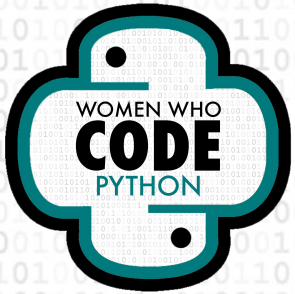
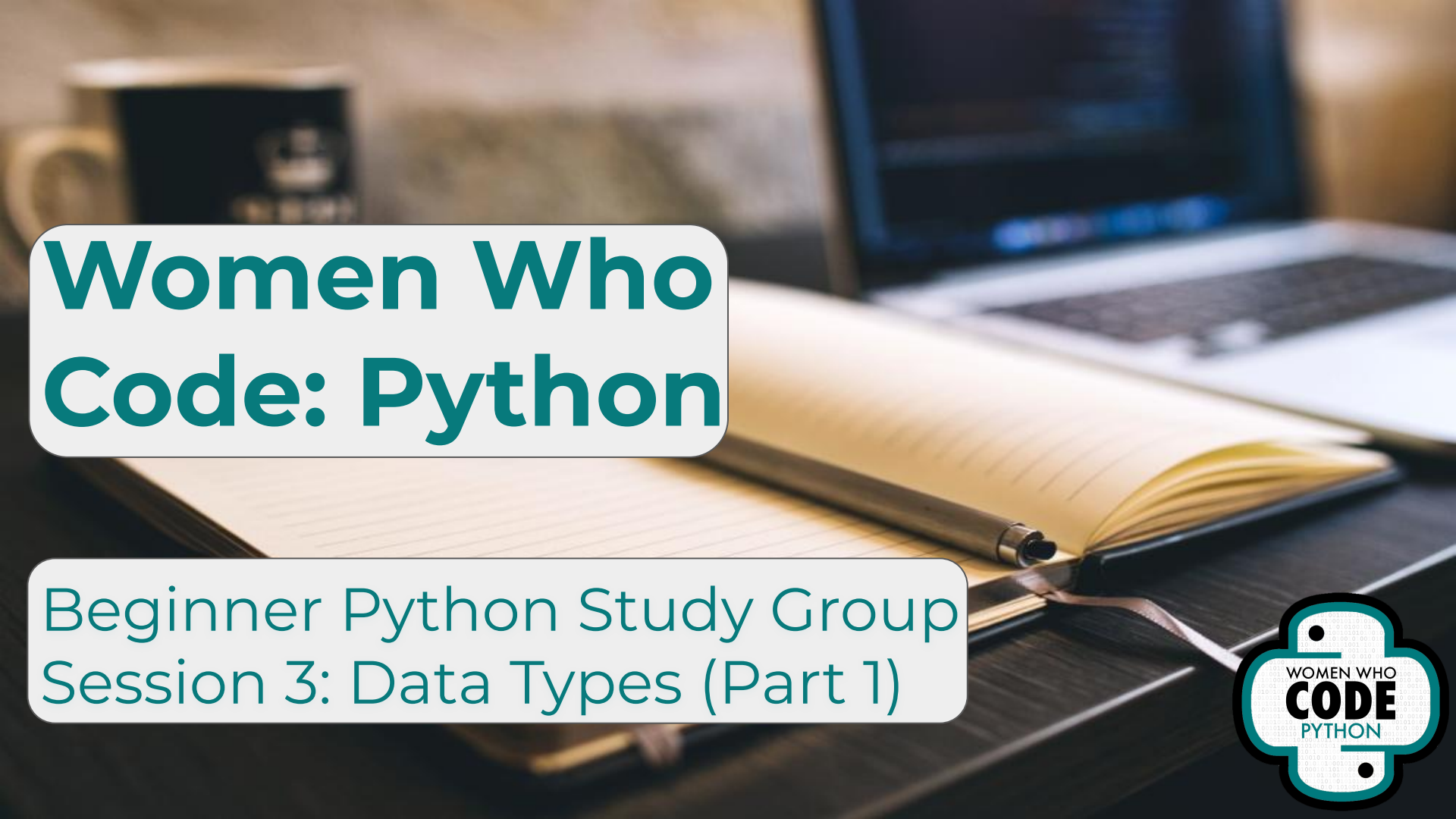
Welcome everyone!

- You can find these slides on GitHub here: https://github.com/WomenWhoCode/WWCodePython
- Please make sure your chat is set to “All panelists and attendees”.
- Some housekeeping rules:
  - Everyone will be muted throughout the webinar, but there will be opportunities for participation!
  - Please share your thoughts on the chat and/or ask questions in the Q&A.
  - The entire team is here today. Please reach out to us with any technical questions!




Women Who Code: Python
Beginner Python Study Group
Session 3: Data Types (Part 1)
WOMEN WHO
CODE
PYTHON

Meet us!

Hi I’m Rishika!

Graduate Student
Lead at WWCode
@Rishika Singh

Hi I’m Karen!

R&D - AI Sector
Volunteer at WWCode
@Karen W

Hi I’m Stephanie!

Marketing Evangelist @ WWCode
@Stephanie

OUR MISSION

Inspiring women to excel in technology careers.

WOMEN WHO CODE

OUR VISION

A world where women are representative as technical executives, founders, VCs, board members and software engineers.

WOMEN WHO CODE

OUR TARGET

Engineers with two or more years of experience looking for support and resources to strengthen their influence and levelup in their careers.

WOMEN WHO CODE

CODE OF CONDUCT

WWCode is an inclusive community, dedicated to providing an empowering experience for everyone who participates in or supports our community, regardless of gender, gender identity and expression, sexual orientation, ability, physical appearance, body size, race, ethnicity, age, religion, socioeconomic status, caste, creed, political affiliation, or preferred programming language(s).

Our events are intended to inspire women to excel in technology careers, and anyone who is there for this purpose is welcome. We do not tolerate harassment of members in any form. Our **Code of Conduct** applies to all WWCode events and online communities.

Read the full version and access our incident report form at **womenwhocode.com/codeofconduct**

WOMEN WHO CODE

230,000
Members

70 networks in 20 countries
Members in 97+ countries
10K+ events
$1025 daily Conference tickets
$2M Scholarships
Access to jobs + resources
Infinite connections

WOMEN WHO CODE

OUR MOVEMENT

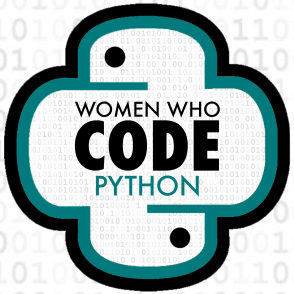
As the world changes, we can be a connecting force that creates a sense of belonging while the world is being asked to isolate.

WOMEN WHO CODE

1. Recap of Session #2 🤓
2. Data types in Python 🔢
    a. Numeric
        i. Int
        ii. Float
    b. Sequence
        i. Str
        ii. List
        iii. Tuple
3. Google Colab - Live Coding! 👩‍💻
4. Wrap-Up 🔃

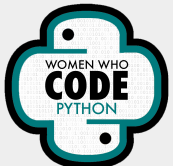
Session #2 Recap

- Recording: https://www.youtube.com/watch?v=_sa1nbLRVRM
- Slides & Code: https://github.com/WomenWhoCode/WWCodePython



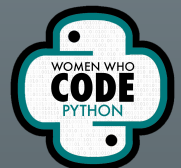
Data Types in Python

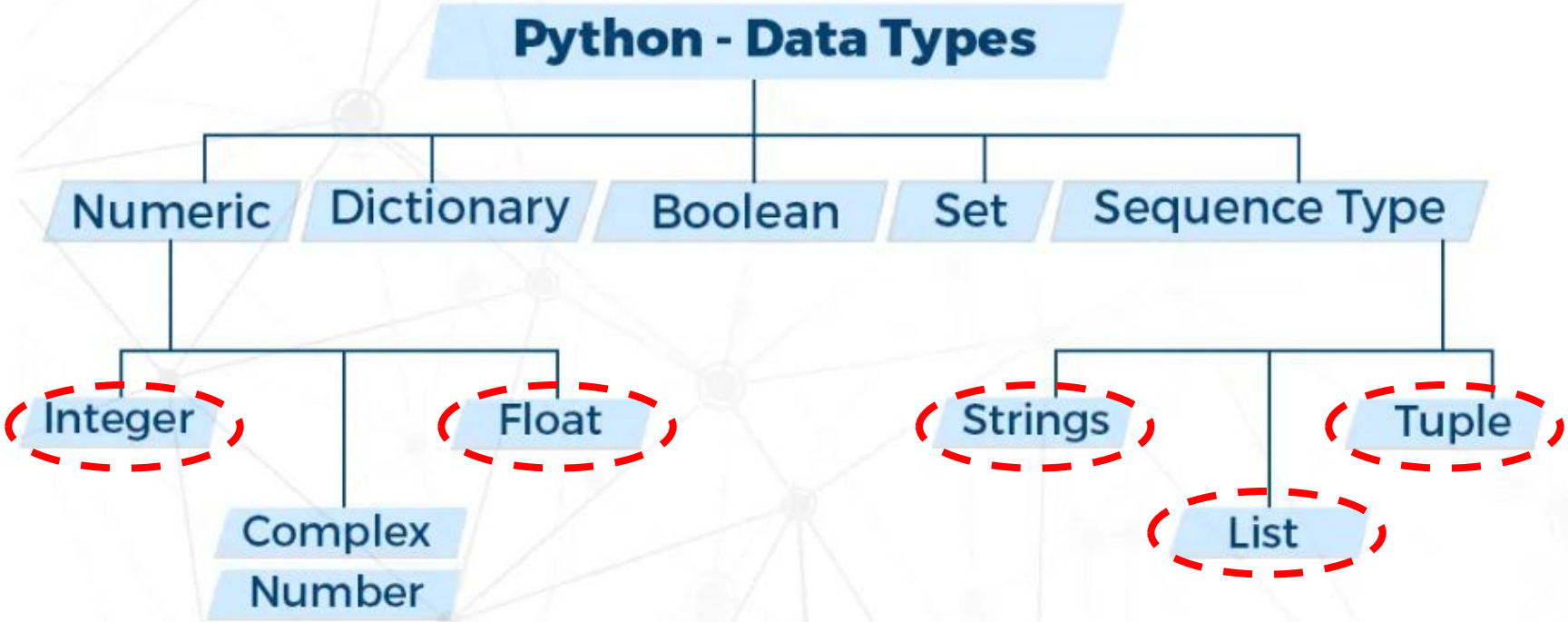
- Numeric
  - Integers
  - Floating-point numbers
- Sequence
  - Strings
  - Lists
  - Tuples



Data Types

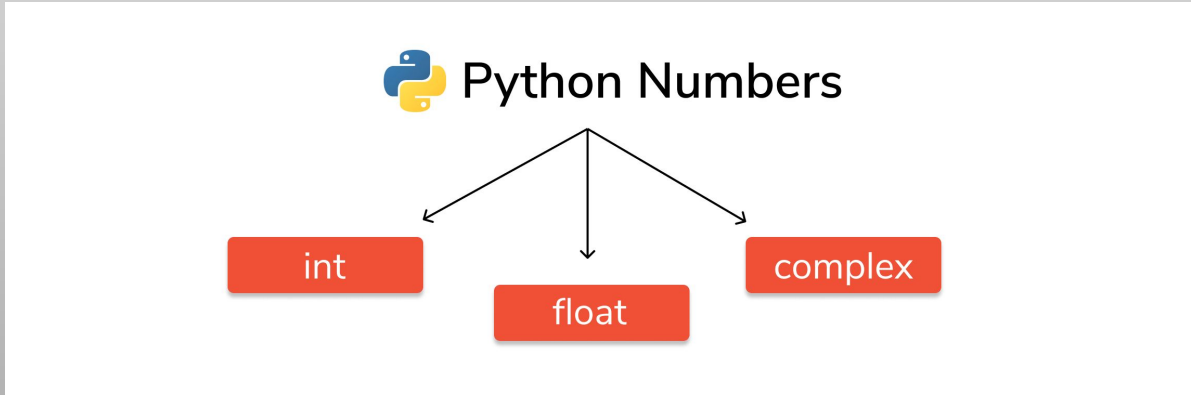
- Variables can store data of different types
- Different types can do different things
- Data types: classification/categorization of data items
- Everything is an *object* in Python programming → data types are actually classes, and variables are instances (objects) of these classes




Python - Data Types
Numeric
Dictionary
Boolean
Set
Sequence Type
Integer
Complex Number
Float
Strings
List
Tuple

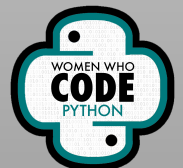
Data Types: Numeric

- In Python, numeric data type represent the data which has numeric value
- Numeric can be integer, floating number or even complex numbers, which are defined as the int, float and complex classes



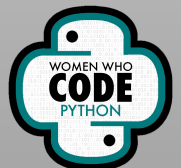
Data Types: Numeric - Int

- This value is represented by the int class
- Contains positive or negative whole numbers (without fraction or decimal)
- In Python, there is no limit to how long an integer value can be
- Exs: 99, 12, 789456124



Data Types: Numeric - Float

- This value is represented by the float class
- A real number with floating point representation
- Specified by a decimal point
- Optionally, the character e or E followed by a positive or negative integer may be appended to specify scientific notation
- Exs: 3.14159, 2.5, 6.022e23



Data Types: Sequence

- In Python, sequence is the ordered collection of similar or different data types
- Sequences allows to store multiple values in an organized and efficient fashion
- There are several sequence types in Python – including string, list, and tuple.

Data Types: Sequence - String

- In Python, Strings are arrays of bytes representing Unicode characters
- A string is a collection of one or more characters put in a single quote, double-quote or triple quote
- In Python, there is no character data type; a character is a string of length one. It is represented by str class
- Exs:
  - “Hi, my name is Rishika”
  - “This is a string in Python”

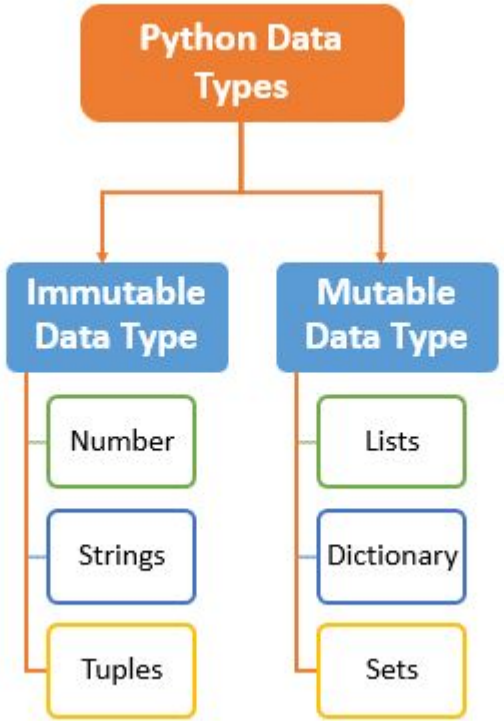
Data Types: Sequence - List

- Lists are just like the arrays, declared in other languages which is a ordered collection of data
- It is very flexible as the items in a list do not need to be of the same type
- A single list may contain Data Types like Integers, Strings, as well as Objects
- Lists are mutable, and hence, they can be altered even after their creation
- Ex: thislist = [“python”, “java”, “C++”]

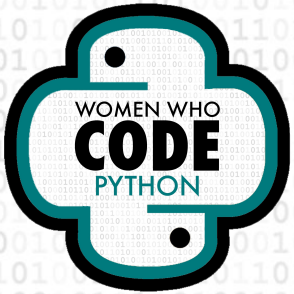
Data Types: Sequence - Tuple

- Just like list, tuple is also an ordered collection of Python objects
- The only difference between type and list is that tuples are immutable i.e. tuples cannot be modified after it is created
- It is represented by the tuple class
- It is more common to define a tuple by closing the sequence of values in parentheses
- Ex: thislist = (“python”, “java”, “C++”)

Data Types: Numeric vs. Sequence

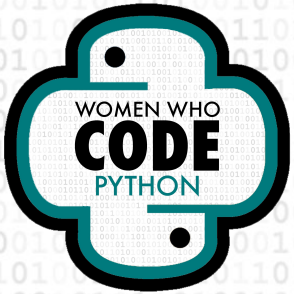


Q&A Time!



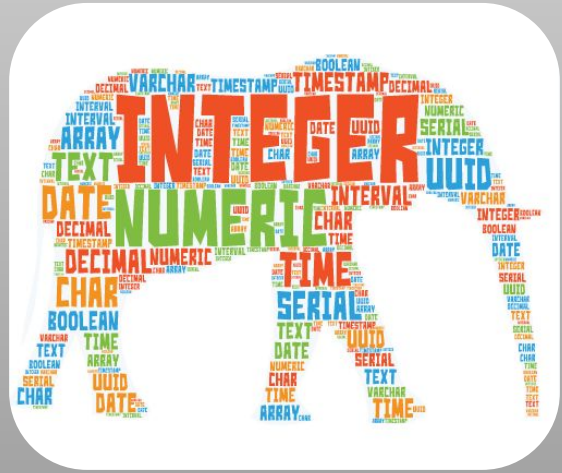
Time for Live Coding!

Google Colab link:
https://colab.research.google.com/drive/1JVaB4tBuXtrBAizqQkMpCUx2ijENpUqX?usp=sharing



Wrap-Up

- Python Data Types covered today:
  - Numeric
  - Sequence
- Next session: Data Types Part 2!

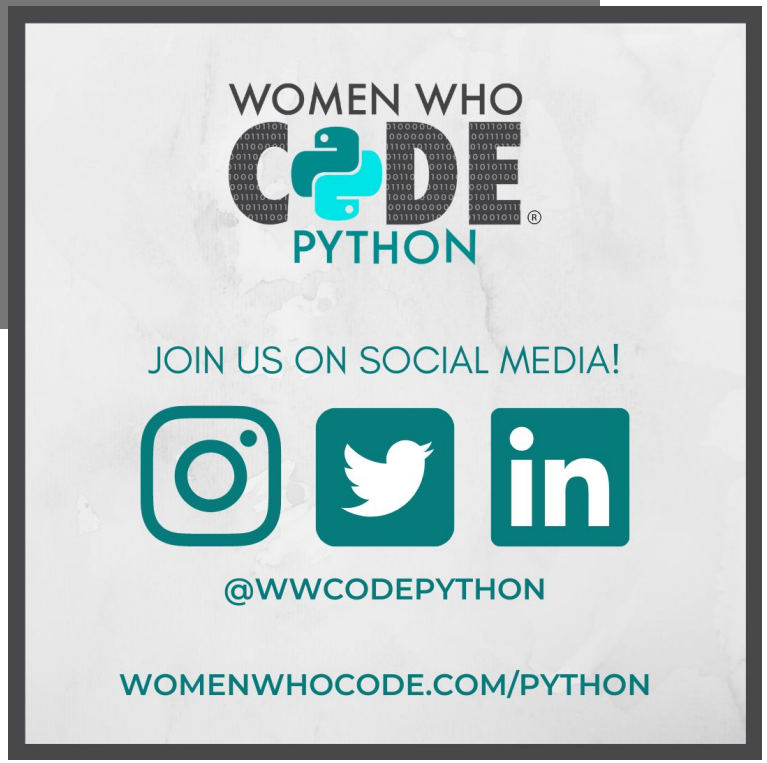


Upcoming Events!

WED 23 SEP	✨Beginner Python Study Group ✨Session 3: Data Types (Part 1) *Recurring* 8:00 PM – 9:30 PM (EDT) | Zoom	Register
SUN 27 SEP	🤗Discover NLP with Python-Study Group: Kickoff Session🤗 *Recurring* 8:00 PM – 9:30 PM (EDT) | Zoom	Register
MON 28 SEP	✨Open Source Contribution (feat. Hacktoberfest) ✨ *Featured* 12:00 PM – 1:00 PM (EDT) | Zoom	Register
WED 07 OCT	✨Beginner Python Study Group ✨Session 4: Data Types (Part 2) *Recurring* 8:00 PM – 9:30 PM (EDT) | Zoom	Register
WED 21 OCT	✨Beginner Python Study Group ✨ Session 5: Programming Logic + Useful Functions *Recurring* 8:00 PM – 9:30 PM (EDT) | Zoom	Register
WED 04 NOV	✨Beginner Python Study Group ✨Session 6: Open Q&A/Review Session *Recurring* 8:00 PM – 9:30 PM (EST) | Zoom	Register

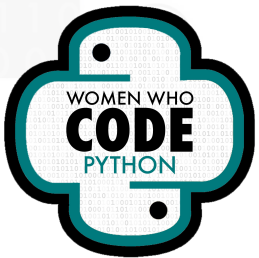
WOMEN WHO CODE PYTHON

Stay Connected



Questions?

Join our Slack channel: #beginner-python-stdy-grp



Thanks, everyone!