

Homework 1

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Exercise 1

- Number of households surveyed in 2007 is 10498
- Number of households with marital status “Couple with kids” in 2005 is 3374
- Number of individuals surveyed in 2008 is 25510
- Number of individuals aged between 25 and 35 in 2016 is 2765
- Cross-table gender/profession in 2009.

	0	11	12	13	21	22	23	31	33	34	35	37	38	42	43	44
Female	11	30	8	29	63	65	8	68	85	184	50	179	78	258	437	1
Male	19	57	19	78	213	114	48	98	107	142	59	260	368	110	117	2

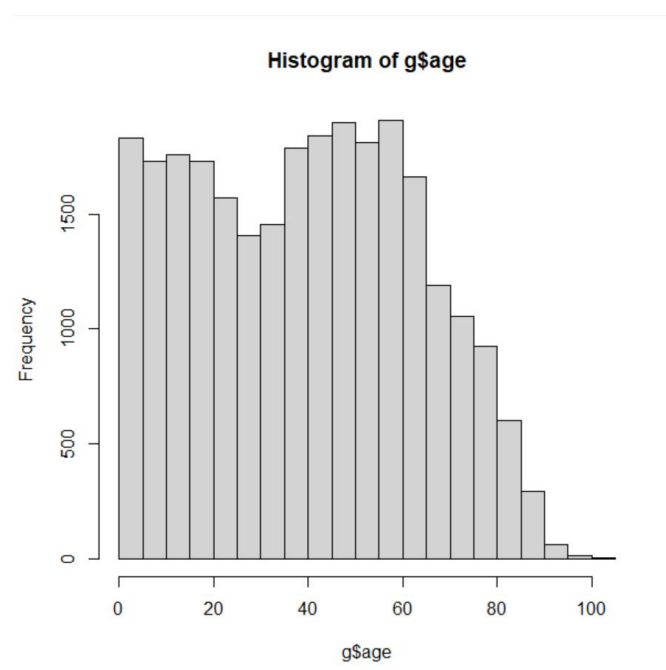
	45	46	47	48	52	53	54	55	56	62	63	64	65	67	68	69
Female	153	410	82	22	782	27	584	353	696	64	35	29	19	147	120	40
Male	95	340	429	215	169	182	98	101	74	443	520	246	159	237	177	82

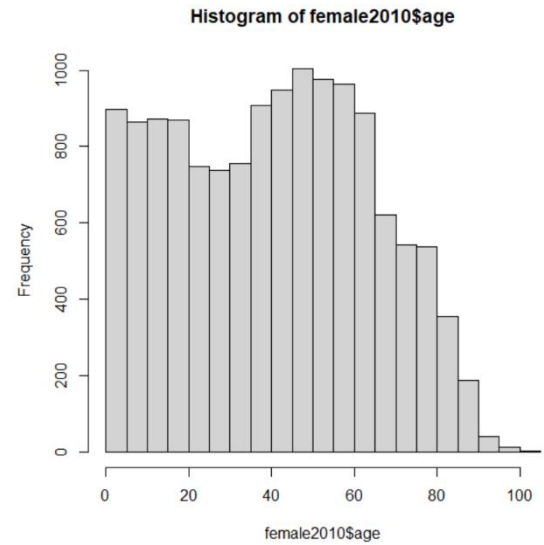
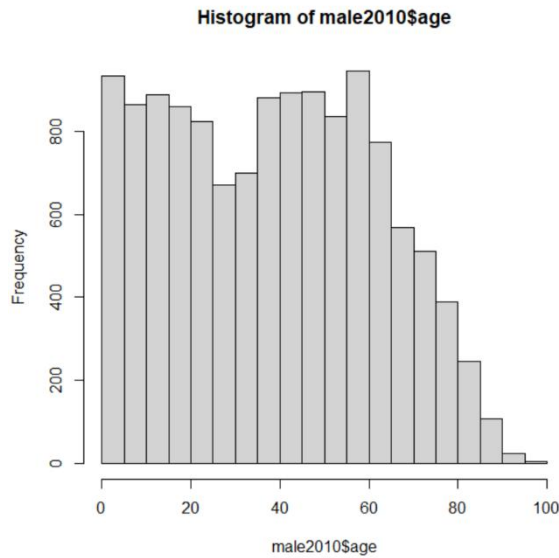
- Distribution of wages in 2005 and 2019. Report the mean, the standard deviation, the inter-decile ratio

The distribution of wages in 2005 is as follows: the mean is 11992.26, the standard deviation is 17318.56, the gini coefficient is 0.6671654

The distribution of wages in 2019 is as follows: the mean is 15350.47, the standard deviation is 23207.18, the gini coefficient is 0.6655301

- Distribution of age in 2010.





The distribution of male's age and female's age is basically same. Except that male has more proportion than female in each age period.

- h. Number of individuals in Paris in 2011 is 3154

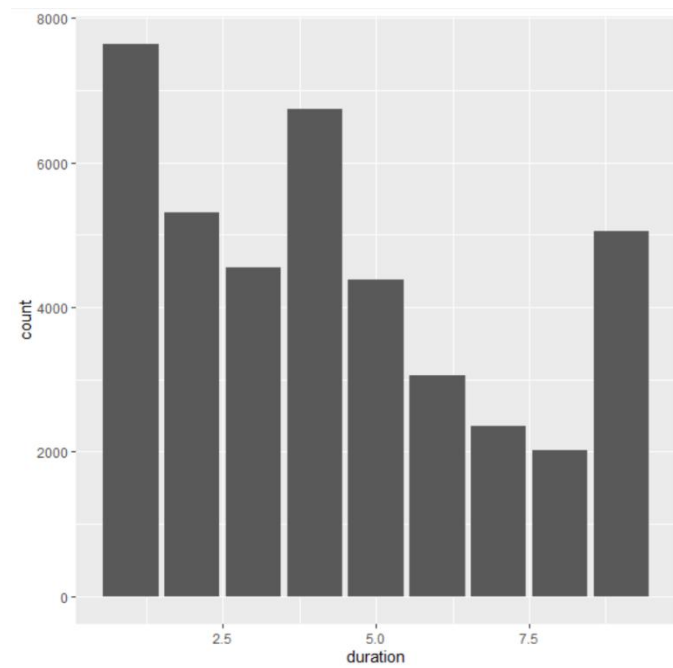
Exercise 2

a,b,c,d see R scripts for more details.

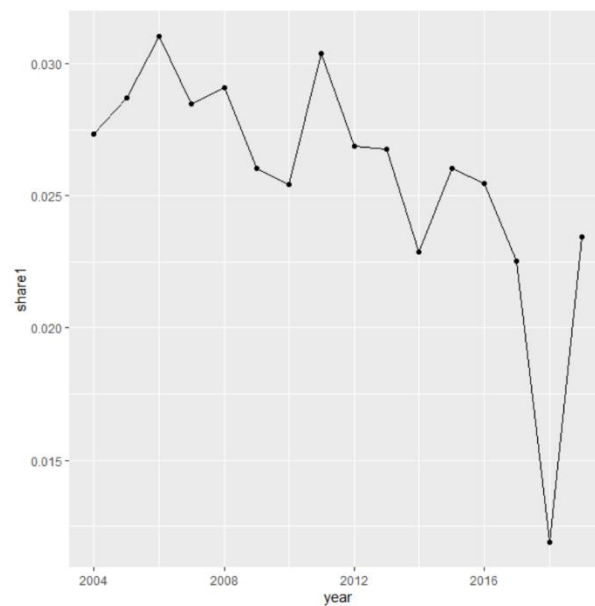
- e. Number of households in which there are more than four family members is 3622
- f. Number of households in which at least one member is unemployed is 17241
- g. Number of households in which at least two members are of the same profession is 490
- h. Number of individuals in the panel that are from household-Couple with kids is 209384
- i. Number of individuals in the panel that are from Paris is 51904
- j. Find the household with the most number of family members. Report its idmen.
- k. Number of households present in 2010 and 2011 is 22408

Exercise 3

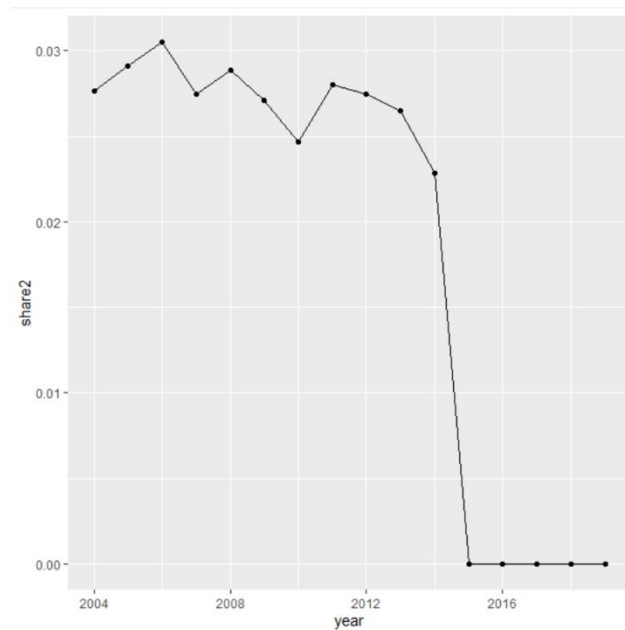
- a. Find out the year each household enters and exit the panel. Report the distribution of the time spent in the survey for each household.



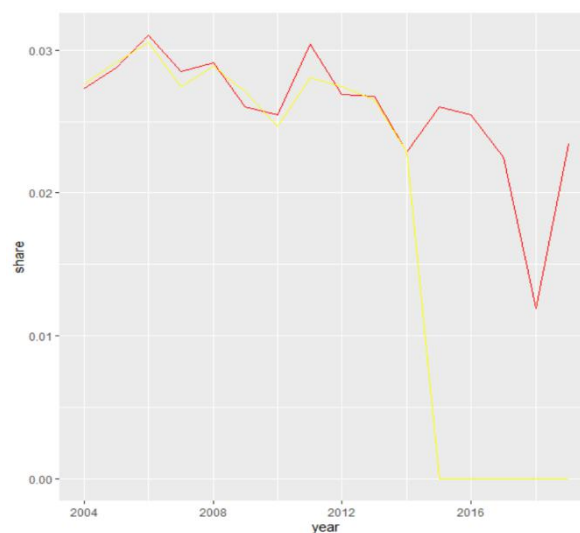
- b. Based on datent, identify whether or not a household moved into its current dwelling at the year of survey. Report the first 10 rows of your result and plot the share of individuals in that situation across years.



- c. Based on myear and move, identify whether or not household migrated at the year of survey. Report the first 10 rows of your result and plot the share of individuals in that situation across years.



- d. Mix the two plots you created above in one graph, clearly label the graph. Do you prefer one method over the other? Justify



I prefer the first method. Because the graph shows less volatility and in the second there is two different criterions for migration, which makes the data inconsistent.

- e. For households who migrate, find out how many households had at least one family member changed . 39981