

# The R Language

Professor Widom's Instructional Odyssey

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# R

Programming language and software environment for statistical computing, graphics, and (more recently) data analysis

- Dynamically typed and interpreted, like Python
- A primary data type is “data frame”, similar to relational table (and Python pandas dataframe)
- Many R features now also available in Python packages

# R Versus Python

## R

- Easier for experienced programmers
- Used by academics, researchers, hard-core data scientists
- Specialized code for complex analyses, statistics, graphics
- Extremely slow!

## Python

- Good for beginners or experienced
- Used by software engineers of all types
- Better integrated with general-purpose coding
- Not especially fast

# Agenda

1. Data manipulation
2. Plotting

Plenty of your turn!

For help while working with R:

**Tutorials and help pages**

(website Course Materials)

➤ **Web search**