SAMPLE RStudio lab assignment: computing

[Interpretation templates]

[Variables in GSS]

[Code templates in R]

Assignment instructions

In this lab assignment, there are two sections. The first section is on "Common computing issues in RStudio", the second section is on computation in RStudio.

Second section

Questions

1) Create a frequency table for **conpress** (confidence level in press). Paste **(5 points)** (take a screenshot of the table, not all screen) and interpret the table **(10 points)**.Use **[Interpretation templates]** file.

1. Variable name (-1 point):	conpress
2. What it measures? (-1 point):	confidence level in press
3. Full wording of the question (-1 point):	Would you say you have confidence in press
4. Response set (-1 point):	(1: a great deal; 2: only some; 3: hardly any)
5. Code (-5):	frq(gss$conpress, out = "v")
6. Table:	**confidence in press (x)** *<numeric>* <table below>
7. Interpretation:	The confidence level in press variable shows that 8.67% of the respondents have a great deal confidence; 48.33% of the respondents have only some confidence; 51.67% of the respondents have hardly any confidence in press.

confidence in press (x) *<numeric>*

val	label	frq	raw.prc	valid.prc	cum.prc
1	a great deal	203	5.73	8.67	8.67
2	only some	929	26.21	39.67	48.33
3	hardly any	1210	34.14	51.67	100.00
NA	NA	1202	33.92	NA	NA

total N=3544 · valid N=2342 · x̄=2.43 · σ=0.65

2) Create a frequency table for **contv** (confidence level in tv). Paste **(5 points)** ([take a screenshot](#) of the table, not all screen) and interpret the table **(10 points)**.Use **[Interpretation templates]** file.

1. Variable name (-1 point):	contv
2. What it measures? (-1 point):	confidence level in television
3. Full wording of the question (-1 point):	Would you say you have confidence in television
4. Response set (-1 point):	(1: a great deal; 2: only some; 3: hardly any)
5. Code (-5):	frq(gss$contv, out = "v")
6. Table:	
7. Interpretation:	The confidence level in television variable shows that 8.01% of the respondents have a great deal confidence; 46.302% of the respondents have only some confidence; 45.98% of the respondents have hardly any confidence in television.

confidence in television (x) *<numeric>*

val	label	frq	raw.prc	valid.prc	cum.prc
1	a great deal	187	5.28	8.01	8.01
2	only some	1075	30.33	46.02	54.02
3	hardly any	1074	30.30	45.98	100.00
NA	NA	1208	34.09	NA	NA

total N=3544 · valid N=2336 · x̄=2.38 · σ=0.63

3) Recode the responses of these variables one by one. 1 will be 3, 2 will be 2, 3 will be 1. The new variable names will be ***conpressnew*** and ***contvnew***, respectively. Check the **[Code templates in R]** file

You will only put the recoding codes.

Code (-5):	```gss$conpressnew <- rec(gss$conpress, rec = "1=3 [a great deal]; 2=2 [only some]; 3=1 [hardly any]", append = FALSE)```
	```gss$contvnew <- rec(gss$contv, rec = "1=3 [a great deal]; 2=2 [only some]; 3=1 [hardly any]", append = FALSE)```

4) Use the mean -rowwise- function to create an index variable. The name of the new variable will be ***confmassmediaindex*** *(the confidence level in mass media index)*. Check the **[Code templates in R]** file

You will only put the computing code.

Code (-5):	```gss <- gss %>% rowwise() %>% mutate (confmassmediaindex = mean (c(conpressnew, contvnew)))```

5) Create a descriptive table for ***confmassmediaindex*** *(the confidence level in mass media index)*. Paste **(35 points)** (take a screenshot of the table, not all screen) and interpret the table **(5 points)**.Use **[Interpretation templates]** file ((Descriptive tables 2 (for computed variables) section)).

Code (-5):	```descr(gss$confmassmediaindex, out = "v", show = "short")```

Table:	**Basic descriptive statistics**				
	Variable	*N*	*Missings (%)*	*Mean*	*SD*
	dd	2311	34.79	1.59	0.54

Interpretation:	The confidence level in mass media index score of the GSS respondents is 1.59 out of 3, with standard deviation 0.54.