Task 0.1 (Help function).

Use the `help` to find out what the following functions do. Furthermore, write a short usage example for each of the functions.

(a) `seq()`

(b) `sum()`

(c) `mean()`

Task 0.2 (Arrays).

(a) Create an array `x` that contains the numbers `1, 3, 5, 7, 9, 11, 13`. You can also try to achieve this with the `seq()` function!

(b) Which data type does the array `x` have? Use the command `typeof(x)` to find out!

(c) What is the result if you calculate `x+5`? Explain!

(d) *Calculate* a second array `y` which contains the doubled entries of `x`: `y = 2, 6, 10, ..., 26`.

(e) Calculate `x+y` and explain the result.

(f) Combine `x` and `y` to a single vector `z`: $1, 3, 5, \ldots, 13, 2, 6, 10, \ldots, 26$

(g) Output the 7^{th} element of `z`.

(h) Replace the 7^{th} element of `z` with the number 100. Output `z` to confirm that you have permanently changed `z`.

Task 0.3 (Data Frames).

Please download the data set `R00_assignment_dataset.csv` from the GitHub repository.

(a) Read the data set as a data frame `df`. Make sure that you set the correct values for `sep` and `header`.

(b) What information does `df` contain?

(c) How many rows and columns does the data frame have?

(d) Output the entire first row of the data set.

(e) Output the value that is stored in row 4, column 2.

(f) Manipulate the column `height` such that it contains the height in centimeters and not in meters.

(g) Save the manipulated data set as `R00_assignment_dataset_processed.csv`.

Please solve the assignment in the `.Rmd` format and export it as `R00-<LastName><FirstName>.PDF`