```
 1 . clear

 2 . set more off

 3 .
 4 . * PS5-II.3.a
 5 .
 6 . use k99

 7 .
 8 . eststo: reg pscore cs
```

Source	SS	df	MS	Number of obs	=	5,743
				F(1, 5741)	=	47.39
Model	34422.5013	1	34422.5013	Prob > F	=	0.0000
Residual	4170119.1	5,741	726.375039	R-squared	=	0.0082
				Adj R-squared	=	0.0080
Total	4204541.6	5,742	732.243399	Root MSE	=	26.951

pscore	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
cs	-.617992	.0897722	-6.88	0.000	-.7939795	-.4420045
_cons	64.06662	1.855053	34.54	0.000	60.43001	67.70322

(**est1** stored)

```
 9 . esttab using PS5-23a.tex, replace ///
   >         nonumbers mtitles("Regular") ///
   >         coeflabels(cs "Class Size" _cons "Constant") ///
   >         b(3) se(3)
   (output written to PS5-23a.tex)

10 .
11 . * PS5-II.3.b
12 .
13 . eststo: reg pscore cs, robust

Linear regression                               Number of obs     =      5,743
                                                F(1, 5741)        =      47.18
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0082
                                                Root MSE          =     26.951
```

pscore	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
cs	-.617992	.08997	-6.87	0.000	-.7943672	-.4416168
_cons	64.06662	1.861063	34.42	0.000	60.41823	67.715

(**est2** stored)

```
14 . esttab using PS5-23b.tex, replace ///
   >         nonumbers mtitles("Regular" "Robust") ///
   >         coeflabels(cs "Class Size" _cons "Constant") ///
   >         b(3) se(3)
   (output written to PS5-23b.tex)

15 .
```

```
16 . * PS5-II.3.c
17 .
18 . eststo: reg pscore cs, vce (cluster classid)

Linear regression                               Number of obs     =      5,743
                                                F(1, 317)         =       7.13
                                                Prob > F          =     0.0080
                                                R-squared         =     0.0082
                                                Root MSE          =     26.951

                                (Std. Err. adjusted for 318 clusters in classid)
------------------------------------------------------------------------------
             |               Robust
      pscore |      Coef.  Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          cs |   -.617992   .2315155    -2.67   0.008    -1.073493   -.1624909
       _cons |   64.06662   4.572727    14.01   0.000     55.06989    73.06335
------------------------------------------------------------------------------
(est3 stored)

19 . esttab using PS5-23c.tex, replace ///
>         nonumbers mtitles("Regular" "Robust" "Cluster") ///
>         coeflabels(cs "Class Size" _cons "Constant") ///
>         b(3) se(3)
(output written to PS5-23c.tex)

20 .
21 . * PS5-II.3.d
22 .
23 . collapse (mean) pscore cs (count) observations = pscore, by(classid)

24 . eststo: reg pscore cs [aweight = observations]
(sum of wgt is 5,743)

      Source |       SS           df       MS      Number of obs   =       318
-------------+----------------------------------   F(1, 316)       =      7.49
       Model |  1906.03435         1  1906.03435   Prob > F        =    0.0066
    Residual |  80459.3035       316  254.618049   R-squared       =    0.0231
-------------+----------------------------------   Adj R-squared   =    0.0200
       Total |  82365.3379       317  259.827564   Root MSE        =    15.957

------------------------------------------------------------------------------
      pscore |      Coef.  Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          cs |   -.617992   .2258718    -2.74   0.007    -1.062395   -.1735893
       _cons |   64.06662   4.667413    13.73   0.000     54.88348    73.24975
------------------------------------------------------------------------------
(est4 stored)

25 . esttab using PS5-23d.tex, replace ///
>         nonumbers mtitles("Regular" "Robust" "Cluster" "Collapsed") ///
>         coeflabels(cs "Class Size" _cons "Constant") ///
>         b(3) se(3)
(output written to PS5-23d.tex)

26 . eststo clear

27 .
28 . log close
      name:  <unnamed>
       log:  C:\Users\wonja\Documents\GitHub\DEDP\14.320\PS5\PS5-23.smcl
  log type:  smcl
 closed on:  29 Apr 2021, 14:58:05
```