The LSD Lab Guide for:

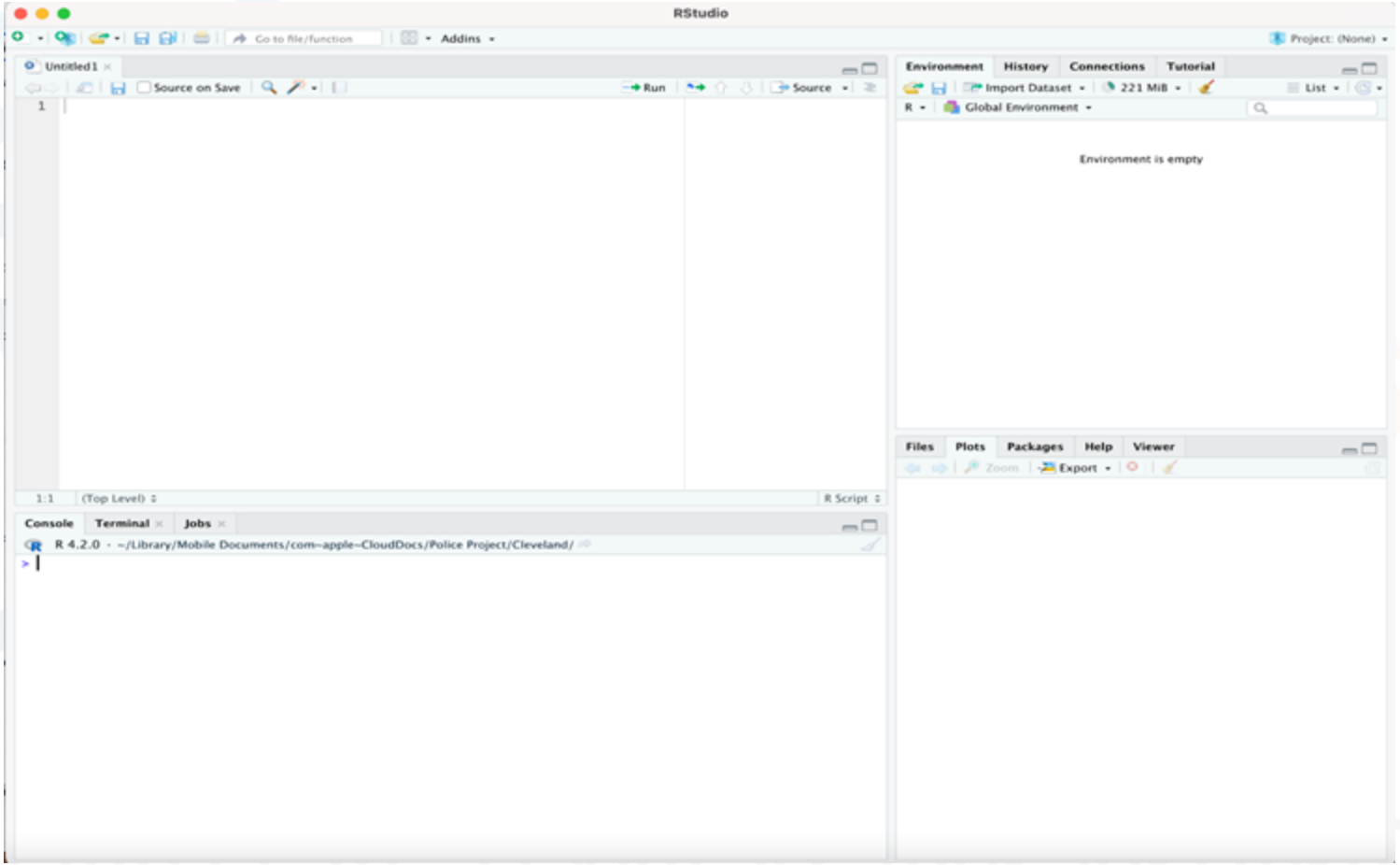
Navigating RStudio

Getting Started in RStudio

- Now that you've installed Base R and RStudio, it's time to get comfortable in the space where you'll be doing your work.
- RStudio is designed to make R easier to write, read, organize, and explore.
- This walkthrough shows you what everything is, what it does, and how to take your first steps using RStudio.

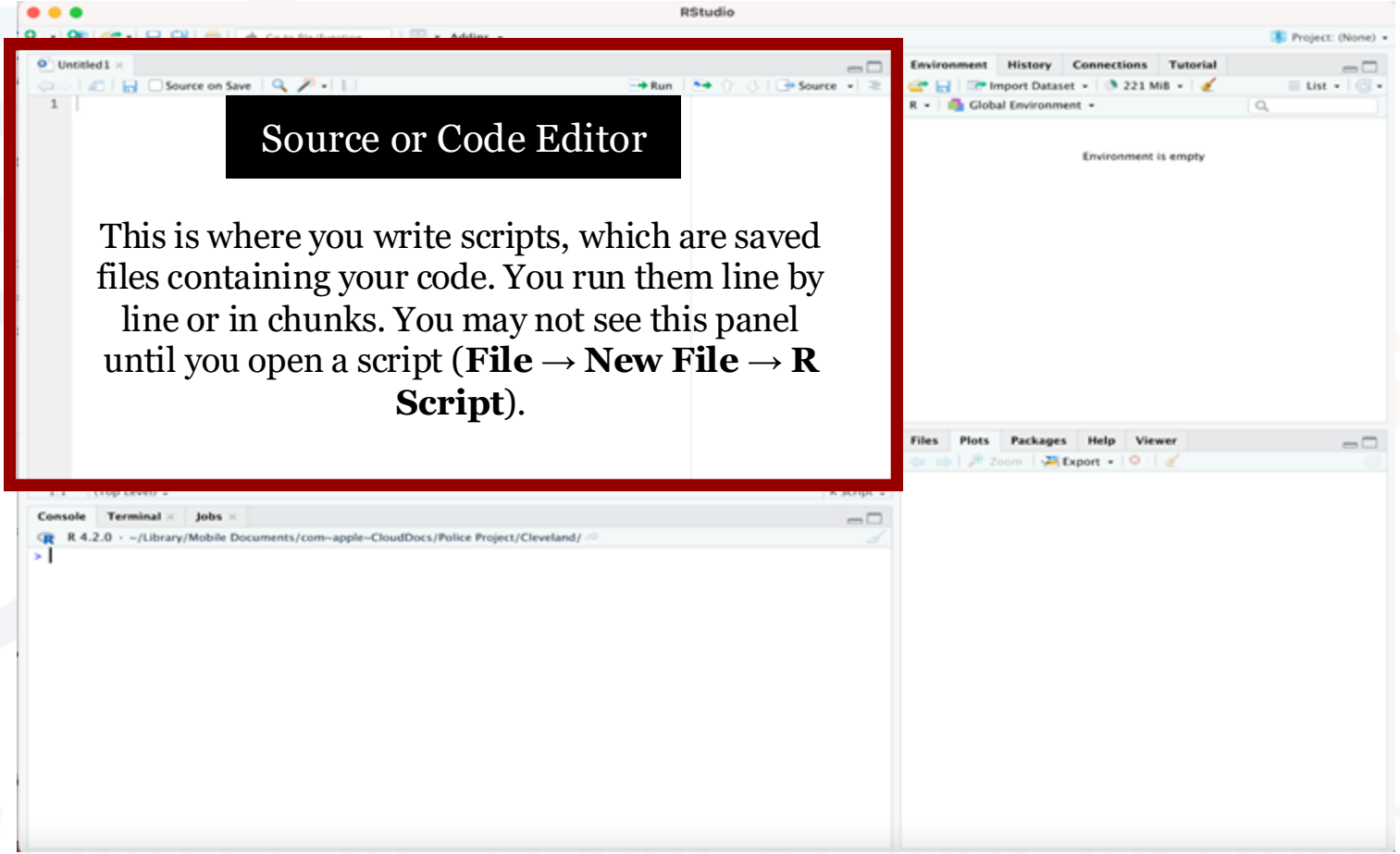
1. The Four Main Panels in RStudio

When you open RStudio, you'll see four main panels. Each serves a different purpose.



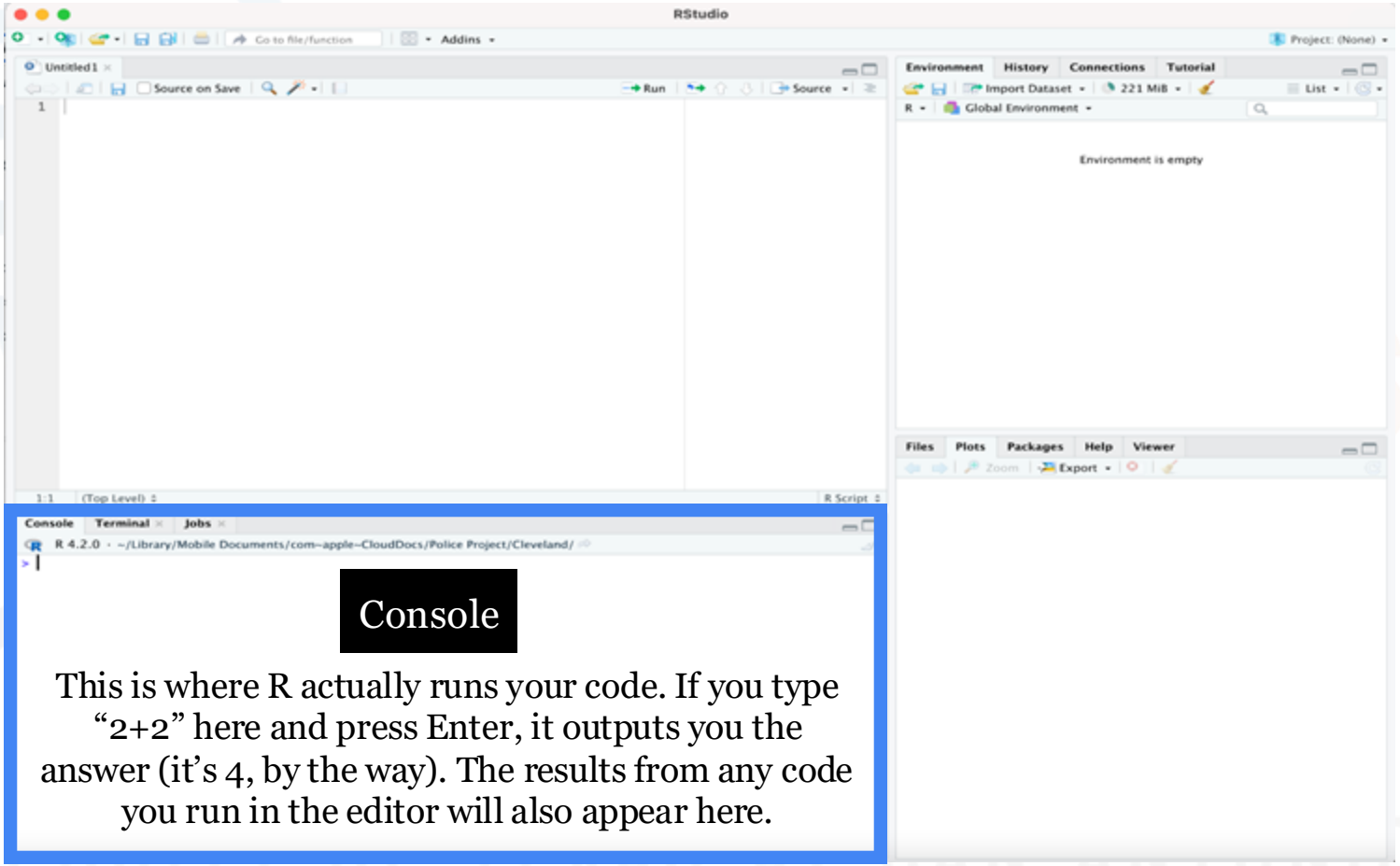
1. The Four Main Panels in RStudio

When you open RStudio, you'll see four main panels. Each serves a different purpose.



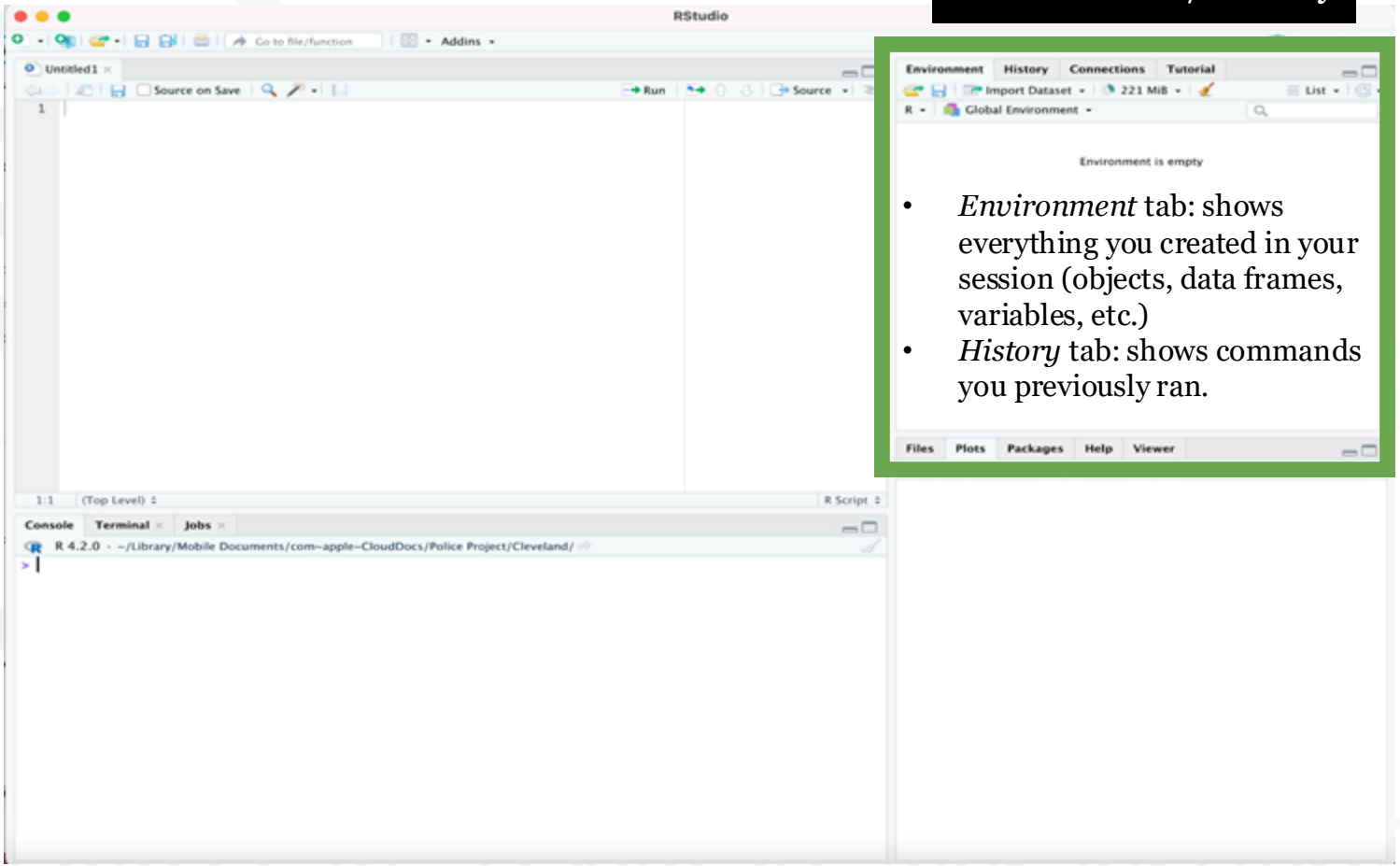
1. The Four Main Panels in RStudio

When you open RStudio, you'll see four main panels. Each serves a different purpose.



1. The Four Main Panels in RStudio

When you open RStudio, you'll see four main panels. Each serves a different purpose.

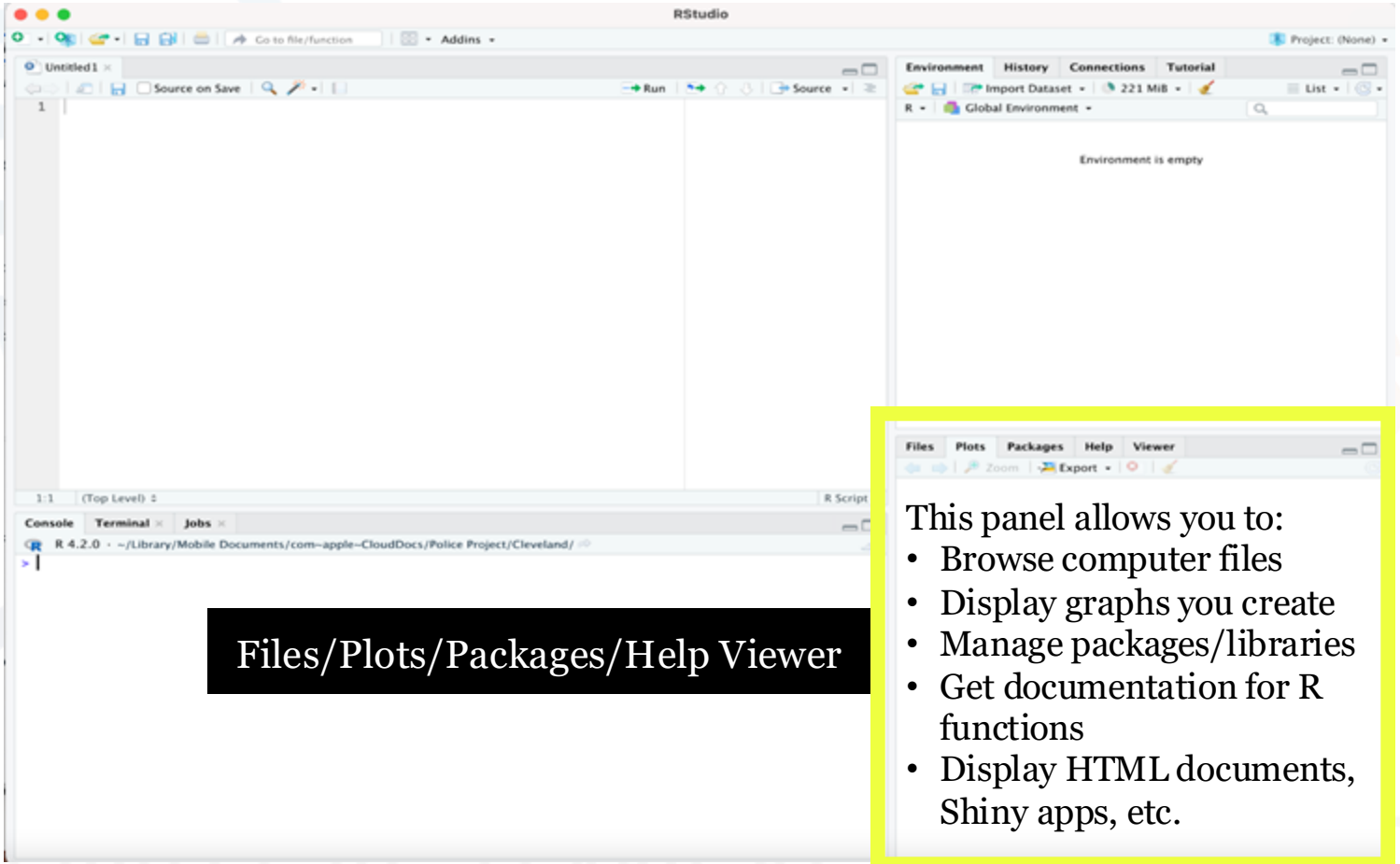


Environment/History

- *Environment* tab: shows everything you created in your session (objects, data frames, variables, etc.)
- *History* tab: shows commands you previously ran.

1. The Four Main Panels in RStudio

When you open RStudio, you'll see four main panels. Each serves a different purpose.



Files/Plots/Packages/Help Viewer

This panel allows you to:

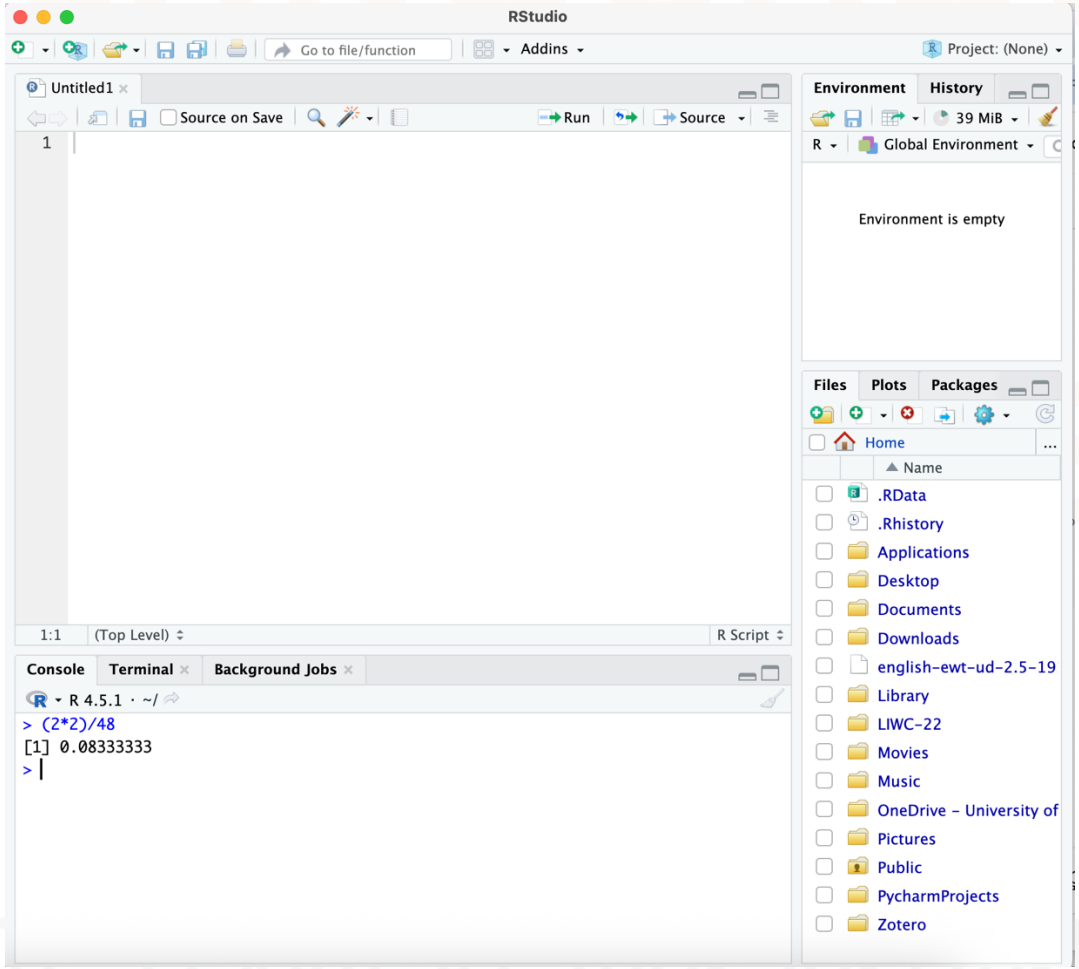
- Browse computer files
- Display graphs you create
- Manage packages/libraries
- Get documentation for R functions
- Display HTML documents, Shiny apps, etc.

2. Running Code: Console vs. Script

You can run R code in two ways:

A. In the Console

- Use this for quick checks or experimenting.
- Example:

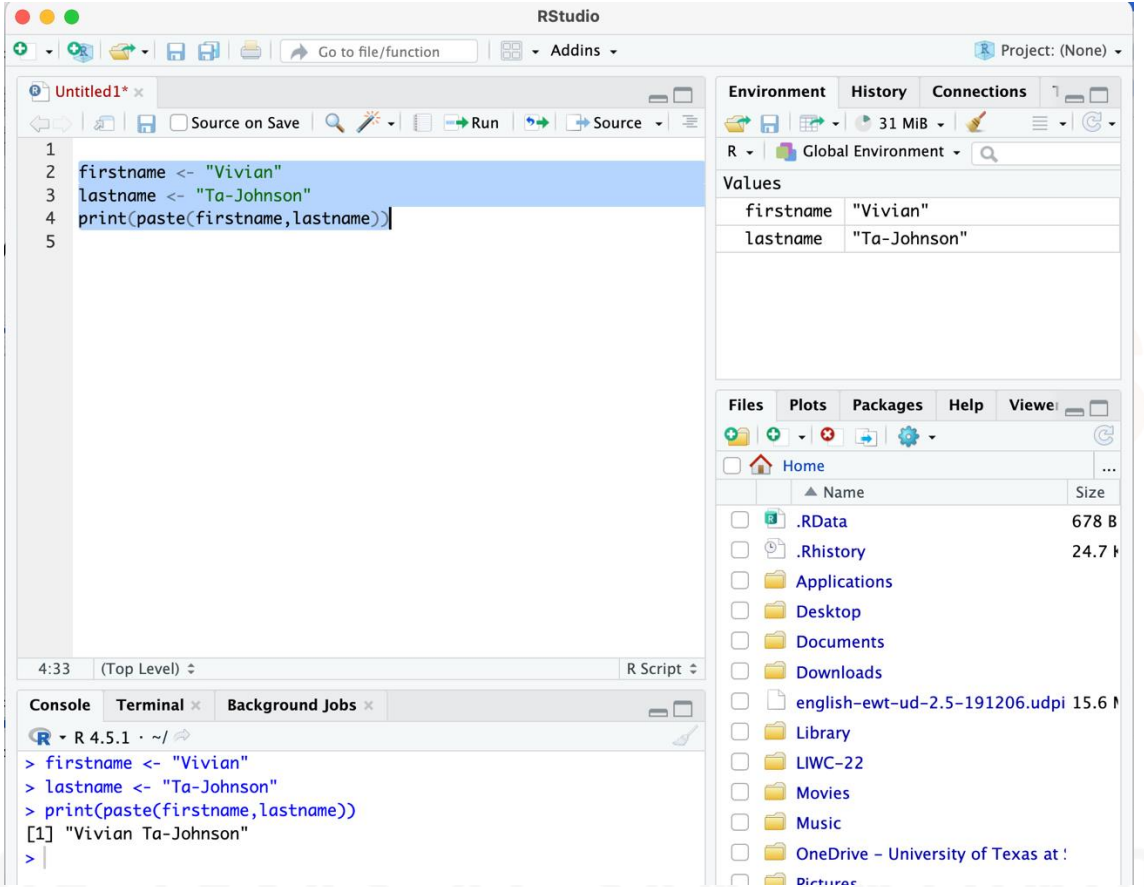


2. Running Code: Console vs. Script

B. In the Code Editor (recommended for real work)

- Create script:
  File → New File → R Script
- Insert code in code editor.
- To run a line/chunk of code, highlight it and either A) click "Run" or B) press:
  - **Cmd + Enter** (macOS)
  - **Ctrl + Enter** (Windows)
- This sends your code to the Console to execute.

Note: Scripts can be saved and reused; the Console cannot.



3. Setting Your Working Directory

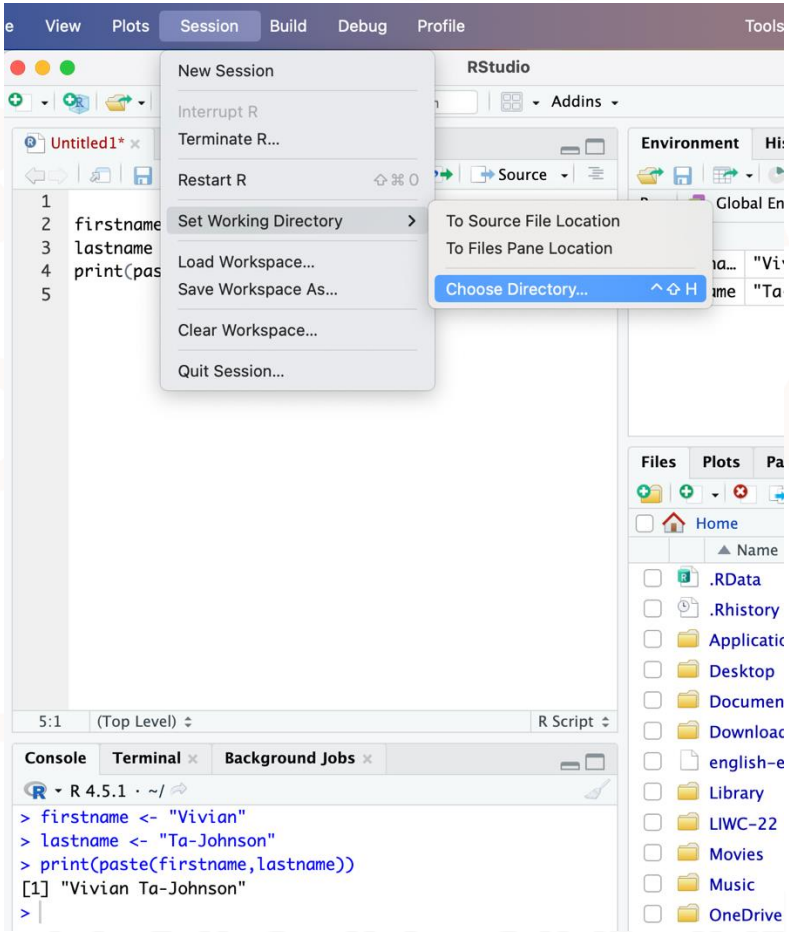
R needs to know where your files live which is called your working directory (wd).

There are two ways to set your wd.

A. Set wd via menu

Click **Session → Set Working Directory → Choose Directory...**

Then choose your wd.

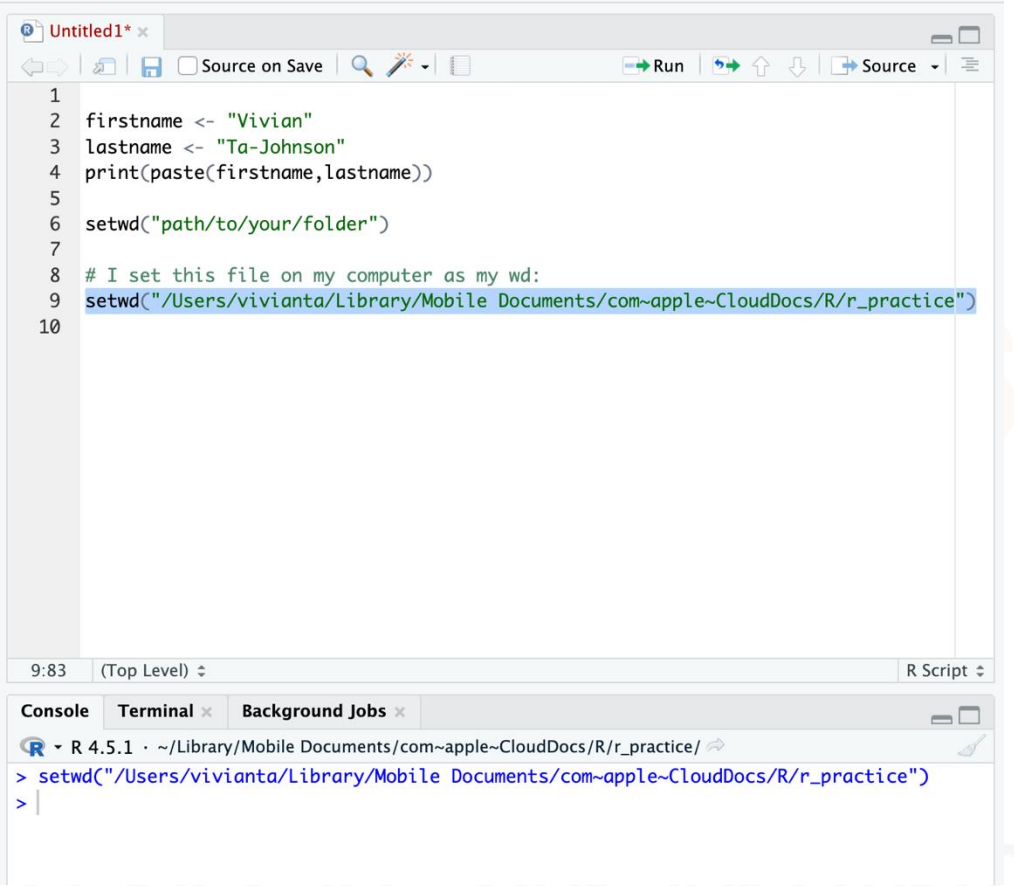


3. Setting Your Working Directory

B. Set wd via code using `setwd()`

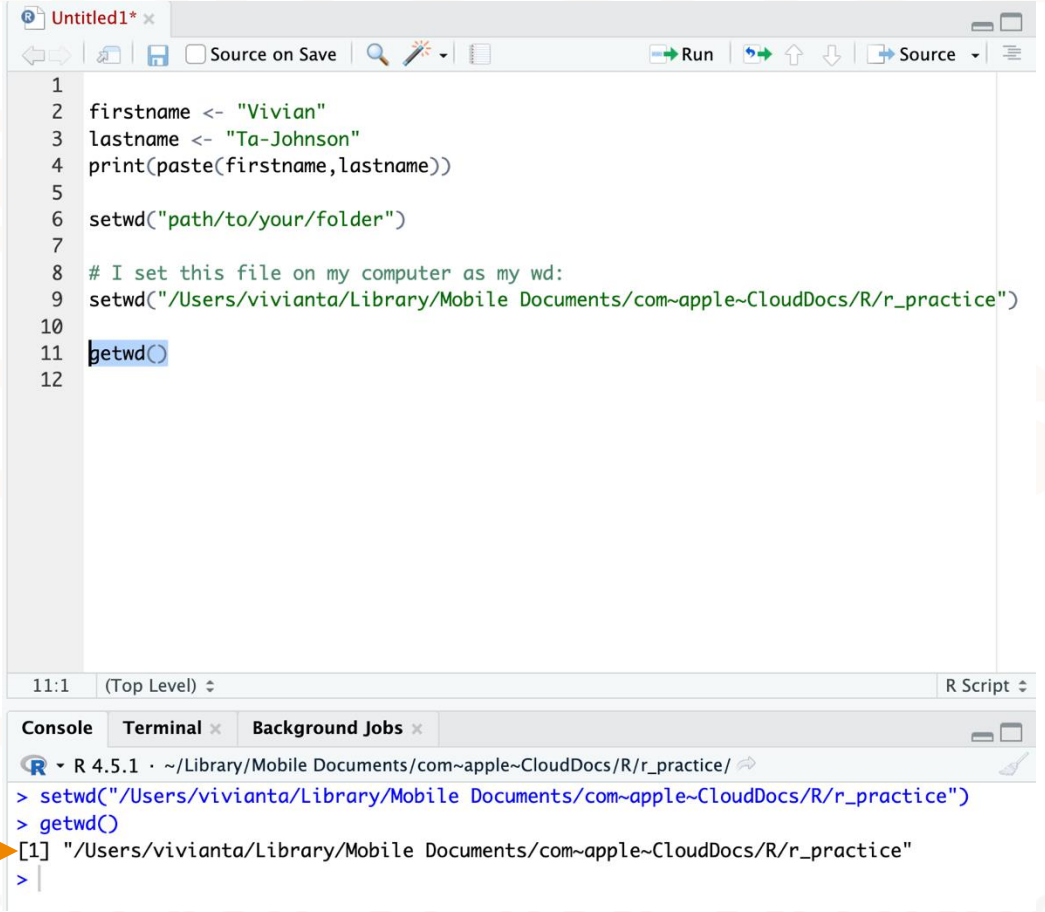
`setwd("insert/folder/path")`

Note: make sure to use forward slashes.



3. Setting Your Working Directory

To check what your current wd is, run `getwd()`



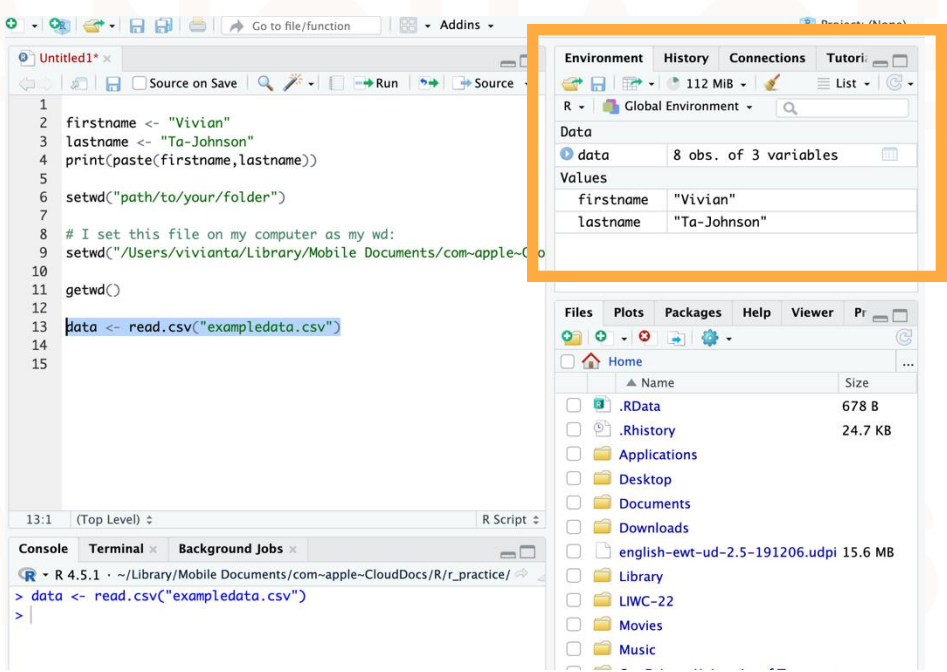
This prints the path to your current wd.

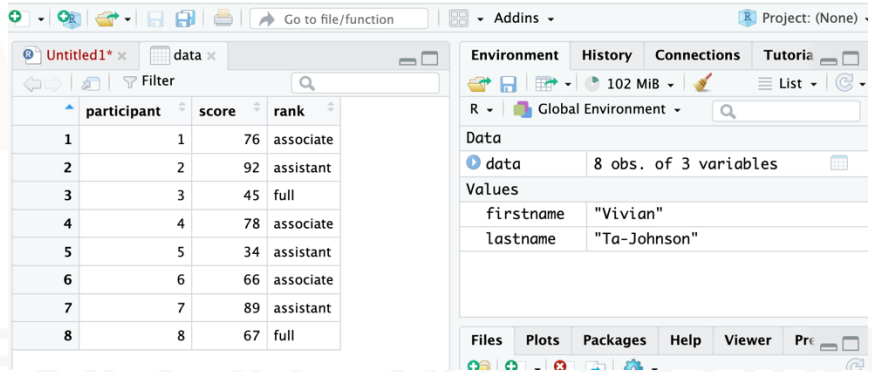
4. Loading Data

Let's load a CSV file named exampledata.csv using `read.csv()`.
It is currently in my wd and I want to name it "data" after loading it into RStudio:

```
data <- read.csv("exampledata.csv")
```

"data" now appears in the Environment pane. Clicking its name lets you view it like a spreadsheet.



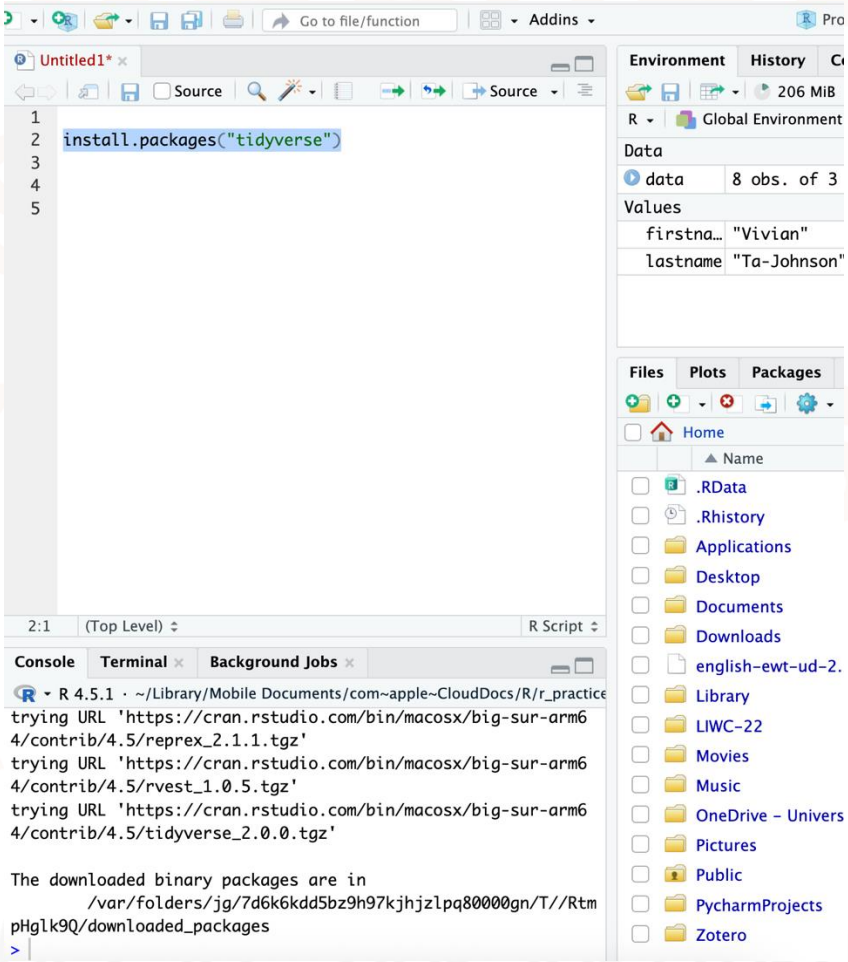


5. Installing and Loading Packages

Packages extend R's abilities. You can install packages:

A. Via code using `install.packages()`:

```
install.packages("tidyverse")
```

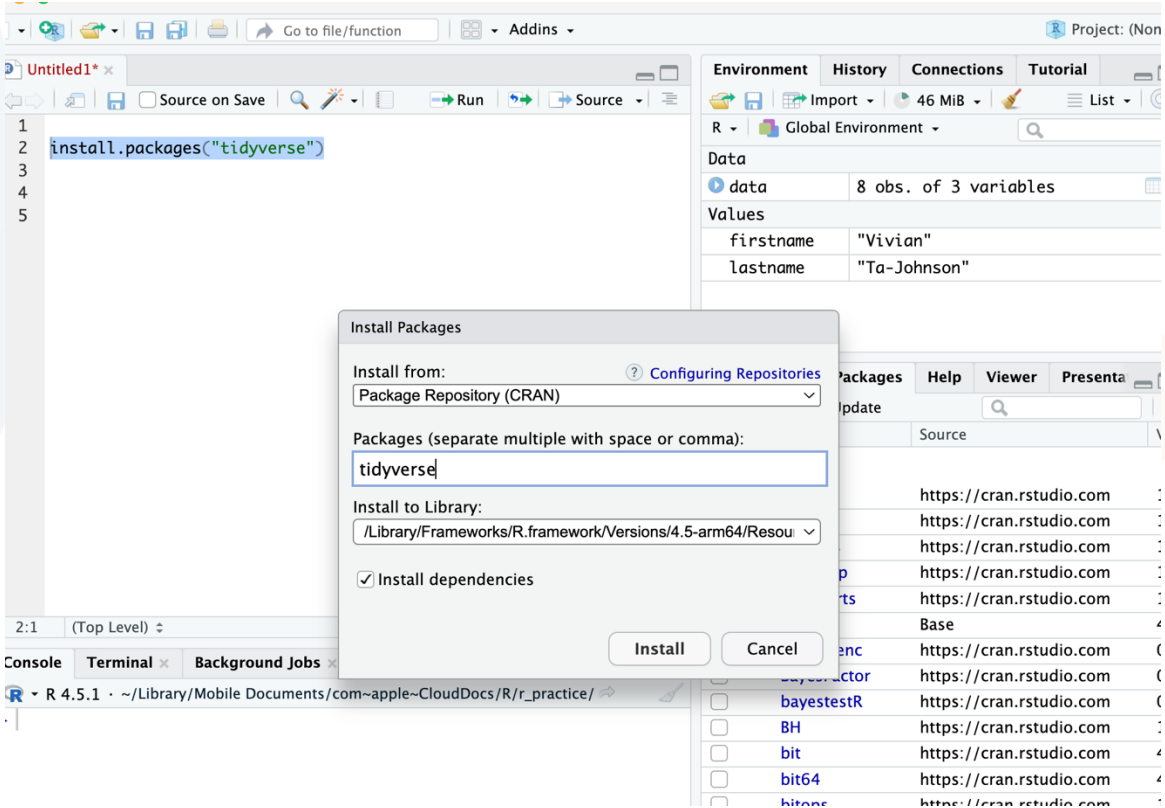


5. Installing and Loading Packages

B. Via menu

In the packages panel, click:

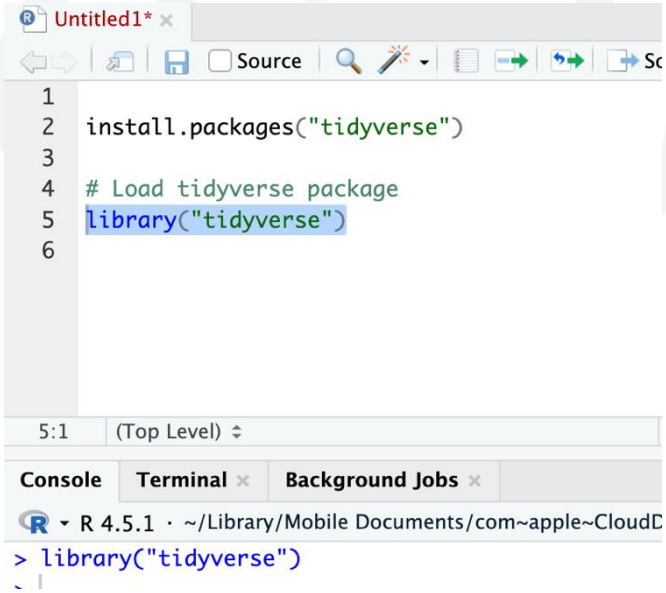
Packages → Install →
Type in name of package
in "Packages" → Install



5. Installing and Loading Packages

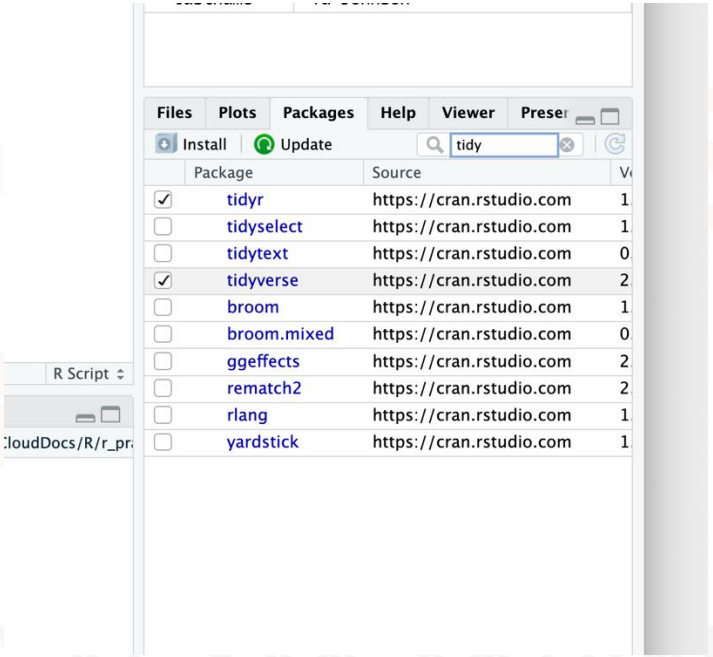
After installation, you can load a package:

A. Via code using `library()`:



or

B. Via the Packages menu by selecting the package:



6. Saving Your Script

To save your script in your wd:

- Click Save
- Name it (e.g., my_first_rscript.R)