
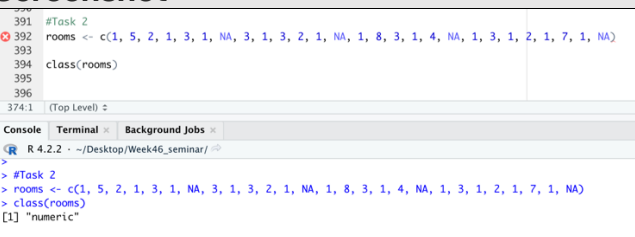


1) Use R to figure out how many elements in the vector below are greater than 2.

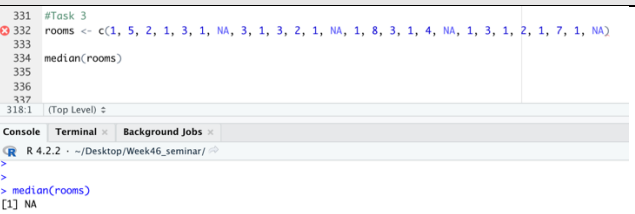
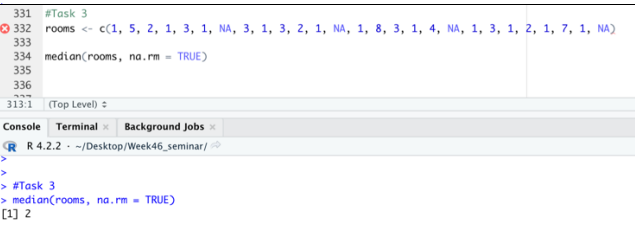
rooms <- c(1, 5, 2, 1, 3, 1, NA, 3, 1, 3, 2, 1, NA, 1, 8, 3, 1, 4, NA, 1, 3, 1, 2, 1, 7, 1, NA)

Description	Screenshot
<ul style="list-style-type: none"> - At first I defined the vector: 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) - Then I defined rooms_great as greater than 2: rooms_great <- rooms[rooms>2] - Since the data included NA's, which I didn't wanted to be included in the count, I removed NA's as follows: rooms_great <- rooms_great[!is.na(rooms_great)] - Finally allowing me to count the amount of elements in the 'rooms'-vector greater than 2 with no NA's included: length(rooms_great) - And the answer to the question is seen in the console's lowest line as being 9. 	 <pre> 361 # Task 1 362 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) 363 364 rooms_great <- rooms[rooms>2] 365 366 rooms_great <- rooms_great[!is.na(rooms_great)] 367 368 length(rooms_great) 369 370 344.1 (Top Level) </pre> <p>Console Terminal Background Jobs</p> <pre> R 4.2.2 ~./Desktop/Week46_seminar/ > > # Task 1 > 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_great <- rooms[rooms>2] > rooms_great <- rooms_great[!is.na(rooms_great)] > length(rooms_great) [1] 9 </pre>

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

Description	Screenshot
When rooms are defined in the vector as the following numbers, one can use the function <code>class(rooms)</code> to describe which kind of data that the 'rooms'-vector contains. At the lowest line in the console in the screenshot, it is shown that the data in the 'rooms'-vector are numeric.	 <pre> 391 #Task 2 392 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) 393 394 class(rooms) 395 396 374:1 (Top Level) ↕ Console Terminal Background Jobs R 4.2.2 - ~/Desktop/Week46_seminar/ ↗ > #Task 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) > class(rooms) [1] "numeric" </pre>

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

Description	Screenshot
The result of running the <code>median(rooms)</code> function is shown as NA in the console as it is confused by the presence of NA's among the numerical data	 <pre> 331 #Task 3 332 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) 333 334 median(rooms) 335 336 347 318:1 (Top Level) ↕ Console Terminal Background Jobs R 4.2.2 - ~/Desktop/Week46_seminar/ ↗ > > median(rooms) [1] NA </pre>
<p>To find the actual median of rooms it is needed to sort out the NA's, which I did as follows: <code>median(rooms, na.rm = TRUE)</code></p> <p>In the console the median is shown to be 2.</p>	 <pre> 331 #Task 3 332 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) 333 334 median(rooms, na.rm = TRUE) 335 336 313:1 (Top Level) ↕ Console Terminal Background Jobs R 4.2.2 - ~/Desktop/Week46_seminar/ ↗ > > #Task 3 > median(rooms, na.rm = TRUE) [1] 2 </pre>

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.

https://raw.githubusercontent.com/Digital-Methods-HASS/au593509_Eithz_Mathias/main/Week_46_task4.png?token=GHSAT0AAAAAB2ZBT7JVHOE7NSCV2AA7QUQY33MZFA

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.