```
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. 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
   1. boolean control in stata
. ///--- Start log
> set more off
. capture log close
. cd "${root log}"
C:\Program Files (x86)\Stata14
. global curlogfile "~\Stata4Econ\prog\define\fs boolean"
. log using "${curlogfile}" , replace
(note: file C:\Users\fan\Stata4Econ\prog\define\fs_boolean.smcl not found)
      name: <unnamed>
      log: C:\Users\fan\Stata4Econ\prog\define\fs_boolean.smcl
  log type: smcl
 opened on: 13 Oct 2019, 14:24:15
 log on
(log already on)
. ///--- Load Data
> set more off
. sysuse auto, clear
(1978 Automobile Data)
 ///--- Control
> local bl includereg1 = 1
. local bl_includereg2 = 0
. global bl_includereg3 = 0
. global bl_includereg4 = 1
. scalar bl_includereg5 = 0
. scalar bl_includereg6 = 1
. ///--- 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 `"$vars rhs"'
                                      ib1.rep78
                                                                 headroom trunk
                 mpg
                                                                                                  weight
. ///--- Define String with Quotes
         #delimit;
delimiter now ;
          global st coef label "
                  mpg "mpg variable"
1.rep78 "BASE GROUP CONSTANT = rep78 is 1"
2.rep78 "rep78 is 2"
                  3.rep78 "rep78 is 3"
                  4.rep78 "rep78 is 4"
                  5.rep78 "rep78 is 5" headroom "headroom variable"
                  trunk "this is the trunk variable"
                  weight "and here the weight variable"
          #delimit cr
delimiter now cr
          di `"$st coef_label"'
                mpg "mpg variable"
                                                                                                                   2.rep78 "rep78
                                                      1.rep78 "BASE GROUP CONSTANT = rep78 is 1"
                         3.rep78 "rep78 is 3"
                                                                4.rep78 "rep78 is 4"
                                                                                                       5.rep78 "rep78 is 5"
>
  is 2"
                                                                                                                 weight "and here
             headroom "headroom variable"
                                                            trunk "this is the trunk variable"
   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 12 13 Apr 2014 17:45 vars: 3,182 (_dta has notes) size:

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

///--- Run Regression

eststo clear

_cons

. if (`bl_includereg1') {

-10261.73

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

Source	SS	df	MS		Number of obs F(8, 39)		48
Model Residual	265270208 212697489	8 39	33158776 5453781.76	Prob R-sq	> F uared	= = =	6.08 0.0000 0.5550
Total	477967697	47	10169525.5		R-squared MSE	=	0.4637 2335.3
price	Coef.	Std. Err.	t	P> t	[95% Co	onf.	Interval]
mpg	92.54338	163.0892	0.57	0.574	-237.335	57	422.4224
rep78 2 3 4 5	1582.106 1832.208 921.8792 4172.732	1987.532 1869.079 2015.345 2681.573	0.98 0.46	0.431 0.333 0.650 0.128	-2438.05 -1948.36 -3154.54 -1251.26	51 1 2	5602.269 5612.776 4998.3 9596.725
headroom trunk weight	-436.3395 -76.14985 4.610868	519.777 136.1647 1.053809	-0.56	0.406 0.579 0.000	-1487.68 -351.568 2.47933	39	615.0087 199.2692 6.742399

-1.56

0.126

-23536.15

3012.686

(est1 stored) . if (`bl_includereg2') { -eststo, title("reg2"): regress price \$vars_rhs if foreign == 1 . if (\$bl_includereg3) {
. eststo, title("reg3"): regress price \$vars_rhs if foreign == 1 . if (\$bl_includereg4) {

eststo, title("reg4"): regress price \$vars_rhs if foreign == 1 note: 1b.rep78 identifies no observations in the sample note: 5.rep78 omitted because of collinearity

6562.752

Source	SS	df MS		Number of obs		s = =	21
Model Residual	77099791.3 21555563.2	6 14	12849965.2 1539683.09	Prob R-sq	F(6, 14) Prob > F R-squared Adj R-squared Root MSE		8.35 0.0006 0.7815
Total	98655354.6	20	4932767.73	_			0.6879 1240.8
price	Coef.	Std. Err.	t	P> t	[95% (Conf.	Interval]
mpg	41.78335	69.31091	0.60	0.556	-106.8	738	190.4405

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 3 4 5	0 866.061 1367.986 0	(empty) 1060.461 686.8411 (omitted)	0.82 1.99	0.428 0.066	-1408.402 -105.1419	3140.524 2841.114
headroom trunk weight _cons	-237.1521 155.15 5.747012 -9844.945	660.3787 94.41051 1.259762 4889.272	-0.36 1.64 4.56 -2.01	0.725 0.123 0.000 0.064	-1653.524 -47.34039 3.045091 -20331.39	1179.219 357.6404 8.448933 641.4998

```
. if (bl includereg5) {
      eststo, title("reg5"): regress price $vars_rhs if foreign == 1
. if (bl_includereg6) {
     es\overline{t}sto, title("reg6"): 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
                                                    Number of obs
                                                                              21
                                                                            8.35
                                                    F(6, 14)
                                                    Prob > F
       Model
                77099791.3
                                      12849965.2
                                                                          0.0006
                21555563.2
                                   14 1539683.09
                                                                          0.7815
    Residual
                                                    R-squared
                                                    Adj R-squared
                                                                          0.6879
       Total
                98655354.6
                                      4932767.73
                                                    Root MSE
                                                                          1240.8
       price
                    Coef.
                            Std. Err.
                                            t
                                                 P>|t|
                                                            [95% Conf. Interval]
                 41.78335
                             69.31091
                                          0.60
                                                 0.556
                                                           -106.8738
                                                                        190.4405
         mpg
       rep78
          1
                            (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)
                -237.1521
                             660.3787
                                         -0.36
                                                 0.725
                                                           -1653.524
                                                                        1179.219
    headroom
                                                                        357.6404
                                                           -47.34039
       trunk
                   155.15
                             94.41051
                                          1.64
                                                 0.123
      weight
                 5.747012
                             1.259762
                                          4.56
                                                 0.000
                                                            3.045091
                                                                        8.448933
                                         -2.01
                                                                        641.4998
                -9844.945
                             4889.272
                                                 0.064
                                                           -20331.39
       cons
(est3 stored)
. }
          esttab, title("include reg 1 2 and 4 but not 3, and 6 but not 5.") ///
                  mtitle ///
                  coeflabels($st coef label) ///
                  varwidth(50)
include reg 1 2 and 4 but not 3, and 6 but not 5.
                                                                               (2)
                                                              (1)
                                                                                               (3)
                                                             reg1
                                                                             reg4
                                                                                              reg6
                                                                            41.78
                                                            92.54
                                                                                             41.78
mpg variable
                                                                            (0.60)
                                                                                            (0.60)
                                                           (0.57)
BASE GROUP CONSTANT = rep78 is 1
                                                                0
                                                                                0
                                                                                                 0
                                                              (.)
                                                                               (.)
                                                                                               (.)
rep78 is 2
                                                           1582.1
                                                           (0.80)
rep78 is 3
                                                           1832.2
                                                                            866.1
                                                                                             866.1
                                                           (0.98)
                                                                            (0.82)
                                                                                            (0.82)
rep78 is 4
                                                            921.9
                                                                           1368.0
                                                                                            1368.0
                                                           (0.46)
                                                                            (1.99)
                                                                                            (1.99)
rep78 is 5
                                                           4172.7
                                                                                0
                                                                                                 0
                                                           (1.56)
                                                                               (.)
                                                                                               (.)
headroom variable
                                                           -436.3
                                                                           -237.2
                                                                                            -237.2
                                                          (-0.84)
                                                                           (-0.36)
                                                                                           (-0.36)
this is the trunk variable
                                                           -76.15
                                                                            155.2
                                                                                             155.2
                                                          (-0.56)
                                                                            (1.64)
                                                                                            (1.64)
and here the weight variable
                                                            4.611***
                                                                            5.747***
                                                                                             5.747***
                                                           (4.38)
                                                                           (4.56)
                                                                                            (4.56)
cons
                                                         -10261.7
                                                                          -9844.9
                                                                                           -9844.9
                                                          (-1.56)
                                                                           (-2.01)
                                                                                           (-2.01)
Ν
                                                                                                21
                                                               48
                                                                               21
t statistics in parentheses
* p<0.05, ** p<0.01, *** p<0.001
 ///--- End Log and to HTML
> log close
      name:
             <unnamed>
       log: C:\Users\fan\Stata4Econ\prog\define\fs_boolean.smcl
  log type:
             smcl
 closed on: 13 Oct 2019, 14:24:16
. capture noisily {
   log2html "${curlogfile}", replace
HTML log file ~\Stata4Econ\prog\define\fs boolean.html created
. }
. ///--- to PDF
> capture noisily {
          translator set Results2pdf logo off
          translator set Results2pdf fontsize 10
          translator set Results2pdf pagesize custom
          translator set Results2pdf pagewidth 11.69
          translator set Results2pdf pageheight 16.53
          translator set Results2pdf lmargin 0.2
          translator set Results2pdf rmargin 0.2
          translator set Results2pdf tmargin 0.2
          translator set Results2pdf bmargin 0.2
          translate @Results "${curlogfile}.pdf", replace translator(Results2pdf)
```

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