# 1. Introduction to R

Due Week 1

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F2025

# Readings

- Read the course syllabus (all parts of this website)
- Recommended reading:
  - FCSP chapter 1, or
  - **PSDS**, chapter 5 or
  - **RDS**, introduction

# **Data & Computational Work**

The main purpose of this week's assignment is to get your computer ready for all the work in the class. This means, primarily, installing software.

## Install R on your computer

Begin by installing R (http://cloud.r-project.org). Choose the version appropriate for your computing platform:

- If you use macOS with an Apple Silicon processor (i.e. an M-series processor), then install R for macOS's Apple Silicon build. This version does not work on older, Intelbased Macs.
- If you use macOS with an Intel processor, then install R for macOS's Intel build.
- If you use Microsoft Windows, then install R for Windows.
- If you use Linux, choose your distribution and install the R package for it.

# Install RStudio on your computer

- If you use macOS (whether Apple Silicon or Intel), install this version of RStudio.
- If you use Windows, install this version of RStudio.
- If you use Linux, choose your distribution from the download page.

## Confirm things work

- R is really a great big calculator. Let's do some calculations!
  - Add 2 and 3 together
  - Multiply 4 by 6
  - Divide 10 by 5
- R can do fancier calculations.
  - Take the square root of 25

### Submit: .R File

In an .R file, write code to answer the following questions. Make sure your file is appropriately titled and headered.

- 1. Create an object named aardvark that stores a 3 as a single number
- 2. Create a second object named boomba that stores a 6 as a single number
- 3. Create a third object named centauri that is the addition of aardvark and boomba
- 4. Create a fourth object named diabolical that is the multiplication aardvark and boomba
- 5. Create an object named ebullient that stores three numbers as a vector: 4,5, and 6
- 6. Create an object named fastidious that stores three numbers as a vector: 8,9, and 11
- 7. Add ebullient and fastidious together, and store it in an object named george
- 8. Find the mean (average) of fastidious, and store it in an object named zoinks

### Submit: PDF file

Answer the following questions and upload as a PDF to Blackboard.

- 1. What is your name and program of study at Syracuse? (Optional: provide your pronouns, if you wish.)
- 2. What is your prior experience with statistics, data analysis, R, and computer programming generally?

- 3. What are you hoping to get out of this class?
- 4. Please include a picture of yourself!
  - It can be anything just make sure that you are the only person in the picture so I can clearly identify you.
- 5. What is the mean of the fastidious object from your .R assignment above?