## **Questions:**

1) Use R to figure out how many elements in the vector below are greater than 2. rooms <- c(1, 5, 2, 3, 1, NA, 3, 1, 3, 2, NA, 1, 8, 3, 1, 4, NA, 1, 3, 1, 2, 1, 7, 1, NA, 4, 3, 1, 7, 2, 1, NA, 1, 1, 3)

## ANSWER:

> rooms

- [1] 1 5 2 3 1 NA 3 1 3 2 NA 1 8 3 1 4 NA 1 3 1 2 1 7 1
- [25] NA 4 3 1 7 2 1 NA 1 1 3
- > rooms > 2
- [1] FALSE TRUE FALSE TRUE FALSE NA TRUE FALSE TRUE FALSE NA FALSE
- [13] TRUE TRUE FALSE TRUE NA FALSE TRUE FALSE FALSE FALSE TRUE FALSE
- [25] NA TRUE TRUE FALSE TRUE FALSE FALSE NA FALSE FALSE TRUE
- > rooms[rooms>2]
- [1] 5 3 NA 3 3 NA 8 3 4 NA 3 7 NA 4 3 7 NA 3
- > rooms no na <- rooms
- > is.na(rooms)
- [1] FALSE FALSE FALSE FALSE TRUE FALSE FALSE FALSE TRUE FALSE
- [13] FALSE FALSE FALSE TRUE FALSE FALSE FALSE FALSE FALSE FALSE
- [25] TRUE FALSE FALSE FALSE FALSE FALSE TRUE FALSE FALSE FALSE
- >!is.na(rooms)
- [1] TRUE TRUE TRUE TRUE TRUE FALSE TRUE TRUE TRUE TRUE FALSE TRUE
- [13] TRUE TRUE TRUE TRUE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
- [25] FALSE TRUE TRUE TRUE TRUE TRUE TRUE FALSE TRUE TRUE TRUE
- > rooms[!is.na(rooms)]
- [1] 1 5 2 3 1 3 1 3 2 1 8 3 1 4 1 3 1 2 1 7 1 4 3 1 7 2 1 1 1 3
- > rooms\_no\_na <- rooms[!is.na(rooms)]
- > rooms\_no\_na
- [1] 1 5 2 3 1 3 1 3 2 1 8 3 1 4 1 3 1 2 1 7 1 4 3 1 7 2 1 1 1 3
- > rooms no na>2
- [1] FALSE TRUE FALSE TRUE FALSE TRUE FALSE TRUE FALSE TRUE TRUE

- [13] FALSE TRUE FALSE TRUE FALSE FALSE TRUE FALSE TRUE TRUE FALSE
- [25] TRUE FALSE FALSE FALSE TRUE
- > rooms no na>2
- [1] FALSE TRUE FALSE TRUE FALSE TRUE FALSE TRUE FALSE TRUE TRUE
- [13] FALSE TRUE FALSE TRUE FALSE FALSE TRUE FALSE TRUE TRUE FALSE
- [25] TRUE FALSE FALSE FALSE FALSE TRUE
- > rooms no na[rooms no na>2]
- [1] 5 3 3 3 8 3 4 3 7 4 3 7 3
- 2) Which function tells you the type of data the 'rooms' vector above contains?

## **ANSWER:**

- > class(rooms)
- [1] "numeric"
- 3) What is the result of running the median() function on the above 'rooms' vector?
- > rooms <- c(1, 5, 2, 3, 1, NA, 3, 1, 3, 2, NA, 1, 8, 3, 1, 4, NA, 1, 3, 1, 2, 1, 7, 1, NA, 4, 3, 1, 7, 2, 1, NA, 1, 1, 3)
- > rooms
- [1] 1 5 2 3 1 NA 3 1 3 2 NA 1 8 3 1 4 NA 1 3 1 2 1 7 1
- [25] NA 4 3 1 7 2 1 NA 1 1 3
- > max(rooms)
- [1] NA
- > max(rooms, na.rm = TRUE)
- [1] 8
- > mean(rooms, na.rm = TRUE)
- [1] 2.566667

- 4) In order to submit a screenshot of RStudio, do the following first: 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 'interviews', incl. the output in the console,

The code we used to create the object 'interviews' is the following: interviews <- read csv("data/SAFI clean.csv")

- b) the 'interviews' object in the "Environment" top right pane, and
- c) the file structure of your R project in the bottom right "Files" pane.

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

