/fs_strings.smcl
   log type:  smcl
  closed on:  10 May 2020, 17:11:03
─────────────────────────────────────────────────────────────────────────

. 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/define/fs_strings.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)
```