

# POL 204b: Homework 1

## Due January 13, 2021 3:00pm

- Ask for help if you need it.
- Work together
- Make sure you “get it”.
- Submit everything extremely well organized and legible, including your code and some output. Make sure you include commentary to explain your code and make everything very readable.

### Exercises

1. For this problem, use the dataset of states attached as an appendix. Using the **PctRetired** variable (the percent of the state’s population aged 65 or older), calculate or graph as appropriate all of the following, BY HAND: histogram, stem and leaf plot, box plot, mean, median, range, standard deviation, and the five-number summary.
2. Using Stata, produce the same graphs and statistics as in the previous problem, analyzing household size for respondents in Burkina Faso, using ICPSR study # 22408. Then examine the education variable, divide the dataset into high, medium, and low education groups, and compare household size across education groups. Discuss your findings if any. DO THIS USING THE ASCII VERSION OF THE DATA, NOT THE STATA VERSION.
3. Using Stata and R, produce the same graphs and statistics as in the previous problem, analyzing number of political figures assassinated, using ICPSR study # 5208. Then examine the variable for group type,

propose a smaller number of summary categories for that variable, and examine the distribution of this new variable. Which of your types of groups attempt the most assassinations? DO THIS USING THE ASCII VERSION OF THE DATA, NOT THE STATA VERSION.

4. Optional if you feel the need. Again using Stata, examine the frequency of strikes in Argentina using ICPSR study #5213. Pick a type of strike, make a histogram, and discuss. Note that the study contains two datasets; pick the right one. Discuss your findings. If there are any problems or oddities, try to find a way to fix them; at a minimum acknowledge them.

Submit both computer code and results. Make the graphs look nice. Bonus if you submit your homework in a LaTeX typeset document.

Data for Problem #1

State	PctRetired	BirthRate
Alabama	13.2	1.4
Alaska	6.2	1.66
Arizona	13.6	1.64
Arkansas	14.1	1.4
California	10.9	1.56
Colorado	10	1.53
Connecticut	13.8	1.26
Delaware	13.4	1.39
District of Columbia	12	1.45
Florida	17.8	1.31
Georgia	9.9	1.68
Hawaii	13.8	1.56
Idaho	11.6	1.56
Illinois	12.1	1.5
Indiana	12.4	1.4
Iowa	14.8	1.27
Kansas	13.2	1.44
Kentucky	12.6	1.34
Louisiana	11.6	1.53
Maine	14.6	1.06
Maryland	11.6	1.44
Massachusetts	13.6	1.28
Michigan	12.4	1.35
Minnesota	12.2	1.27
Mississippi	12.2	1.57
Missouri	13.5	1.35
Montana	13.6	1.21
Nebraska	13.5	1.44
Nevada	11.9	1.56

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State	PctRetired	BirthRate
New Hampshire	12.3	1.16
New Jersey	13.3	1.37
New Mexico	12.2	1.49
New York	13	1.36
North Carolina	12.4	1.5
North Dakota	14.7	1.2
Ohio	13.3	1.4
Oklahoma	13.3	1.42
Oregon	12.9	1.32
Pennsylvania	15.5	1.17
Rhode Island	14.5	1.16
South Carolina	12.5	1.44
South Dakota	14.3	1.4
Tennessee	12.6	1.4
Texas	10.3	1.67
Utah	8.9	2.1
Vermont	13	1.02
Virginia	11.5	1.43
Washington	11.5	1.35
West Virginia	15.3	1.01
Wisconsin	13.1	1.28
Wyoming	12	1.22