```
                                              __  ___  ___  ___  ___(R)
                                             /_   /   __/   /  __/
                                            __/  /  /__/  /  /__/
                                              Statistics/Data analysis
```

```
 1 .
 2 . clear

 3 . set more off

 4 . cd "C:\Users\wonja\Documents\GitHub\14.320\PS3"
   C:\Users\wonja\Documents\GitHub\14.320\PS3

 5 . use NHIS2009_clean

 6 .
 7 . * Problem 3.(a)
 8 .
 9 . * select non-missings
10 .         keep if marradult==1 & perweight!=0
   (50,662 observations deleted)

11 .             by serial: egen hi_hsb = mean(hi_hsb1)
   (207 missing values generated)

12 .                 keep if hi_hsb!=. & hi!=.
   (207 observations deleted)

13 .             by serial: egen female = total(fml)

14 .                 keep if female==1
   (31 observations deleted)

15 .                 drop female

16 .
17 . * Josh's sample selection criteria
18 .      gen angrist = ( age>=26 & age<=59 & marradult==1 & adltempl>=1 )

19 .             keep if angrist==1
   (9,613 observations deleted)

20 .      // drop single-person HHs
21 .      by serial: gen n = _N

22 .             keep if n>1
   (1,331 observations deleted)

23 .
24 . eststo: reg hlth hi if fml == 0 [aw=perweight]
   (sum of wgt is 34,118,563)
```

Source	SS	df	MS		
				Number of obs	= 9,395
				F(1, 9393)	= 122.74
Model	108.591763	1	108.591763	Prob > F	= 0.0000
Residual	8310.31193	9,393	.884734582	R-squared	= 0.0129
				Adj R-squared	= 0.0128
Total	8418.90369	9,394	.896200095	Root MSE	= .9406

hlth	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]
hi	.3132452	.0282743	11.08	0.000	.2578214 .368669
_cons	3.695654	.0262753	140.65	0.000	3.644149 3.74716

(**est1** stored)

```
25 . esttab using PS3-3a.tex, replace compress cells("b(label(coef) fmt(a3) star)
   > ci(par fmt(a3))" t(par fmt(a3))) label mtitles("Health status") varlabels(hi
   > "Covered by insurance" _cons "Constant") nonumber stats(N, fmt(%9.0gc) label(
   > Observations)) addnote("t statistics in parentheses" "@starlegend")
   (output written to PS3-3a.tex)

26 . eststo clear

27 .
28 . * Problem 3.(b)
29 .
30 . eststo: reg hlth hi age if fml == 0 [aw=perweight]
   (sum of wgt is 34,118,563)
```

Source	SS	df	MS			
Model	373.144672	2	186.572336			
Residual	8045.75902	9,392	.856660883			
Total	8418.90369	9,394	.896200095			

	Number of obs	=	9,395
	F(2, 9392)	=	217.79
	Prob > F	=	0.0000
	R-squared	=	0.0443
	Adj R-squared	=	0.0441
	Root MSE	=	.92556

hlth	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
hi	.3658295	.0279826	13.07	0.000	.3109775	.4206814
age	-.019377	.0011026	-17.57	0.000	-.0215384	-.0172156
_cons	4.495212	.0523317	85.90	0.000	4.39263	4.597793

```
   (est1 stored)

31 . eststo: reg hlth hi age yedu if fml == 0 [aw=perweight]
   (sum of wgt is 34,118,563)
```

Source	SS	df	MS			
Model	792.761587	3	264.253862			
Residual	7626.1421	9,391	.812069226			
Total	8418.90369	9,394	.896200095			

	Number of obs	=	9,395
	F(3, 9391)	=	325.41
	Prob > F	=	0.0000
	R-squared	=	0.0942
	Adj R-squared	=	0.0939
	Root MSE	=	.90115

hlth	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
hi	.1450738	.0289237	5.02	0.000	.0883772	.2017704
age	-.0189735	.0010737	-17.67	0.000	-.0210782	-.0168688
yedu	.0800721	.0035225	22.73	0.000	.0731673	.086977
_cons	3.552731	.0656894	54.08	0.000	3.423966	3.681497

```
   (est2 stored)

32 . eststo: reg hlth hi age yedu inc if fml == 0 [aw=perweight]
   (sum of wgt is 34,118,563)
```

Source	SS	df	MS			
Model	1020.72787	4	255.181966			
Residual	7398.17582	9,390	.787878149			
Total	8418.90369	9,394	.896200095			

	Number of obs	=	9,395
	F(4, 9390)	=	323.89
	Prob > F	=	0.0000
	R-squared	=	0.1212
	Adj R-squared	=	0.1209
	Root MSE	=	.88763

hlth	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
hi	.0192656	.029434	0.65	0.513	-.0384314	.0769625
age	-.0212503	.001066	-19.93	0.000	-.02334	-.0191607
yedu	.0564235	.0037378	15.10	0.000	.0490965	.0637504
inc	3.24e-06	1.90e-07	17.01	0.000	2.86e-06	3.61e-06
_cons	3.772314	.0659787	57.17	0.000	3.642982	3.901647

```
   (est3 stored)
```

```
33 . esttab using PS3-3b.tex, replace compress cells(b(label(coef) fmt(a3) star) t
   > (par fmt(a3))) label mtitles("" "Health status" "") varlabels(hi "Covered by
   > insurance" yedu "Years of education" inc "Income" _cons "Constant") nonumber
   > stats(N, fmt(%9.0gc) label(Observations)) addnote("t statistics in parenthese
   > s" "@starlegend")
   (output written to PS3-3b.tex)


34 . eststo clear


35 .
36 . log close
          name:  <unnamed>
           log:  C:\Users\wonja\Documents\GitHub\14.320\PS3\PS3-3.smcl
      log type:  smcl
     closed on:   1 Apr 2021, 12:53:17
   ─────────────────────────────────────────────────────────────────────────────
```