

# Applied Social Data Science

## Coding Camp

Setup • Orientation

---

Elena Karagianni, PhD Candidate

karagiae@tcd.ie

 September 8–12, 2025

Department of Political Science, Trinity College Dublin

# Schedule

10am - 1pm

- Monday: Introduction
- Tuesday: R Basics + Good practices

10am - 12pm

- **Thursday: Python basics**
- Friday: How to write up and report -  $\text{\LaTeX}$

## Why Python (and differences from R

- General-purpose language (R is a statistical language)

## Why Python (and differences from R

- General-purpose language (R is a statistical language)
- More suitable for machine learning, deep learning, and large-scale web applications

## Why Python (and differences from R

- General-purpose language (R is a statistical language)
- More suitable for machine learning, deep learning, and large-scale web applications
- It is used for various purposes like building a graphical user interface, developing games etc.

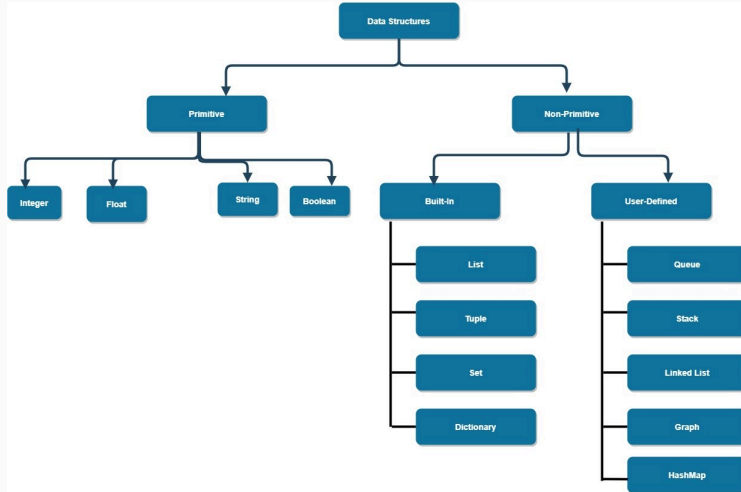
## Why Python (and differences from R

- General-purpose language (R is a statistical language)
- More suitable for machine learning, deep learning, and large-scale web applications
- It is used for various purposes like building a graphical user interface, developing games etc.
- Primary users of Python include developers and programmers (R is used more by scientists/Research & Development who frequently rely on data analysis)

Every variable in Python has a type, indicating the nature of the value that it stores.

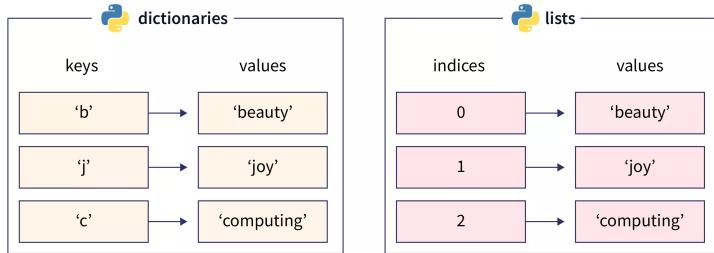
- **Primitive:** Simplest forms of representing data
- **Non-primitive:** These contain primitive values within more complex data structures for special purposes.

# Python Data Structures





# Differences from R



SCALER  
*Topics*

# Differences from R

```
while x < 10:
    print("x is currently", x)
    x = x + 1
    if x > 5:
        print("x approaching 10")
```

Outer block

Inner block 1

Inner block 2

Colon character at end of block header line

# Let's try it out!

## Step 1

Open **Anaconda Prompt** first

Then: launch Jupyter Notebook from Anaconda Navigator