Introduction to R

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SCAN!

What is R?

R is a programming language with an emphasis on statistics and statistical analysis

Commonly used to analyze any data; applications in modern data science and machine learning
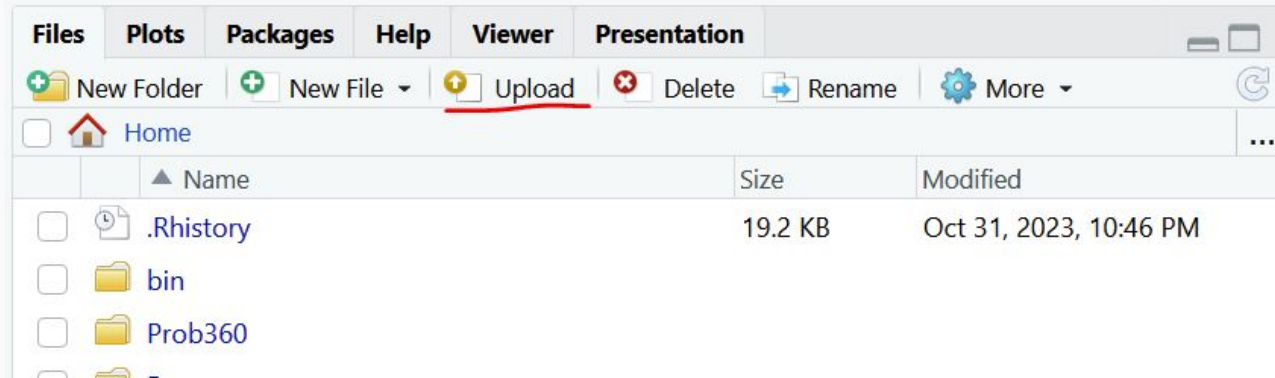
Getting to the Server & Uploading Files

Go to r.amherst.edu

Click "+ New Session"

Press the "**Upload**" button and select the file from your computer
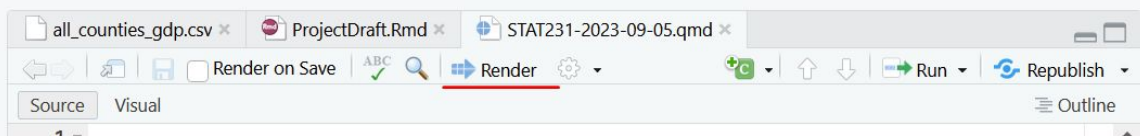
Rendering & Running Code Chunks

Press the "**Render**" button to create a PDF from your code

If you want to run just some of the code you have options:

Highlight the code to run and press "Run"

Press "Run" while on the line of the code you want to run

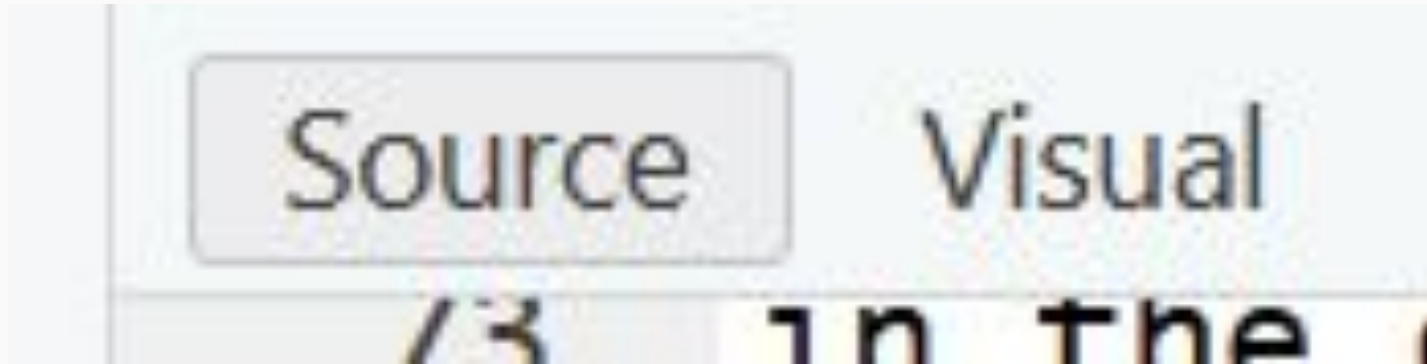Press the green play button above the code

Exporting/Saving PDFs

After rendering the file you will be able to save it as a PDF to submit

Visual vs Source Editor

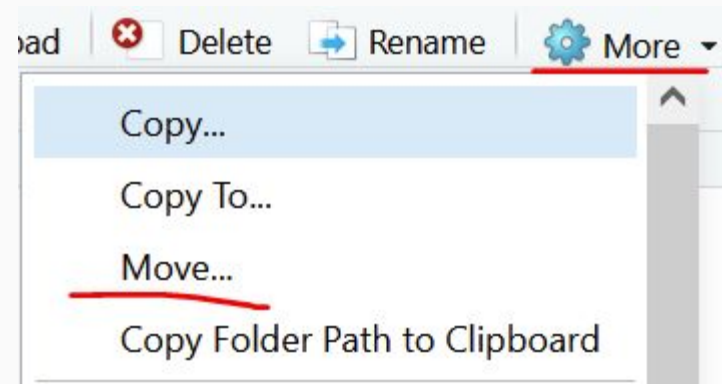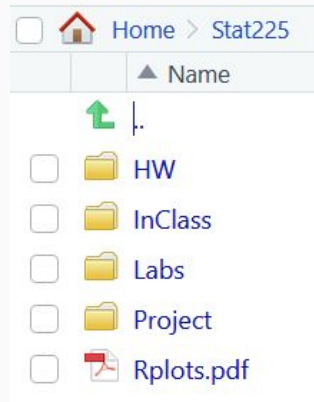You can choose how you view the files while working on them

File Organization

Keep one folder for all files from a class

Can help to nest folders

Ability to move files is hidden under "More" near the upload button

Rmarkdown text vs code

Text will have a white background and not be in a code "chunk"

Code will be inside a "chunk" with "```{r}" at the start and "```" at the end

Those aren't apostrophes, they are backticks! They can be found at the top left of your keyboard.

```
73   in the console.
74
75   Please select `ggplot2` as your Graphics System.
76   You and your partner will copy and paste your code into the code chunk below.
77
78
79 ▾ ```{r}
80   #| label: fig-ourfig
81   #| fig.cap: "Education effect on wages"
82   #| fig.height: 6
```

Adding/Running code chunks

Click the arrow next to the symbol

There should be a drop down menu, select `R` to add an R code chunk

Clicking the arrow in the top-right corner of a code chunk will "run" or execute that code chunk
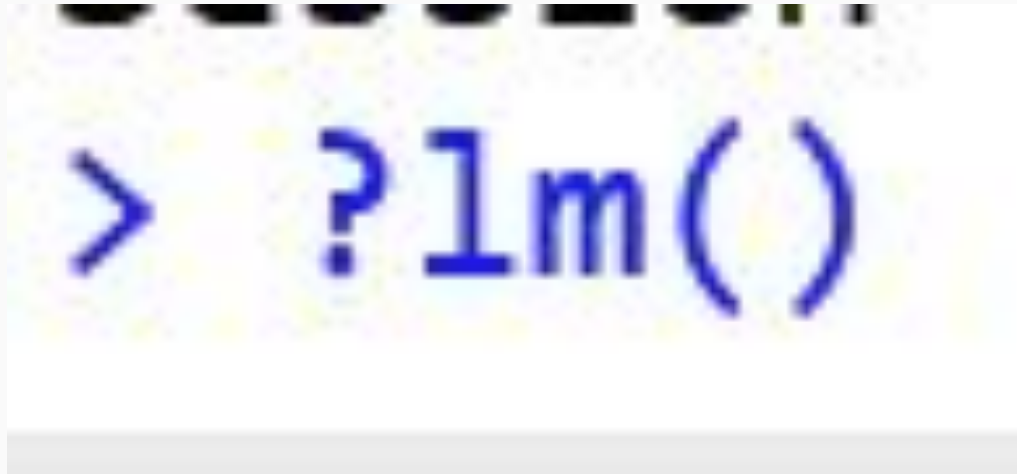
Or, there is a `Run` button next to the gives options for running multiple chunks at a time

Troubleshooting Options

Using the ? in front of a function will pull up its documentation

You shouldn't be afraid to google an error message

What is a package/library

A collection of functions someone has compiled for our use

You won't need to install them, but you will have to tell R you are using them with the **"library()"** command

```{r}
#| label: setup
#| include: false
# install.packages(mosaic)
library(mosaic)
library(tidyverse)
```