

# Exercises - Third R meeting

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These exercises are not mandatory but they will help you working with R. Try to find solve the tasks as much as you can without looking on the tutorial pdf for the meeting. Always remember, there are many sources that can help you:

- Read the help pages for functions and packages. Especially the 'Details' will tell you more about the function and the output of the function.
- Use `?`  connected with a function name to find its help page (e.g. `?read.csv`)
- Use `??` if your don't know whether there is a function or what its name is (e.g. `??xlsx`)
- Ask [Google](#) or [Stackoverflow](#). There are many others that struggle with the same questions that you have.

You need the files that were attached to the second R meeting mail from November 5th.

1. Import the file `PlayerExpenses.xlsx` into R using the `read.xlsx2()` function (don't forget to load the `xlsx` package).
2. You will find that the first column is transformed by R into something else than a time stamp that we want. To tell R to import the first column as a time stamp (the format is called `POSIXct`), we need to define classes of all columns in the data.frame. Do this by using the `colClass` argument and hand over the vector `POSIXct, character, character, numeric`.
3. Create a simple plot with the `plot()` function where the Date column is on the x-axes and the column with the Fees is on the y-axes.
4. Use `?plot` to find out how to change the 'labels' of the x and y axes (e.g. into 'Date' and 'Fees') and how to add a title to the graph.
5. Import the `Nationality.csv` file using `read.csv()`.
6. Combine the two data.frames (`PlayerExpenses` and `Nationality`) using the `data.frame()` function. Try to have only one Fee column in your resulting data.frame.

7. Create a new `data.frame` that includes all columns of the previous `data.frame` but only for players from England.
8. Save this `data.frame` as a csv file (`write.csv()`), an xlsx file (`write.xlsx()`), and an R object (`save()`) to your Desktop.