

HW 02: Introduction to R

Graphical Analysis of Biological Data

By the end of this assignment, you will be able to perform the following tasks in R.

- assign values to variables;
- create and manipulate vectors;
- create and perform computations on arrays;
- create, subset, and compare factors;
- create data frames, extract data from rows, columns, and cells; and
- create and manipulate lists.

Click on any blue text to visit the external website.

Assignment

This exercise will teach you basic commands and types of data objects in R, using an interactive website provided by DataCamp. DataCamp offers a range of beginning to advanced courses, most of which target programming for the data sciences. Some courses are free, and you will use one of them.

1. Create a hw02 folder inside your local repo (the folder you created for this course).
 2. Register for a *free* [DataCamp account](#). If you get subsequent email from them, just click on the unsubscribe link at the bottom of the email.
 3. Complete all six parts of this [free Introduction to R](#) course. It took me about 2 hours but I knew what I was doing. You should allow about 3–4 hours. You do not have to do it all at once but finish them all by the due date.
 4. After you have completed successfully all six parts, you will be able to download a Statement of Accomplishment PDF. Download the PDF, rename it to `certificate_of_completion.pdf` and place it in your hw02 folder.
 5. Launch R Studio and open the Project file you made for this course.
 6. Choose `Tools > Version Control > Commit...` from the menu.
 7. You should see an entry on the left that looks like `hw02/certificate_of_completion.pdf` or similar. Click the checkbox to the left. If you see only `hw02`, then click that checkbox. That should show your certificate file, already checked.
 8. In the `Commit` message box on the right type “Proof I finished homework 2.” and press the `Commit` button.
 9. Close the confirmation box, then click the `Push` button with the green, upward-pointed arrow (upper right in RStudio). This will place your certificate on the remote repo (GitHub) for me to view.
- Notes 03 will cover what is actually going on when you do these steps.
10. For more practice, I recommend that you read and work through [R4ds Chapter 4](#) (R4ds), and answer the questions 1 and 3 at the end of the chapter.
 11. You should also read [Chapter 6](#) and [Chapter 8](#).
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Grading Rubric

This assignment is all or none.

No work: 0	Needs work: 1	Satisfactory: 2	Excellent: 3
Did not upload certificate indicating successful completion of DataCamp course.	Does not apply.	Does not apply.	Successfully completed DataCamp course. Uploaded certificate to remote repo.

et Voilà