Please download the data set R01\_assignment\_dataset.csv from the GitHub repository. Load it as a data frame df:

> df = read.csv("R01\_assignment\_dataset.csv")

## Task 1.1 (Exploring the data set).

- (a) What data does the data set contain?
- (b) How many variables (columns) and how many observations (rows) does the data set contain?
- (c) Use the table() function to find out how many authors are male and female.
- (d) Is the column pronoun simply the sum of the columns i, we, you, SheHe, they, ImpersonalPronouns?

**Hint:** You might tackle this question with simple array calculations on the columns.

## Task 1.2 (Investigating trends in the data).

- (a) Take a closer look at the data to answer the following question:

  Do male and female authors differ with respect to the average number of words they write per sentence?
  - (i) Use ggplot2 to create a barplot with geom\_bar that shows the average number of words per sentence separately for the male and female authors.
  - (ii) Use ggplot2 to create a density plot with geom\_density that shows the distribution of number of words per sentence separately for the male and female authors.
- (b) Choose another *continuous* variable in the data set. Visualize its distribution separately for male and female authors.

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