

SOC 4930/5050: Problem Set 01 - Initial Data Cleaning

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Directions

Complete all of the following questions using the data from the `testDriveR` package. Your well-formatted R Notebook source (the `.Rmd` file) and `html` output should be uploaded to your assignments repository by 4:15PM on Monday, September 18th, 2017.

Part 1: Cleaning Data

Use the `gss16` data frame saved in the `testDriveR` package and make the following changes using “`piped`” code:

1. Keep only the following variables - `ID_`, `SEX`, `HRS1`, `WRKSTAT`, `INCOME16`
2. Rename all of the variables except `SEX`. These are what each of the other variables refer to:
 - `ID_` - identification number
 - `HRS1` - number of hours worked last week
 - `WRKSTAT` - work status (full time, part time, etc.)
 - `INCOME16` - income last year, categorized
3. Create a *string* version of the `SEX` variable that is equal to “male” when `SEX == 1` and is otherwise equal to “female”
4. Remove the original `SEX` variable
5. How many men and women are in the data set?

Part 2: Plotting Data

Use the your cleaned GSS data to produce the following plots:.

6. Create a bar plot using the string “sex” variable you created
7. Create a scatter plot of last year’s income by hours worked that (a) only shows data for fulltime workers (when the “work status” variable is equal to 1)¹ and (b) colors points using the “sex” variable you created

¹ *Hint:* if you use a piped set of functions you can include the appropriate `dplyr` function for extracting observations *before* you create your plot

Rubric

Individual Questions			
Part 1		Part 2	
Question	Points	Question	Points
1	2	6	3
2	4	7	5
3	4		
4	2		
5	2		
<i>Points Possible</i>	14		8

Note: Partial credit possible

Notebook Formatting & RMarkdown		
Category	Details	Points
Excellent	Syntax used appropriately & without error	4
Good	Minor concerns with syntax use	2.5
Improvement Needed	Significant concerns with syntax	1
Unsatisfactory	No RMarkdown used	0
<i>Points Possible</i>		4

Literate Programming		
Category	Details	Points
Excellent	Narrative throughout with great detail	4
Good	Some narrative with inconsistent detail	2.5
Improvement Needed	Limited narrative with little detail	1
Unsatisfactory	No narrative included	0
<i>Points Possible</i>		4