

# 0: How to do this assignment

The six parts of this assignment will teach you basic commands and types of data objects in R. By the end, you will be able to achieve the following tasks in R:

- Create and save a new R script;
- assign values to variables;
- create and manipulate vectors;
- create and perform computations on matrices;
- create, subset, and compare factors;
- create data frames, extract data from rows, columns, and cells; and
- create and manipulate lists.
- commit your work to Git and push it to GitHub.

*These achievements belong to Learning Outcomes 1 and 6.*

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## How this works

First, create a folder called `hw02` inside your local repo (the folder you created for this course). It should be in the same folder as your project file.

Next, choose **File > New File > R Script** from the menu to create a new script. Choose **File > Save As...** to save the script as `hw02-1.R` inside the `hw02` folder you just created. Use this script for part 1: Intro to Basics. You'll make a separate script for each part. Save each script in your `hw02` folder.

This assignment consists of six parts:

- 1: Intro to Basics (HTML | PDF)
- 2: Vectors (HTML | PDF)
- 3: Matrices (HTML | PDF)
- 4: Factors (HTML | PDF)
- 5: Data frames (HTML | PDF)
- 6: Lists (HTML | PDF)

Each part has a set of instructions (in HTML and PDF) to guide you through the exercises. I'll release the parts over 2-3 days to give us all time to work out any kinks with setup and getting comfortable in RStudio.

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After you complete each assignment, you must push your script to your remote repository. Follow these steps:

1. Choose **Tools > Version Control > Commit...** from the menu.
2. You should see an entry on the left that looks like `hw02/hw02-1.R` or similar. The exact file name will depend on the the part you just completed. Click the checkbox to the left. If you see only `hw02`, then click that checkbox. That should show your script, already checked.
3. In the **Commit message** box on the right type "Finished Part 1." and press the **Commit** button. Change the part number to match the part you just completed.

4. Close the confirmation box, then click the **Push** button with the green, upward-pointed arrow (upper right in RStudio). This will place your completed notebook on your remote repo (GitHub) for me to view.

Notes 03 will cover what is actually going on when you do these steps.