```
  ___  ____  ____  ____  ____ (R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/   15.1   Copyright 1985-2017 StataCorp LLC
  Statistics/Data Analysis            StataCorp
                                      4905 Lakeway Drive
       Special Edition                College Station, Texas 77845 USA
                                      800-STATA-PC        http://www.stata.com
                                      979-696-4600        stata@stata.com
                                      979-696-4601 (fax)

100-student Stata lab perpetual license:
       Serial number:  401506209499
         Licensed to:  lyx
                       CUHKSZ

Notes:
      1.  Unicode is supported; see help unicode_advice.
      2.  Maximum number of variables is set to 5000; see help set_maxvar.

Checking for updates...
(contacting http://www.stata.com)
bad serial number
unable to check for update; verify Internet settings are correct.

. import excel "C:\Users\lyx\Desktop\2040 proj\Part1_training_data.xlsx", sheet("5") firstrow

. reg price t0 t1 t2 t3 t4 t5, robust
note: t0 omitted because of collinearity

Linear regression                               Number of obs     =        200
                                                F(5, 194)         =      25.65
                                                Prob > F          =     0.0000
                                                R-squared         =     0.3750
                                                Root MSE          =     710.74

------------------------------------------------------------------------------
             |               Robust
       price |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          t0 |          0  (omitted)
          t1 |  -123.464   48.57248    -2.54   0.012    -219.2619   -27.6661
          t2 |   1.844261   1.260313     1.46   0.145    -.6414124   4.329935
          t3 |  -.0059349   .0143809    -0.41   0.680    -.0342979    .022428
          t4 |  -.0000325    .000074    -0.44   0.661    -.0001784   .0001134
```

```
          t5 |   1.50e-07   1.40e-07     1.07   0.286    -1.26e-07    4.26e-07
       _cons |   7617.603   635.8701    11.98   0.000     6363.497    8871.709
------------------------------------------------------------------------------
```

. import excel "C:\Users\lyx\Desktop\2040 proj\Part1_training_data.xlsx", sheet("10") firstrow clear

. reg price t0 t1 t2 t3 t4 t5 t6 t7 t8 t9 t10 , robust
note: t0 omitted because of collinearity

```
Linear regression                               Number of obs     =        200
                                                F(4, 189)         =          .
                                                Prob > F          =          .
                                                R-squared         =     0.4198
                                                Root MSE          =     693.77

------------------------------------------------------------------------------
             |               Robust
       price |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          t0 |          0  (omitted)
          t1 |  -261.5371   286.7413    -0.91   0.363    -827.1617    304.0874
          t2 |   28.81617   32.90402     0.88   0.382    -36.09013    93.72247
          t3 |  -1.645372   1.674427    -0.98   0.327    -4.948338    1.657594
          t4 |   .0479473   .0463439     1.03   0.302    -.0434706    .1393651
          t5 |  -.0007944   .0007696    -1.03   0.303    -.0023125    .0007237
          t6 |   7.99e-06   8.01e-06     1.00   0.320    -7.81e-06    .0000238
          t7 |  -4.99e-08   5.27e-08    -0.95   0.345    -1.54e-07    5.41e-08
          t8 |   1.89e-10   2.13e-10     0.89   0.375    -2.31e-10    6.10e-10
          t9 |  -4.00e-13   4.82e-13    -0.83   0.408    -1.35e-12    5.52e-13
         t10 |   3.60e-16   4.69e-16     0.77   0.443    -5.64e-16    1.28e-15
       _cons |      7515.6   800.9137     9.38   0.000     5935.722    9095.478
------------------------------------------------------------------------------
```

. import excel "C:\Users\lyx\Desktop\2040 proj\Part1_training_data.xlsx", sheet("20") firstrow clear

. reg price t0 t1 t2 t3 t4 t5 t6 t7 t8 t9 t10 t11 t12 t13 t14 t15 t16 t17 t18 t19 t20 , robust
note: t0 omitted because of collinearity
note: t1 omitted because of collinearity
note: t2 omitted because of collinearity
note: t7 omitted because of collinearity
note: t12 omitted because of collinearity
note: t13 omitted because of collinearity

note: t17 omitted because of collinearity

Linear regression Number of obs = 200
F(1, 185) = .
Prob > F = .
R-squared = 0.4187
Root MSE = 701.94

price	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
t0	0	(omitted)				
t1	0	(omitted)				
t2	0	(omitted)				
t3	-.233905	1.323991	-0.18	0.860	-2.845967	2.378157
t4	.0122271	.0934797	0.13	0.896	-.1721963	.1966505
t5	-.0002915	.0026682	-0.11	0.913	-.0055556	.0049725
t6	3.31e-06	.000037	0.09	0.929	-.0000698	.0000764
t7	0	(omitted)				
t8	-4.32e-10	3.66e-09	-0.12	0.906	-7.64e-09	6.78e-09
t9	4.35e-12	4.56e-11	0.10	0.924	-8.55e-11	9.42e-11
t10	-1.42e-14	1.01e-13	-0.14	0.888	-2.13e-13	1.84e-13
t11	1.84e-30	1.17e-29	0.16	0.875	-2.12e-29	2.49e-29
t12	0	(omitted)				
t13	0	(omitted)				
t14	-1.87e-36	1.25e-35	-0.15	0.881	-2.65e-35	2.28e-35
t15	1.41e-38	7.45e-38	0.19	0.850	-1.33e-37	1.61e-37
t16	-2.94e-41	1.87e-40	-0.16	0.875	-3.98e-40	3.39e-40
t17	0	(omitted)				
t18	5.01e-88	1.84e-87	0.27	0.785	-3.12e-87	4.12e-87
t19	-4.32e-90	1.76e-89	-0.25	0.806	-3.90e-89	3.04e-89
t20	9.39e-93	3.81e-92	0.25	0.806	-6.58e-92	8.46e-92
_cons	6830.107	905.7364	7.54	0.000	5043.207	8617.007

. import excel "C:\Users\lyx\Desktop\2040 proj\Part1_training_data.xlsx", sheet("7") firstrow clear

. reg price t0 t1 t2 t3 t4 t5 t6 t7, robust
note: t0 omitted because of collinearity

Linear regression Number of obs = 200
F(5, 192) = .

```
                                                Prob > F          =          .
                                                R-squared         =     0.4068
                                                Root MSE          =     696.03

------------------------------------------------------------------------------
             |               Robust
       price |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          t0 |           0  (omitted)
          t1 |    69.3724   94.67809     0.73   0.465    -117.3703    256.1152
          t2 |   -8.93832   4.740561    -1.89   0.061    -18.28859    .4119464
          t3 |   .2470503    .113055     2.19   0.030     .024061    .4700395
          t4 |  -.0030035   .0014172    -2.12   0.035    -.0057988   -.0002082
          t5 |   .0000186   9.62e-06     1.93   0.055    -4.15e-07    .0000375
          t6 |  -5.74e-08   3.34e-08    -1.72   0.087    -1.23e-07    8.47e-09
          t7 |   7.11e-11   4.66e-11     1.53   0.128    -2.07e-11    1.63e-10
       _cons |   6743.405   759.4635     8.88   0.000     5245.442    8241.368
------------------------------------------------------------------------------

. import excel "C:\Users\lyx\Desktop\2040 proj\Part1_training_data.xlsx", sheet("8") firstrow
clear

. reg price t0 t1 t2 t3 t4 t5 t6 t7 t8 , robust
note: t0 omitted because of collinearity

Linear regression                               Number of obs     =        200
                                                F(5, 191)         =          .
                                                Prob > F          =          .
                                                R-squared         =     0.4068
                                                Root MSE          =     697.85

------------------------------------------------------------------------------
             |               Robust
       price |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          t0 |           0  (omitted)
          t1 |   65.09879   125.6443     0.52   0.605    -182.7298    312.9274
          t2 |  -8.576407   8.663318    -0.99   0.323    -25.66447    8.511659
          t3 |   .2340141   .2832543     0.83   0.410    -.3246943    .7927225
          t4 |  -.0027619   .0049502    -0.56   0.578    -.0125261    .0070022
          t5 |   .0000161   .0000491     0.33   0.744    -.0000807    .0001128
          t6 |  -4.30e-08   2.76e-07    -0.16   0.876    -5.88e-07    5.02e-07
          t7 |   2.72e-11   8.23e-10     0.03   0.974    -1.60e-09    1.65e-09
          t8 |   5.46e-14   1.01e-12     0.05   0.957    -1.93e-12    2.04e-12
```

```
       _cons |   6756.383   768.1206     8.80   0.000     5241.295    8271.472
------------------------------------------------------------------------------
```

```
. import excel "C:\Users\lyx\Desktop\2040 proj\Part1_training_data.xlsx", sheet("4") firstrow
clear

. reg price t0 t1 t2 t3 t4 , robust
note: t0 omitted because of collinearity

Linear regression                               Number of obs     =        200
                                                F(4, 195)         =      27.52
                                                Prob > F          =     0.0000
                                                R-squared         =     0.3708
                                                Root MSE          =     711.29

------------------------------------------------------------------------------
             |               Robust
       price |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          t0 |           0  (omitted)
          t1 |   -153.033   29.49958    -5.19   0.000    -211.2122   -94.85383
          t2 |   2.863775   .5071883     5.65   0.000     1.863496    3.864054
          t3 |  -.0194098   .0033909    -5.72   0.000    -.0260974   -.0127223
          t4 |   .0000429   7.74e-06     5.54   0.000     .0000276    .0000581
       _cons |   7822.637   522.5276    14.97   0.000     6792.106    8853.168
------------------------------------------------------------------------------
```

```
. save "C:\Users\lyx\Desktop\2040 proj\Taylor_n_selection.dta"
file C:\Users\lyx\Desktop\2040 proj\Taylor_n_selection.dta saved

.
```