Exercise 2

#2

Calculate the correlation between Y and X1.

	Y	u1
Y	1.0000	
u1	0.1160	1.0000

This is quite different from 1.2.

Calculate the coefficients on the regression.

Source	SS	df	MS
Model	315329.133	3	105109.711
Residual	9947.3343	9,996	.995131483
Total	325276.467	9,999	32.5308998

Number of obs	=	10,000
F(3, 9996)	>	99999.00
Prob > F	=	0.0000
R-squared	=	0.9694
Adj R-squared	=	0.9694
Root MSE	=	.99756

Y	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
u1	1.175044	.0171802	68.40	0.000	1.141367	1.20872
u2	-.9003673	.0028711	-313.59	0.000	-.9059953	-.8947393
u3	.1005889	.0002157	466.41	0.000	.1001662	.1010117
_cons	.8009973	.6478174	1.24	0.216	-.4688551	2.07085

Calculate the standard errors, using the standard formulas of the OLS.

This can be shown in the chart above.

Using bootstrap with 49 and 499 replications respectively.

```
Bootstrap replications (49)
----+--- 1 ---+--- 2 ---+--- 3 ---+--- 4 ---+--- 5
.................................................
```

Linear regression

Number of obs	=	10,000
Replications	=	49
Wald chi2(3)	=	358306.09
Prob > chi2	=	0.0000
R-squared	=	0.9694
Adj R-squared	=	0.9694
Root MSE	=	0.9976

Y	Observed Coef.	Bootstrap Std. Err.	z	P>|z|	Normal-based [95% Conf.	Interval]
u1	1.175044	.0168205	69.86	0.000	1.142076	1.208011
u2	-.9003673	.0029568	-304.51	0.000	-.9061625	-.894572
u3	.1005889	.000259	388.30	0.000	.1000812	.1010966
_cons	.8009973	.7839713	1.02	0.307	-.7355582	2.337553

```
Linear regression                               Number of obs     =     10,000
                                                Replications      =        499
                                                Wald chi2(3)      =  283965.16
                                                Prob > chi2       =     0.0000
                                                R-squared         =     0.9694
                                                Adj R-squared     =     0.9694
                                                Root MSE          =     0.9976
```

Y	Observed Coef.	Bootstrap Std. Err.	z	P>|z|	Normal-based [95% Conf.	Interval]
u1	1.175044	.017771	66.12	0.000	1.140213	1.209874
u2	-.9003673	.0028295	-318.21	0.000	-.905913	-.8948216
u3	.1005889	.0002219	453.32	0.000	.100154	.1010238
_cons	.8009973	.6634689	1.21	0.227	-.4993779	2.101373

#4

The probit regression:

```
Probit regression                               Number of obs     =     10,000
                                                LR chi2(3)        =   11283.62
                                                Prob > chi2       =     0.0000
Log likelihood = -1287.8187                     Pseudo R2         =     0.8142
```

ydum	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
u1	1.132912	.0560252	20.22	0.000	1.023104	1.242719
u2	-.9120145	.0249007	-36.63	0.000	-.9608189	-.86321
u3	.1018701	.0026759	38.07	0.000	.0966254	.1071148
_cons	-302.3891	7.947723	-38.05	0.000	-317.9664	-286.8119

The logit regression:

```
Logistic regression                             Number of obs     =     10,000
                                                LR chi2(3)        =   11275.15
                                                Prob > chi2       =     0.0000
Log likelihood = -1292.0526                     Pseudo R2         =     0.8135
```

ydum	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
u1	2.057558	.1046452	19.66	0.000	1.852458	2.262659
u2	-1.647092	.0492343	-33.45	0.000	-1.74359	-1.550595
u3	.1839136	.0053234	34.55	0.000	.17348	.1943472
_cons	-545.9487	15.81095	-34.53	0.000	-576.9376	-514.9598

The linear probability model:

```
Linear regression                               Number of obs     =     10,000
                                                F(3, 9996)        =    5524.02
                                                Prob > F          =     0.0000
                                                R-squared         =     0.6088
                                                Root MSE          =     .31275

------------------------------------------------------------------------------
             |               Robust
        ydum |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          u1 |   .0818024   .0053584    15.27   0.000     .0712989     .092306
          u2 |  -.0601577   .0009596   -62.69   0.000    -.0620386   -.0582767
          u3 |   .0071021   .0000648   109.56   0.000      .006975    .0072292
       _cons |  -20.59574   .1947444  -105.76   0.000    -20.97748     -20.214
------------------------------------------------------------------------------
```

Compute the marginal effect of X on Y according to the probit and logit models.

```
Conditional marginal effects                    Number of obs     =     10,000
Model VCE    : OIM

Expression   : Pr(ydum), predict()
dy/dx w.r.t. : u1 u2 u3
at           : u1              =     2.00771 (mean)
               u2              =    6.012179 (mean)
               u3              =     2999.51 (mean)

------------------------------------------------------------------------------
             |            Delta-method
             |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          u1 |   .4516502   .0223285    20.23   0.000     .4078871    .4954132
          u2 |  -.3635866   .0098969   -36.74   0.000    -.3829842    -.344189
          u3 |   .0406119   .0010656    38.11   0.000     .0385234    .0427003
------------------------------------------------------------------------------
```

```
Conditional marginal effects                    Number of obs     =     10,000
Model VCE    : OIM

Expression   : Pr(ydum), predict()
dy/dx w.r.t. : u1 u2 u3
at           : u1              =     2.00771 (mean)
               u2              =    6.012179 (mean)
               u3              =     2999.51 (mean)

------------------------------------------------------------------------------
             |            Delta-method
             |      dy/dx   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          u1 |   .5137631   .0261146    19.67   0.000     .4625795    .5649467
          u2 |  -.4112716   .0122423   -33.59   0.000     -.435266   -.3872771
          u3 |   .0459224   .0013272    34.60   0.000     .0433211    .0485237
------------------------------------------------------------------------------
```

Exercise 3

#1

The market shares of the ten products:

Variable	Obs	Mean	Std. Dev.	Min	Max
ppk_stk	4,470	.5184362	.1505174	.19	.67
pbb_stk	4,470	.5432103	.1203319	.19	1.01
pfl_stk	4,470	1.01502	.0428952	.95	1.16
phse_stk	4,470	.4371476	.1188312	.19	.64
pgen_stk	4,470	.3452819	.0351661	.25	.55
pimp_stk	4,470	.7807785	.1146461	.33	2.3
pss_tub	4,470	.8250895	.0612116	.5	.98
ppk_tub	4,470	1.077409	.0297261	.98	1.24
pfl_tub	4,470	1.189376	.0140545	.69	1.47
phse_tub	4,470	.5686734	.072455	.33	1.27

 # 2&3

Propose a model for the effects of price on demand. Write the likelihood and optimize the model.

```
Alternative-specific conditional logit         Number of obs      =     44,700
Case variable: num                             Number of cases    =       4470

Alternative variable: price                    Alts per case: min =         10
                                                              avg =       10.0
                                                              max =         10

                                                  Wald chi2(1)    =    1458.85
Log likelihood = -7464.9321                       Prob > chi2     =     0.0000
```

dum	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
price						
c	-6.656579	.1742793	-38.19	0.000	-6.99816	-6.314998
1	(base alternative)					
2						
_cons	-.9543068	.0500462	-19.07	0.000	-1.052396	-.856218
3						
_cons	1.296968	.1086515	11.94	0.000	1.084015	1.509921
4						
_cons	-1.717332	.0541582	-31.71	0.000	-1.82348	-1.611184
5						
_cons	-2.904005	.0714605	-40.64	0.000	-3.044065	-2.763945
6						
_cons	-1.515311	.1262303	-12.00	0.000	-1.762718	-1.267904
7						
_cons	.2517684	.079164	3.18	0.001	.0966098	.406927
8						
_cons	1.464868	.1180467	12.41	0.000	1.233501	1.696236
9						
_cons	2.357505	.133774	17.62	0.000	2.095313	2.619697
10						
_cons	-3.896594	.177419	-21.96	0.000	-4.244328	-3.548859

The marginal effect:

```
.
. estat mfx

Pr(choice = 1|1 selected) = .41862592
------------------------------------------------------------------------------
variable |      dp/dx   Std. Err.     z     P>|z|  [    95% C.I.    ]      X
---------+--------------------------------------------------------------------
c        |
       1 |   -1.62007    .045076  -35.94   0.000  -1.70841  -1.53172   .51844
       2 |     .38092    .016377   23.26   0.000   .348821   .413019   .54321
       3 |    .156526    .010709   14.62   0.000   .135537   .177515    1.015
       4 |    .359811    .016943   21.24   0.000   .326602   .393019   .43715
       5 |    .202435    .012376   16.36   0.000   .178178   .226691   .34528
       6 |     .04471    .005301    8.43   0.000   .034319     .0551   .78078
       7 |    .194866    .011804   16.51   0.000   .171731   .218001   .82509
       8 |     .12222    .008972   13.62   0.000   .104636   .139804   1.0774
       9 |     .14162    .009996   14.17   0.000   .122027   .161213   1.1894
      10 |    .016959    .002973    5.71   0.000   .011133   .022785   .56867
------------------------------------------------------------------------------

Pr(choice = 2|1 selected) = .13669617
------------------------------------------------------------------------------
variable |      dp/dx   Std. Err.     z     P>|z|  [    95% C.I.    ]      X
---------+--------------------------------------------------------------------
c        |
       1 |     .38092    .016377   23.26   0.000   .348821   .413019   .51844
       2 |   -.785545    .030158  -26.05   0.000  -.844654  -.726436   .54321
       3 |    .051111    .003765   13.57   0.000   .043731   .058492    1.015
       4 |    .117491    .006448   18.22   0.000   .104853   .130129   .43715
       5 |    .066102    .004433   14.91   0.000   .057414    .07479   .34528
       6 |    .014599    .001779    8.20   0.000   .011112   .018087   .78078
       7 |    .063631    .004253   14.96   0.000   .055295   .071966   .82509
       8 |    .039909    .003145   12.69   0.000   .033744   .046074   1.0774
       9 |    .046244    .003507   13.18   0.000    .03937   .053118   1.1894
      10 |    .005538    .000986    5.62   0.000   .003605   .007471   .56867
------------------------------------------------------------------------------

Pr(choice = 3|1 selected) = .05617075
------------------------------------------------------------------------------
variable |      dp/dx   Std. Err.     z     P>|z|  [    95% C.I.    ]      X
---------+--------------------------------------------------------------------
c        |
       1 |    .156526    .010709   14.62   0.000   .135537   .177515   .51844
       2 |    .051111    .003765   13.57   0.000   .043731   .058492   .54321
       3 |   -.352903     .02284  -15.45   0.000  -.397668  -.308137    1.015
       4 |    .048279    .003651   13.22   0.000   .041124   .055434   .43715
       5 |    .027162    .002319   11.71   0.000   .022618   .031707   .34528
       6 |    .005999    .000796    7.53   0.000   .004438    .00756   .78078
       7 |    .026147    .002223   11.76   0.000    .02179   .030504   .82509
```

#3&4

Propose a model for the effects of family income on demand. Write the likelihood and optimize the model.

```
Iteration 3:   log likelihood =  -8236.757

Alternative-specific conditional logit         Number of obs      =     44,700
Case variable: num                             Number of cases    =       4470

Alternative variable: price                    Alts per case: min =         10
                                                              avg =       10.0
                                                              max =         10

                                                  Wald chi2(9)    =     101.55
Log likelihood =  -8236.757                       Prob > chi2     =     0.0000
```

dum	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	(base alternative)					
2						
income	-.0030887	.003114	-0.99	0.321	-.009192	.0030145
_cons	-.8453241	.0931354	-9.08	0.000	-1.027866	-.662782
3						
income	.0145862	.0038255	3.81	0.000	.0070885	.022084
_cons	-2.399858	.1335802	-17.97	0.000	-2.66167	-2.138045
4						
income	.0040504	.0030926	1.31	0.190	-.0020109	.0101118
_cons	-1.201326	.0971021	-12.37	0.000	-1.391643	-1.01101
5						
income	-.0012536	.0042024	-0.30	0.765	-.0094901	.0069829
_cons	-1.690582	.1269952	-13.31	0.000	-1.939488	-1.441676
6						
income	.030612	.004674	6.55	0.000	.0214512	.0397729
_cons	-4.139767	.210989	-19.62	0.000	-4.553298	-3.726236
7						
income	-.0069326	.0044161	-1.57	0.116	-.015588	.0017228
_cons	-1.531042	.1280434	-11.96	0.000	-1.782002	-1.280081
8						
income	.0228862	.0036217	6.32	0.000	.0157878	.0299845
_cons	-2.848352	.1393848	-20.44	0.000	-3.121541	-2.575163
9						
income	.017743	.0037623	4.72	0.000	.010369	.0251169
_cons	-2.575597	.13614	-18.92	0.000	-2.842427	-2.308768
10						
income	.0107909	.01013	1.07	0.287	-.0090636	.0306454
_cons	-4.28227	.345792	-12.38	0.000	-4.96001	-3.60453

The marginal effect:

Pr(choice = 1|1 selected) = .39801715

variable	dp/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
casevars							
income	-.001062	.000487	-2.18	0.029	-.002016	-.000108	27.664

Pr(choice = 2|1 selected) = .15691817

variable	dp/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
casevars							
income	-.000904	.000378	-2.39	0.017	-.001645	-.000162	27.664

Pr(choice = 3|1 selected) = .05406295

variable	dp/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
casevars							
income	.000644	.000183	3.53	0.000	.000286	.001002	27.664

Pr(choice = 4|1 selected) = .13391688

variable	dp/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
casevars							
income	.000185	.000329	0.56	0.574	-.00046	.00083	27.664

Pr(choice = 5|1 selected) = .07089742

variable	dp/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
casevars							
income	-.000278	.000264	-1.06	0.291	-.000795	.000238	27.664

Pr(choice = 6|1 selected) = .01478443

variable	dp/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
casevars							
income	.000413	.000066	6.22	0.000	.000283	.000543	27.664

Pr(choice = 7|1 selected) = .07107045

The mixed logit model for the effects of family income on demand.

```
Integration points:               50          Wald chi2(10)     =    1211.55
Log simulated likelihood = -7352.5814          Prob > chi2       =     0.0000
```

dum	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
price						
c	-7.547198	.2223547	-33.94	0.000	-7.983005	-7.111391
Normal						
sd(c)	3.649194	.291882			3.119703	4.268552
1	(base alternative)					
2						
income	-.0058937	.0036744	-1.60	0.109	-.0130955	.001308
_cons	-.8886583	.1104599	-8.05	0.000	-1.105156	-.6721609
3						
income	.0202033	.0046021	4.39	0.000	.0111834	.0292232
_cons	.3624811	.2026931	1.79	0.074	-.0347902	.7597523
4						
income	.0025691	.0034659	0.74	0.459	-.004224	.0093622
_cons	-2.025266	.1126402	-17.98	0.000	-2.246037	-1.804495
5						
income	-.003862	.0045853	-0.84	0.400	-.012849	.005125
_cons	-3.383501	.1540533	-21.96	0.000	-3.68544	-3.081562
6						
income	.0324638	.0049366	6.58	0.000	.0227883	.0421394
_cons	-2.521205	.2228586	-11.31	0.000	-2.958	-2.08441
7						
income	-.0061804	.0047636	-1.30	0.194	-.0155168	.003156
_cons	.4032682	.1520697	2.65	0.008	.105217	.7013193
8						
income	.0292799	.004687	6.25	0.000	.0200936	.0384662
_cons	.0961353	.2292829	0.42	0.675	-.353251	.5455217
9						
income	.0258758	.0051442	5.03	0.000	.0157934	.0359583
_cons	.7081915	.2768591	2.56	0.011	.1655576	1.250825
10						
income	.0065357	.010873	0.60	0.548	-.0147751	.0278465
_cons	-4.412742	.3674048	-12.01	0.000	-5.132842	-3.692641

```
LR test vs. fixed parameters: chibar2(01) =    130.70  Prob >= chibar2 = 0.0000
```

Estimate the model which is extracted choice 10.

					avg =	9.0
					max =	9
Integration sequence:	Hammersley					
Integration points:	50			Wald chi2(9)	=	1146.94
Log simulated likelihood =	-7171.0302			Prob > chi2	=	0.0000

dum	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
price						
c	-7.682409	.2324916	-33.04	0.000	-8.138084	-7.226733
Normal						
sd(c)	3.800923	.3038365			3.249721	4.445617
1	(base alternative)					
2						
income	-.0058322	.0036865	-1.58	0.114	-.0130577	.0013933
_cons	-.8990062	.1108781	-8.11	0.000	-1.116323	-.6816892
3						
income	.020762	.004655	4.46	0.000	.0116383	.0298857
_cons	.3657732	.2056176	1.78	0.075	-.0372298	.7687763
4						
income	.002387	.0034768	0.69	0.492	-.0044274	.0092015
_cons	-2.042462	.1133201	-18.02	0.000	-2.264566	-1.820359
5						
income	-.0045297	.0046257	-0.98	0.327	-.0135959	.0045364
_cons	-3.429965	.1567892	-21.88	0.000	-3.737266	-3.122664
6						
income	.0326799	.0049492	6.60	0.000	.0229796	.0423802
_cons	-2.508699	.2233818	-11.23	0.000	-2.94652	-2.070879
7						
income	-.0058333	.0047736	-1.22	0.222	-.0151894	.0035227
_cons	.4157664	.1529337	2.72	0.007	.1160218	.715511
8						
income	.0298916	.0047549	6.29	0.000	.0205722	.039211
_cons	.0940732	.2329927	0.40	0.686	-.3625841	.5507305
9						
income	.0266457	.0052373	5.09	0.000	.0163808	.0369106
_cons	.6893077	.2824188	2.44	0.015	.1357771	1.242838

LR test vs. fixed parameters: chibar2(01) = 138.35 Prob >= chibar2 = 0.0000

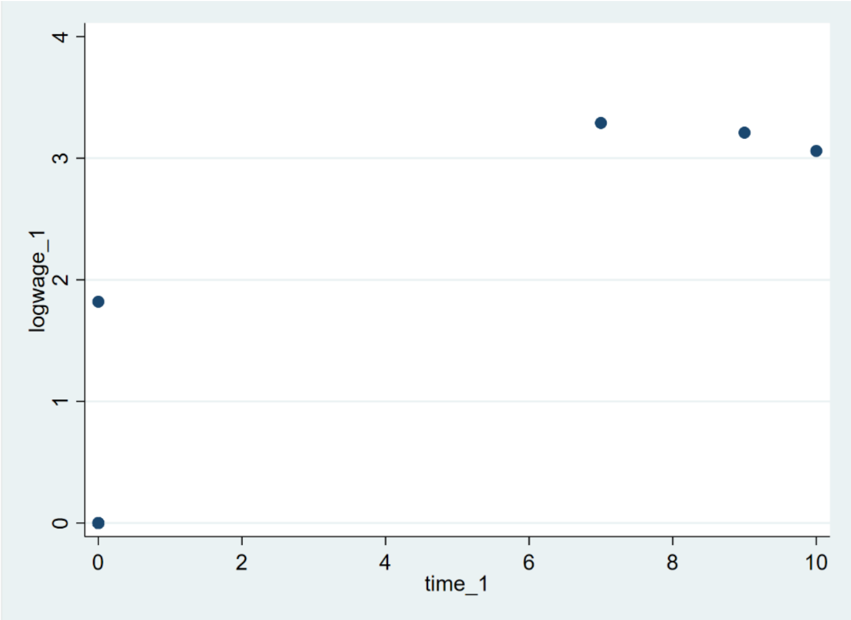
Do the hausman test

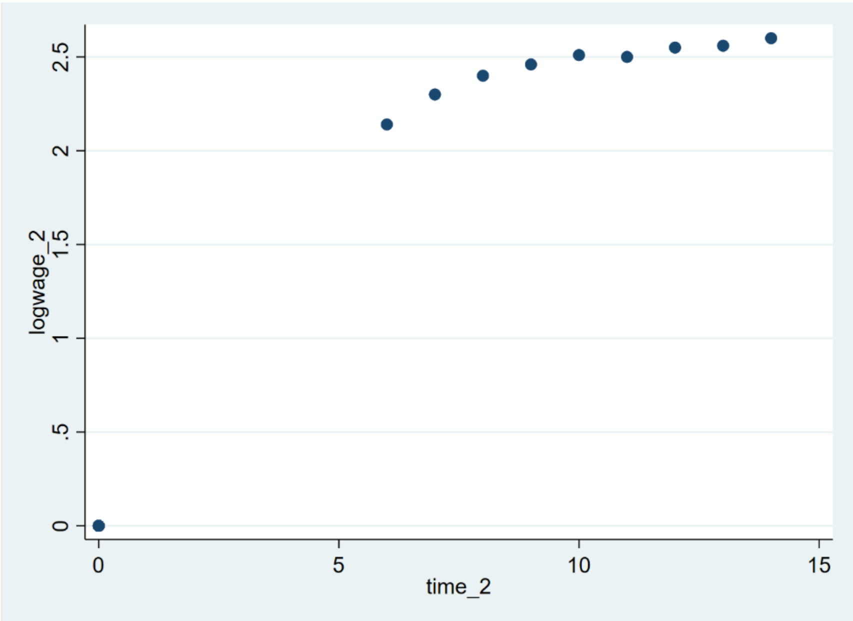
```
. hausman haust haust2, alleqs constant

                     ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |     haust        haust2       Difference          S.E.
-------------+----------------------------------------------------------------
price        |
           c |   -7.547198    -7.682409        .1352107               .
-------------+----------------------------------------------------------------
Normal       |
       sd(c) |    3.649194     3.800923       -.1517296               .
-------------+----------------------------------------------------------------
2            |
      income |   -.0058937    -.0058322       -.0000615               .
       _cons |   -.8886583    -.8990062        .0103479               .
-------------+----------------------------------------------------------------
3            |
      income |    .0202033      .020762       -.0005587               .
       _cons |    .3624811     .3657732       -.0032921               .
-------------+----------------------------------------------------------------
4            |
      income |    .0025691      .002387        .0001821               .
       _cons |   -2.025266    -2.042462        .0171966               .
-------------+----------------------------------------------------------------
5            |
      income |    -.003862    -.0045297        .0006678               .
       _cons |   -3.383501    -3.429965        .0464637               .
-------------+----------------------------------------------------------------
6            |
      income |    .0324638     .0326799       -.0002161               .
       _cons |   -2.521205    -2.508699       -.0125056               .
-------------+----------------------------------------------------------------
7            |
      income |   -.0061804    -.0058333        -.000347               .
       _cons |    .4032682     .4157664       -.0124982               .
-------------+----------------------------------------------------------------
8            |
      income |    .0292799     .0298916       -.0006117               .
       _cons |    .0961353     .0940732        .0020621               .
-------------+----------------------------------------------------------------
9            |
      income |    .0258758     .0266457       -.0007698               .
       _cons |    .7081915     .6893077        .0188837               .
------------------------------------------------------------------------------
                         b = consistent under Ho and Ha; obtained from asmixlogit
          B = inconsistent under Ha, efficient under Ho; obtained from asmixlogit

    Test:  Ho:  difference in coefficients not systematic

                  chi2(18) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                           =      -5.59    chi2<0 ==> model fitted on these
                                           data fails to meet the asymptotic
```

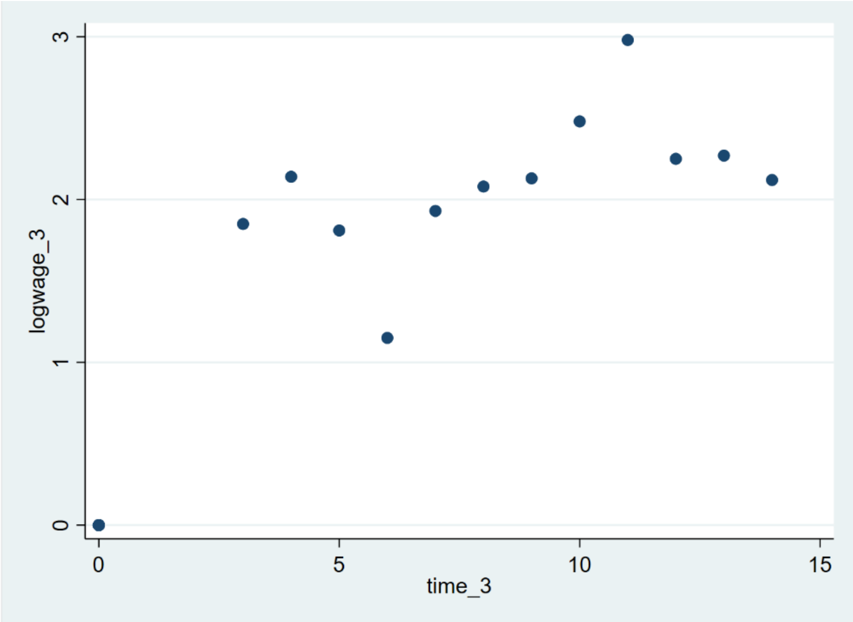
Exercise 4

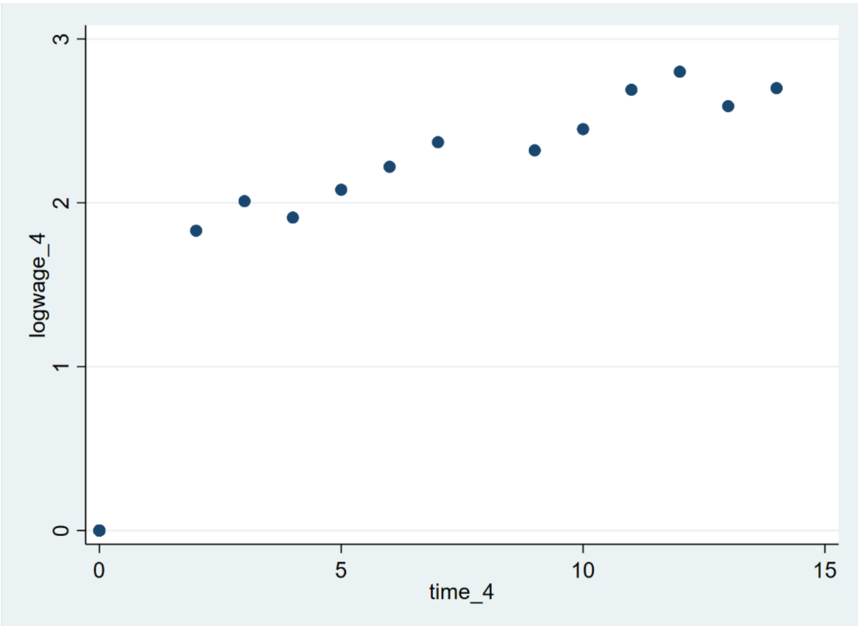
#1

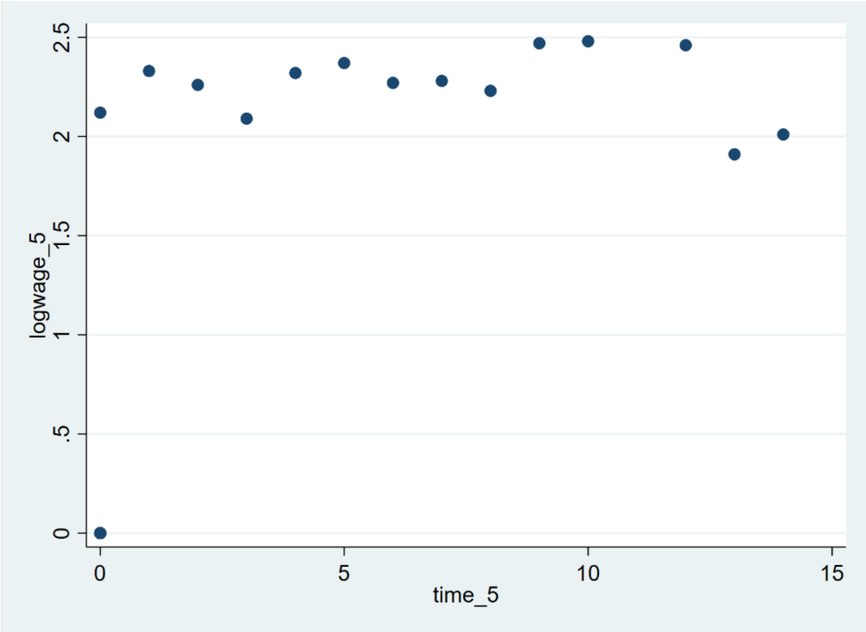
Represent the panel dimension of wages for 5 randomly selected individuals.


logwage_1
0
1
2
3
4
0
2
4
6
8
10
time_1


logwage_2
0
.5
1
1.5
2
2.5
0
5
10
15
time_2


logwage_3
0
1
2
3
0
5
10
15
time_3


logwage_4
0
1
2
3
0
5
10
15
time_4



2#

Estimate the random effect model under the normality assumption of the disturbance terms.

```
Random-effects GLS regression                   Number of obs     =     17,919
Group variable: personid                        Number of groups  =      2,178

R-sq:                                           Obs per group:
     within  = 0.1961                                         min =          1
     between = 0.1533                                         avg =        8.2
     overall = 0.1578                                         max =         15

                                                Wald chi2(2)      =    4209.96
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =     0.0000

------------------------------------------------------------------------------
     logwage |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        educ |    .107938   .0033832    31.90   0.000     .1013071     .114569
    potexper |   .0387645   .0007178    54.00   0.000     .0373576    .0401714
       _cons |   .5635206   .0438846    12.84   0.000     .4775083    .6495328
-------------+----------------------------------------------------------------
     sigma_u |  .37207276
     sigma_e |  .33545728
         rho |   .5516129   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

3#

Between Estimator:

```
Between regression (regression on group means)  Number of obs     =     17,919
Group variable: personid                        Number of groups  =      2,178

R-sq:                                           Obs per group:
     within  = 0.1962                                         min =          1
     between = 0.1553                                         avg =        8.2
     overall = 0.1518                                         max =         15

                                                F(2,2175)         =     200.01
sd(u_i + avg(e_i.))=  .3991313                  Prob > F          =     0.0000
```

logwage	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
educ	.0930999	.0046685	19.94	0.000	.0839447	.1022551
potexper	.0259987	.0036049	7.21	0.000	.0189294	.0330681
_cons	.8455688	.0770179	10.98	0.000	.6945324	.9966052

Within Estimator:

```
Fixed-effects (within) regression               Number of obs     =     17,919
Group variable: personid                        Number of groups  =      2,178

R-sq:                                           Obs per group:
     within  = 0.1964                                         min =          1
     between = 0.1550                                         avg =        8.2
     overall = 0.1551                                         max =         15

                                                F(2,15739)        =    1923.47
corr(u_i, Xb)  = -0.1273                        Prob > F          =     0.0000
```

logwage	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
educ	.123662	.0057619	21.46	0.000	.1123681	.1349559
potexper	.0385611	.0007585	50.84	0.000	.0370744	.0400478
_cons	.4068016	.0717348	5.67	0.000	.2661931	.54741
sigma_u	.40290853					
sigma_e	.33545728					
rho	.59059603	(fraction of variance due to u_i)				

```
F test that all u_i=0: F(2177, 15739) = 9.95                 Prob > F = 0.0000
```

First time difference estimator:

Source	SS	df	MS
Model	3.2930869	2	1.64654345
Residual	2252.70337	15,738	.143137843
Total	2255.99645	15,740	.143328873

Number of obs	=	15,741
F(2, 15738)	=	11.50
Prob > F	=	0.0000
R-squared	=	0.0015
Adj R-squared	=	0.0013
Root MSE	=	.37834

wage_d	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
edu_d	.0383523	.0081414	4.71	0.000	.0223942	.0543104
exp_d	.0039891	.0038866	1.03	0.305	-.0036291	.0116072
_cons	.0494644	.005536	8.94	0.000	.0386132	.0603155