W46: Start with R

DESCRIPTION

Instructions: For this assignment, you need to answer a couple questions with code and then take a particular screenshot of your working environment.
You can submit the solutions including the URL to the screenshot typed up in a doc/pdf to Brightspace OR upload the document with solutions and the screenshot to your repository on Github and submit here (to Brightspace) only your Github URL (make sure your HW files are immediately findable there).

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

```
> # W46:Stat with R
> #1) Use R to figure out how many elements in the vector below are greater than 2.
> rooms <- c(1, 5, 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[rooms>2]
 [1]  5  3 NA  3  3 NA  8  3  4 NA  3  7 NA
>
```

2) Which function tells you the type of data the 'rooms' vector above contains?

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

The function that tells you the type of data the 'rooms' vector contains is, *class(rooms)* as seen above.

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

```
> median(rooms)
[1] NA
> median(rooms, na.rm = TRUE)
[1] 2
>
```

Firstly, I tried to run the median function on the 'rooms' vector, but the result showed NA, because the data includes missing values[1].
Then I added the argument *na.rm = TRUE* to *median(rooms),* so the argument then became to median(rooms, na.rm = TRUE), because then R could calculate the result while ignoring the NA's.

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) or equivalent. Place **here** the URL leading to the screenshot in your repository.

5) **Challenge: Tidy up your Danish monarchs dataset (you created last week) sufficiently so that you can load it into R as a tibble using the read_csv() and calculate the mean() and median() duration of rule over time.**

[1] "Introduction to R," 2022, accessed 18-11, 2022, https://humburg.github.io/r-socialsci-git/01-intro-to-r/index.html.

To calculate the mean() and median() duration of rule over time over, I firstly load my csv. File into R, but I could not calculate the mean and median of duration of rule over time.
I then specified the coordinates I should use.

The result of mean and median duration of rule over time is mean = 19.1 years and median =19.5 years

See the Rcript for codes and funtions.

Litteraturliste

"Introduction to R." 2022, accessed 18-11, 2022, https://humburg.github.io/r-socialsci-git/01-intro-to-r/index.html.