

Exercise 2

Data exploration

Explore the `airquality` dataset

- i) Load the `airquality` dataset
- ii) Assign a new name to the dataset (e.g. `airquality_1`)
- iii) Get an overview of the dataset:
 - How many rows does the dataset have?
 - How many columns does the dataset have?
 - What class do the columns have? Can you guess?
- iv) Calculate the mean temperature
- v) What is the maximum ozone content?

For those who have time left...

- vi) In which month and day did the maximum ozone content occur?
- vii) Calculate the mean temperature for the month May

Hints

- i) Use the command `data(airquality)` to load the dataset.
- ii) Assign a new name with the form `new_name <- airquality`
- iii) Get an overview of the dataset:
 - Number of rows: Check the functions `dim (?dim)` or `nrow (?nrow)`
 - Number of columns: Check the functions `dim (?dim)` or `ncol (?ncol)`
 - Column classes: Check the function `class (?class)`
- iv) Check the function `mean (?mean)`. Select the column `Temp` (in the form of `df$Temp` or `df[, 4]`)
- v) Check the function `max (?max)` and the argument `na.rm`
- vi) Check the function `which.max`
- vii) Use the function `subset (?subset)` to filter for the month May (`Month == 5`)