**Intro to R**

For this assignment, you need to present the results, the code you used to answer a few questions, and then take a screenshot of your working environment.

Submit a textfile with typed up solutions here OR upload the document with solutions and the screenshot to your repository on Github and provide here only your Github URL. Make sure your homework files are clearly marked and readily 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)

By using the code

rooms[rooms>2]

it is possible to get the answer of how many vectors are greater than 2. But by using this code then R will also count NA as being greater then 2. By using this code, the result will be 13 vectors are greater than 2.

If I want to see how many vectors are greater than 2, without counting NA as well. Then I can use the code

length(rooms[rooms>2 & !is.na(rooms)])

By doing so I can now see that 9 vectors are greater then 2.

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Automatisk genereret beskrivelse

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

To find what kind of type the data is, I can use the function.

typeof(rooms)

By doing so I get the result double. Double means that the data is numerical, which means that the is in numbers.



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

By running the function

median(rooms, na.rm = TRUE)

Will I get the result 2, this is because this function takes all the numbers and puts them on a straight line, and then finds the number in the middle which in this case is 2.

I have ask R to find the median without NA

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Automatisk genereret beskrivelse

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

1. the line of code you used to create the object,

To create the object have I used the code

#install packages

#install.packages(“tidyverse”)

By doing so I make sure that tidyverse is installed. When tidyverse is installed, is it time to activate tidyverse to be able to use it. For activating it am I using the function

library(tidyverse)

When tidyverse is activated, is it possible to use it to download and read the given csv file.

To make R read the csv file, then I use the function

FAFI\_read <- read\_csv(“data/SAFI\_clean.csv”)

I write data in front of SAFI\_clean.csv, because I have saved the csv file under the folder called data.

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1. the 'interviews' object in the Environment, and

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1. the file structure of **your R project**in the bottom right "Files" pane.

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Automatisk genereret beskrivelse

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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.

I first check to see if I can load my data set into R.

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I had not created a column that showed the length of the monarch’s reign. I used R to find the reign length by using the code above.

To be able to find the mean and median, did I give Margrethe 2. An end time for here reign. I choose 2023, the year we are in. Through R is it then possible to get the mean of the reign period to 18,7 and the median of the reign period to be 15,5

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