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    _/_/_/_/_/_/_/_/_/_/_/_/
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```

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 PEP

Notes:

1. Unicode is supported; see [help unicode\\_advice](#) .

running c:\ado\personal\profile.do ...

```

. doedit "C:\Users\lutib\Dropbox\PEP_distance_Poverty Course (Exercises)\2020\evaluations\weeks_semai
> nes 1-2-3\Stata outputs of assessments\BLOC1_COPY3.do"

```

```

. do "C:\Users\lutib\AppData\Local\Temp\STD3e10_000000.tmp"

```

```

.
. // EXERCICE 1
. // Q1
.
. clear

```

```

. /* Inserting the data */
. clear

```

```

. input   hhid   region income hhszize

```

	hhid	region	income	hhszize
1. 1	1	210	4	
2. 2	1	450	6	
3. 3	1	300	5	
4. 4	1	210	3	
5. 5	2	560	2	
6. 6	2	400	4	
7. 7	3	140	4	
8. 8	3	250	2	
9. 9	3	340	2	
10. 10	3	220	2	
11. 11	3	360	3	
12. 12	3	338	2	
13. 13	3	330	3	
14. 14	3	336	4	
15. end				

```

.
.
. /* Generating variable the variable per capita income */
. gen pcinc = income/hhszize

```

```

.
. /* listing the variables */
. list, separator(0)

```

	hhid	region	income	hhsz	pcinc
1.	1	1	210	4	52.5
2.	2	1	450	6	75
3.	3	1	300	5	60
4.	4	1	210	3	70
5.	5	2	560	2	280
6.	6	2	400	4	100
7.	7	3	140	4	35
8.	8	3	250	2	125
9.	9	3	340	2	170
10.	10	3	220	2	110
11.	11	3	360	3	120
12.	12	3	338	2	169
13.	13	3	330	3	110
14.	14	3	336	4	84

```
.
. /* Estimating the average per capita income */
. sum pcinc [aw=hhsz]
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
pcinc	14	46	96.6087	54.7293	35	280

```
. scalar mean_inc = r(mean)
```

```
.
. /* Estimating the total incomes of the population */
. /* method 1 */
. total pcinc [pw=hhsz]
```

Total estimation                      Number of obs      =                      14

	Total	Std. Err.	[95% Conf. Interval]	
pcinc	4444	604.0291	3139.075	5748.925

```
.
. /* method 2 */
. sum hhsz
```

Variable	Obs	Mean	Std. Dev.	Min	Max
hhsz	14	3.285714	1.266647	2	6

```
. scalar pop_size = r(sum)
```

```
. dis " total incomes of the population =" pop_size*mean_inc
total incomes of the population =4444
```

```
.
. // Q3:
. gen pline = 120

. gen pgap = 0

. replace pgap = (pline-pcinc)/pline if (pcinc < pline)
(9 real changes made)
```

```
. sum      pgap [aw=hhsize]
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
pgap	14	46	.2905797	.2423569	0	.7083333

```
.
. // Q4:
. ifgt pcinc, pline(120) alpha(1) hsize(hhsize)
```

```

Poverty index   : FGT index
Household size  : hhsize
Parameter alpha : 1.00
```

Variable	Estimate	STE	LB	UB	Pov. line
<b>pcinc</b>	<b>0.290580</b>	<b>0.065337</b>	<b>0.149428</b>	<b>0.431731</b>	120.00

```
.
. // Q5:
. gen      deflator = 1.00

. replace deflator = 1.15 if region == 2
(2 real changes made)

. replace deflator = 1.20 if region == 3
(8 real changes made)

. gen      rpcinc = pcinc/deflator
```

```
.
. // Q6
. sum rpcinc [aw=hhsize]
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
rpcinc	14	46	85.50252	45.00555	29.16667	243.4783

```
.
. replace pline = 130
(14 real changes made)

. replace pgap = (pline-rpcinc)/pline if (rpcinc < pline)
(11 real changes made)
```

```
. sum      pgap [aw=hhsize]
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
pgap	14	46	.387766	.2184423	0	.775641

```
. ifgt      rpcinc, pline(130) alpha(1) hsize(hhsize)
```

```

Poverty index   : FGT index
Household size  : hhsize
Parameter alpha : 1.00
```

Variable	Estimate	STE	LB	UB	Pov. line
<b>rpcinc</b>	<b>0.387766</b>	<b>0.056098</b>	<b>0.266574</b>	<b>0.508958</b>	130.00

```

.
.
.
. // EXERCICE 2
. /* Inputting the panel data */
. clear

. input id period income hhsiz e na

      id    period    income    hhsiz e    na
1. 1      1         29        4        2
2. 2      1         50        3        2
3. 3      1         36        4        3
4. 1      2         30        4        2
5. 2      2         48        3        3
6. 3      2         46        5        2
7.
. end

.
. /* Generating the Per Capita INCome variables */
. gen pcinc = income/hhsiz e

.
.
.
. /* Estimating the average Per Capita INCome: period 1 */
. sum pcinc [aw=hhsiz e] if period == 1

      Variable |      Obs      Weight      Mean   Std. Dev.      Min      Max
-----+-----
      pcinc    |        3        11    10.45455    4.747879      7.25    16.66667

.
. /* Estimating the average per capita income: period 2 */
. sum pcinc [aw=hhsiz e] if period == 2

      Variable |      Obs      Weight      Mean   Std. Dev.      Min      Max
-----+-----
      pcinc    |        3        12    10.33333    4.10589      7.5      16

.
. /* Generating the Adut Equivalent Size and the Adult Equivalent INCome */
. gen aes = 1 + 0.6 * (na-1) + 0.4 * (hhsiz e-na)

. gen eainc = income/aes

.
. /* Estimating the average per adult-equivalent income: period 1 */
. sum eainc [aw=hhsiz e] if period == 1

      Variable |      Obs      Weight      Mean   Std. Dev.      Min      Max
-----+-----
      eainc    |        3        11    16.24709    6.628922    12.08333      25

.
. /* Estimating the average per adult-equivalent income: period 2 */
. sum eainc [aw=hhsiz e] if period == 2

      Variable |      Obs      Weight      Mean   Std. Dev.      Min      Max
-----+-----
      eainc    |        3        12    16.46645    4.313659     12.5    21.81818

```

```

.
.
. // EXERCICE 3
.
. // Q1
. clear

. /* Opening the data bkf98I.dta*/
. use "C:\Users\lutib\Dropbox\PEP_distance_Poverty Course (Exercises)\2020\evaluations\weeks_semaines
> 1-2-3\Stata outputs of assessments\data_3.dta"

.
.
. // Q2
. /* sorting the data by the per capita income */
. sort pcexp

.
. /* generating the variable of the proportion of popultion */
. sum hhsiz


```

Variable	Obs	Mean	Std. Dev.	Min	Max
hhsiz	2,000	7.625	5.348708	1	39

```

. gen ps = hhsiz/r(sum)

.
. /* generating the variable percentile and the quantiles */
. gen p = sum(ps)

. gen q = pcexp

.
.
. // Q3
. line p pcexp if p<0.90, title(The cumulative distribution curve) xtitle(The per per capita income
> (y)) ytitle(F(y))

.
.
. // Q4
. line q p if p<0.90, title(The quantile curve) xtitle(the percentile (p)) ytitle(The quantile Q(
> p))

.
.
. // Q5
. c_quantile pcexp, hsize(hhsiz) min(0) max(0.90) hgroup(zone)

.
.
. // Q6
. cdensity pcexp , hs(hhsiz) band(25000) min(0) max(800000) hg(sex)

.
end of do-file
.

```