

HW4

GitHub link: https://github.com/Digital-Methods-HASS/AU580227_Pasternakova_Alexandra.git

- 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)
```

```
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)
#creates vector
```

```
rooms_filtered <- rooms[!is.na(rooms)]
#creates new vector taking values of "rooms" without NA
(rooms_filtered)
```

```
## [1] 1 2 1 3 1 3 1 3 2 1 1 8 3 1 4 1 3 1 2 1 7 1
```

```
#prints elements of the vector on the console
```

```
rooms_filtered <- rooms_filtered[rooms_filtered > 2]
#filters out all values greater than 2
(rooms_filtered)
```

```
## [1] 3 3 3 8 3 4 3 7
```

```
#prints values
```

```
length(rooms_filtered)
```

```
## [1] 8
```

```
#counts how many elements there is
#answer is 8
```

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

```
class(rooms)
```

```
## [1] "numeric"
```

```
#tells us the tupe of data (numeric, logical, string...)
#the data is numeric
```

```
str(rooms)
```

```
## num [1:26] 1 2 1 3 1 NA 3 1 3 2 ...
```

#another option which also includes length and sample of data

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

```
median(rooms)
```

```
## [1] NA
```

*#the result is unknown due to our data including NA values
#we could use the vector without NA values to count the median*

```
median(rooms , na.rm = TRUE)
```

```
## [1] 1.5
```

*#by including na.rm we tell the program to remove NA values before starting computation
#result for median is 1.5*