ADS2: Problem Set 1

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Importing data into R

One of the most valuable features of R is its ability to analyze data obtained from external sources and export the available data. R can manipulate data generated in `.csv` and `.xlsx` files. That may allow you to create data in an external program that is more convenient and load it into R for further analysis. R can export data files created in it. We will discuss a few examples during this class and in the respective problem set.

First of all, let's work on the data frame created during the class. Load the `.RData` file (or any other file you used to store your data) you created during the class and check the presence of items by `ls()` command.

Your colleagues took a few more mice for analysis. Thus, you have got a few more observations! Add them to the existing data frame:

KO:
DN – 13, 15.54;
DP – 54, 42;

WT:
DN – 8.67, 7.87, 9.5;
DP – 85.4, 77.45, 80.21.

Unfortunately, the recording person forgot to note the results of the dissection, so these data are Not Available. Check what to do if the data are missing.

Your task will be to update your existing data frame (add the newly obtained rows into the existing `thymocytes` data frame) and export this updated data frame using `write.csv()` command.

In this way, you can export data created or modified in R. There are a few more R extensions that allow working with `.xlsx` files to R. Namely, `xlsx` and `readxl` packages. You can try to use them for this problem set as well.

Importing and exporting `.csv` tables

Load an external file `ADS2week1.csv` into R using `read.csv()` command.

How do these data look to you? Do you find anything unusual? Investigate these data and finish the task mentioned in the file. Again, you will need to apply some string operations to finish this task.

It will be your problem set this week, and you can discuss it with your instructors in the class or during student hours at the end of the week.

You may need to install a special package to R to be able to finish this task. For example, one for using string operations.

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