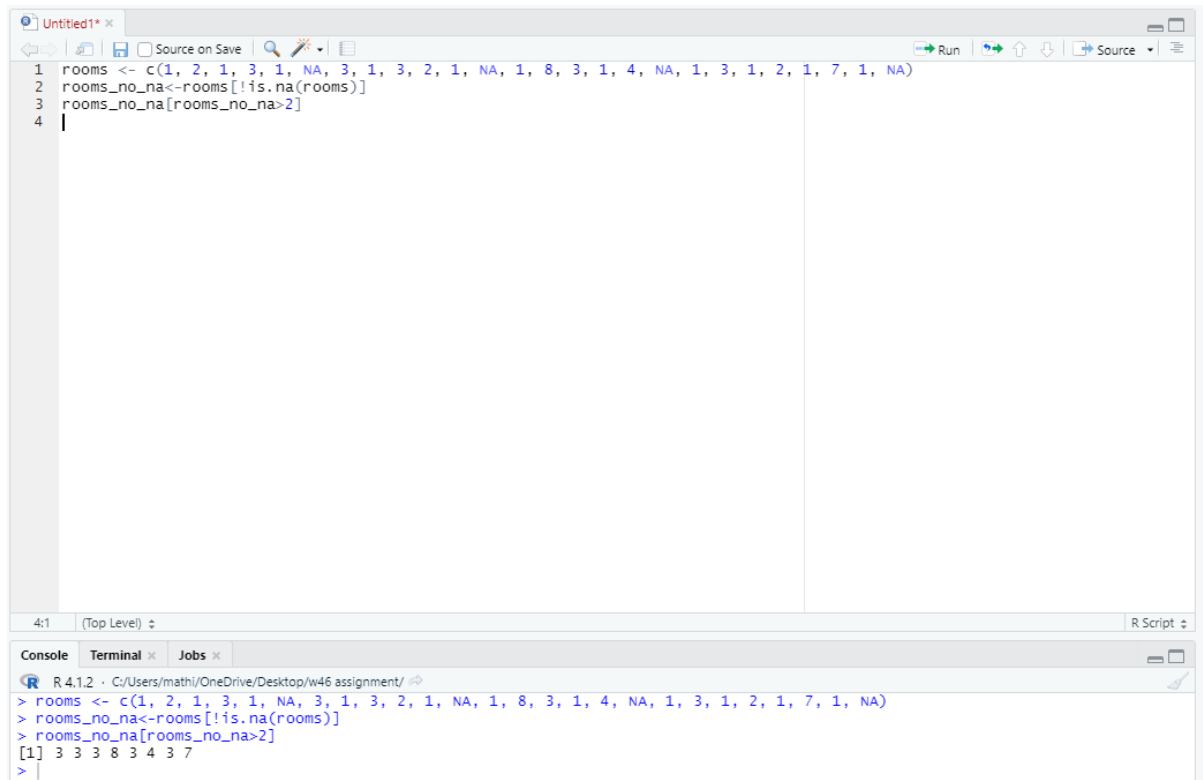


## W46: Start with R.

### 1) Use R to figure out how many elements in the vector below are greater than 2.

```
rooms <- c(1, 2, 1, 3, 1, NA, 3, 1, 3, 2, 1, NA, 1, 8, 3, 1, 4, NA, 1, 3, 1, 2, 1, 7, 1, NA)
```

First we plotted the vector in the script. Then we removed all the NAs, because if we didn't, then they would show as an answer when we typed in the last command. Lastly, we entered the command to find all numbers greater than 2. In the console you can see the result.



The screenshot shows the RStudio interface. The script editor contains the following code:

```
1 rooms <- c(1, 2, 1, 3, 1, NA, 3, 1, 3, 2, 1, NA, 1, 8, 3, 1, 4, NA, 1, 3, 1, 2, 1, 7, 1, NA)
2 rooms_no_na <- rooms[!is.na(rooms)]
3 rooms_no_na[rooms_no_na > 2]
4
```

The console shows the output of the commands:

```
> rooms <- c(1, 2, 1, 3, 1, NA, 3, 1, 3, 2, 1, NA, 1, 8, 3, 1, 4, NA, 1, 3, 1, 2, 1, 7, 1, NA)
> rooms_no_na <- rooms[!is.na(rooms)]
> rooms_no_na[rooms_no_na > 2]
[1] 3 3 3 8 3 4 3 7
>
```

### 2) What type of data is in the 'rooms' vector?

When we type the command:

```
4 class(rooms)
```

We can see that Rstudio says that the data is numeric:

```
> class(rooms)
[1] "numeric"
```

### 3) What is the result of running the median() function on the above 'rooms' vector?

Because we in the first assignment defined rooms\_no\_na to be the vector without the NAs, then we won't have to do it again. We can then just calculate the median with the provided command:

```
> mean(rooms_no_na)
[1] 2.318182
```

**4) Submit the following image to Github: Inside your R Project (.Rproj), install the 'tidyverse' package and use the download.file() and read\_csv() function to read the SAFI\_clean.csv dataset into your R project as 'interviews' digital object (see instructions in <https://datacarpentry.org/r-socialsci/setup.html> and 'Starting with Data' section). Take a screenshot of your RStudio interface showing**

**a) the line of code you used to create the object,**

I created a directory manually, since my Rstudio wouldn't let me do it. I named the directory data, so that the spreadsheet file would get into the right directory. Else, I just used this chunk:

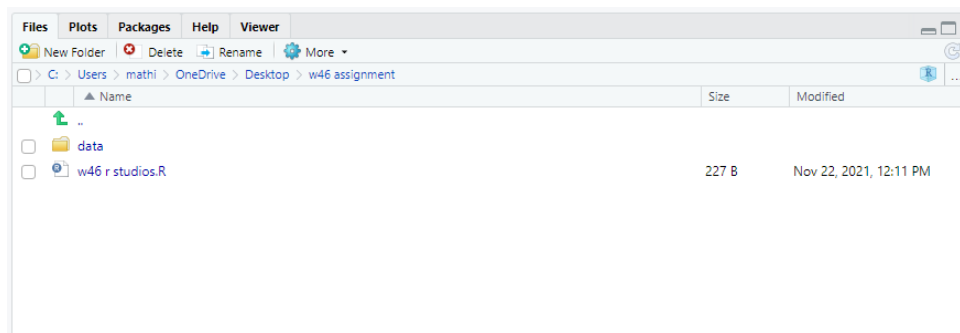
```
library(tidyverse)
download.file("https://ndownloader.figshare.com/files/11492171",
             "data/SAFI_clean.csv", mode = "wb")
interviews<-read_csv("./data/SAFI_clean.csv")
view(interviews)
```

**b) the 'interviews' object in the Environment, and**

I used the command view() to view the spreadsheet. In this case we named it interviews, so view(interviews):

	key_ID	village	interview_date	no_membrs	years_liv	respondent_wall_type	rooms	memb_assoc	affect_conflicts	liv_count	items_owned
1	1	God	2016-11-17	3	4	muddaub	1	NULL	NULL	1	bicycle;televisio
2	1	God	2016-11-17	7	9	muddaub	1	yes	once	3	cow_cart;bicycli
3	3	God	2016-11-17	10	15	burntbricks	1	NULL	NULL	1	solar_torch
4	4	God	2016-11-17	7	6	burntbricks	1	NULL	NULL	2	bicycle;radio;co
5	5	God	2016-11-17	7	40	burntbricks	1	NULL	NULL	4	motorcyle;radic
6	6	God	2016-11-17	3	3	muddaub	1	NULL	NULL	1	NULL
7	7	God	2016-11-17	6	38	muddaub	1	no	never	1	motorcyle;cow_
8	8	Chirodzo	2016-11-16	12	70	burntbricks	3	yes	never	2	motorcyle;bicyc
9	9	Chirodzo	2016-11-16	8	6	burntbricks	1	no	never	3	television;solar,
10	10	Chirodzo	2016-12-16	12	23	burntbricks	5	no	never	2	cow_cart;motor
11	11	God	2016-11-21	6	20	sunbricks	1	NULL	NULL	2	radio;cow_plou
12	12	God	2016-11-21	7	20	burntbricks	3	yes	never	2	cow_cart;bicycli
13	13	God	2016-11-21	6	8	burntbricks	1	no	never	3	bicycle;radio;co
14	14	God	2016-11-21	10	20	burntbricks	3	NULL	NULL	3	bicycle;radio;co
15	15	God	2016-11-21	5	30	sunbricks	2	yes	once	3	bicycle;radio;co
16	16	God	2016-11-24	6	47	muddaub	1	NULL	NULL	4	radio;cow_plou
17	17	God	2016-11-21	8	20	sunbricks	1	NULL	NULL	1	mobile_phone
18	18	God	2016-11-21	4	20	muddaub	1	NULL	NULL	3	bicycle;mobile

c) the file structure of your R project in the bottom right "Files" pane.



Save the screenshot as an image and put it in your AUID\_lastname\_firstname repository inside our Github organisation (github.com/Digital-Methods-HASS) or equivalent. Place here the URL leading to the screenshot in your repository.

Here is a screenshot of the entire Rstudio page, showing all the commands and etc.

[https://github.com/Digital-Methods-HASS/au681088\\_Madsen\\_Thomasen\\_Mathias.git](https://github.com/Digital-Methods-HASS/au681088_Madsen_Thomasen_Mathias.git)