

## W4: Start with R

### DESCRIPTION

For this assignment, please answer the following three questions showing your code and results and then take a particular screenshot of your working environment. You can upload here (to Brightspace) the code and the URL to the screenshot OR submit everything to Github and submit here a single link to your repository.

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)
```

```
# Homework4 - find rooms in the following line above 3
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)
# I start by adding all the numbers to a new variable called rooms1
# 'notavailable' values from the line will not be added
rooms1 <- rooms[!is.na(rooms)]
# Then i find all the values in the line that is above 2
rooms1[rooms1>2]
# I use the function 'length' to count the elements in rooms1 that is above 2
length(rooms1[rooms1>2])
# the answer is 8
```

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

To check the type of data I use the function 'class'

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

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

```
> median(rooms)
[1] NA
```

As the vector contains NA values, the function is not able to calculate it.

To do this you should remove those by adding the na.rm (rm = remove)

```
> median(rooms, na.rm = TRUE)
[1] 1.5
> median(rooms1)
[1] 1.5
```

At the end I just check if its right by trying the median function on room1

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,
- b) the 'interviews' object in the Environment, and
- 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](https://github.com/Digital-Methods-HASS)) or equivalent. Place **here** the URL leading to the screenshot in your repository.