**Homework 3**

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.

OBS : I have used a read color in my explanations – this is only to highlight the steps not because it is an error or anything.

**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)

First, I put in the following : 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) and then press command and enter

Then I wanted to make R not calculate the missing data and therefore I typed in na.rm = TRUE

> stands for “greater than”

Then I put in rooms>2 and press command and enter

Script :

Et billede, der indeholder tekst, skærmbillede, Font/skrifttype, linje/række

Automatisk genereret beskrivelse

Console :

Et billede, der indeholder tekst, Font/skrifttype, linje/række, skærmbillede

Automatisk genereret beskrivelse

There are 9 elements in the vector that are greater than 2

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

The function typeof(rooms) indicates the type of an object

Script :

Et billede, der indeholder tekst, Font/skrifttype, hvid

Automatisk genereret beskrivelse

 Console : 

The type of data for rooms comes out as “double”.

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

By using the median() function you can calculate the median of the rooms vector

Script : Et billede, der indeholder tekst, Font/skrifttype, linje/række, skærmbillede

Automatisk genereret beskrivelse

Console :

Et billede, der indeholder tekst, skærmbillede, Font/skrifttype, linje/række

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

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.

First, we made a folder named data (here, mappe til data) by typing dir.create(“data”)

Afterwards we downloaded the file SAFI\_clean.csv and by typing data/ in front of the name, the file automatically downloaded into the data folder we just made.

Script :

Et billede, der indeholder tekst, skærmbillede, Font/skrifttype, linje/række

Automatisk genereret beskrivelse

Console :

Et billede, der indeholder tekst, skærmbillede, Font/skrifttype

Automatisk genereret beskrivelse

Afterwards we typed library(tidyverse) and library(here) to load the packages

Then we asked R to read our downloaded data (SAFI\_clean.csv) in our data folder as interviews by typing read\_csv(). There ‘here’ indicates for R where to find our data. We added na = “NULL” to indicate missing as NA instead of NULL.

Script :

Et billede, der indeholder tekst, skærmbillede, Font/skrifttype

Automatisk genereret beskrivelse

Console :

Et billede, der indeholder tekst, Font/skrifttype, linje/række, nummer/tal

Automatisk genereret beskrivelse

Et billede, der indeholder tekst, skærmbillede, Font/skrifttype, linje/række

Automatisk genereret beskrivelse

Hereafter, we typed view(interviews) to give us an overview of the dataset and an additional window popped up with the overview of the dataset :

Et billede, der indeholder tekst, nummer/tal, skærmbillede

Automatisk genereret beskrivelse

Here is a picture of the file structure of my R project in my files :

Et billede, der indeholder tekst, skærmbillede, software, Computerikon

Automatisk genereret beskrivelse

There are 7 screenshots in my GitHub repository, I have named them with numbers in the order they should be opened.

Here is the link / URL :

<https://github.com/MathildeHNi/AU673184_Halberg_Mathilde>