

Lab 01

First steps in data science

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Welcome to lab!

What to expect in lab

- Introduction to the lab assignment (~ 15 minutes)
- Work on the lab assignment (generally done in groups)
- All assignments will be completed using RStudio and submitted to Gradescope. We'll go over the process in detail today.

Getting started

Goals

- **Introduce you to R and RStudio:**
 - R is the name of the programming language itself
 - RStudio is a convenient interface
- **Introduce you to Git and GitHub:** collaboration and version control system that we will be using throughout the course
 - Git is a version control system, like "Track Changes" features from Microsoft Word
 - GitHub is the home for your Git-based projects on the internet
- **Take small steps:**
 - This a solo lab to make versioning simpler, but that doesn't mean you can't work with others.

Getting started

You may watch or follow along:

- Navigate to <https://classroom.github.com/a/VJXpY3-I> and accept the assignment.
- Navigate to the repository you just created using the newly provided link.
- Click on the green Code button in that repository, and copy the git URL (it should end in .git).
- Go to your **RStudio Docker container**.
- In RStudio, go to *File* → *New Project* → *Version Control* → *Git*.
- Copy and paste the git URL of your assignment repo into the dialog box labelled *Repository URL*. Adjust the folder to where you want this assignment located.
- Click *Create Project*, and the files from your GitHub repo will be displayed in the *Files* pane in RStudio.
- Click *lab_01.Rmd* to open the template R Markdown file.

Now it's your turn! Please let us know if you have any questions.

Configure git

Next, we need to configure git so RStudio and GitHub can communicate with each other.

Type the following lines of code in the RStudio **console** pane:

```
library(usethis)  
use_git_config(user.name = "your name", user.email = "your email")
```

Make sure you input your name and your email address associated with GitHub in the above code.

Once you have configured git, you're ready to complete the rest of lab! We will walk you through Lab 01, up to Exercise 1.

The directions for Lab 01 are available on the course website at http://www2.stat.duke.edu/courses/Spring21/sta199.003/labs/lab_01.html.

Lab 01

- As you work on Lab 01
 - work with individuals in your breakout room,
 - ask questions,
 - don't be afraid to experiment in R, you can't break anything.
- Pay special attention to the submission procedure detailed at the end of the instructions.