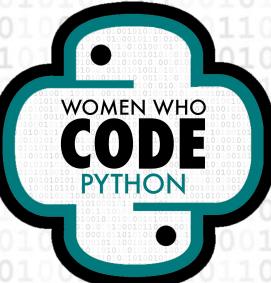


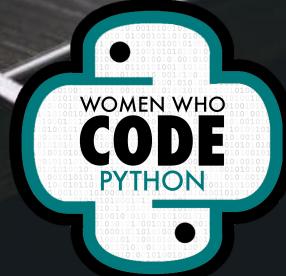
Welcome everyone!

- 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 4: Data Types (Part 2)





Meet us!

OUR MISSION

Inspiring women to
excel in technology
careers.



OUR VISION

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



OUR TARGET

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



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

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



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.



Upcoming Events!

THU
08
OCT

🌟 Ask me Anything Series: AMA with Shannon Martin, Recruiter at Google🌟

3:00 PM – 4:00 PM (EDT) | 🔍 Zoom

[Register](#)

THU
15
OCT

🔥 Python Fire: A Webinar by David Bieber 🔥

5:00 PM – 6:00 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](#)

FRI
30
OCT

🌟 AMA with Megan, Data Scientist at Microsoft🌟

4:00 PM – 5:00 PM (EDT) | 🔍 Zoom

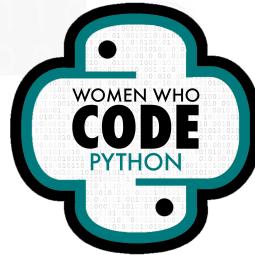
[Register](#)

WED
04
NOV

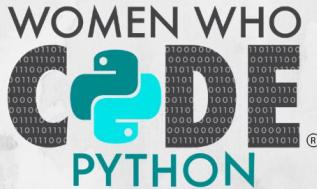
✨ Beginner Python Study Group ✨ Session 6: Open Q&A/Review Session Recurring

8:00 PM – 9:30 PM (EST) | 🔍 Zoom

[Register](#)



Stay Connected



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JOIN US ON SOCIAL MEDIA!

@WWCODEPYTHON

WOMENWHOCODE.COM/PYTHON

Today's Agenda



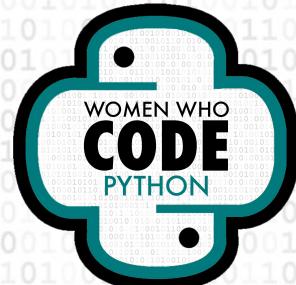
1. Recap of Session #3 😎
2. Data types in Python 
 - a. Boolean
 - b. Set
 - c. Dictionary
3. Google Colab - Live Coding! 
4. Wrap-Up 

Session #3 Recap

Recording: https://youtu.be/be_7am82i-Q

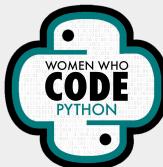
Slides & Code:

<https://github.com/WomenWhoCode/WWCodePython>

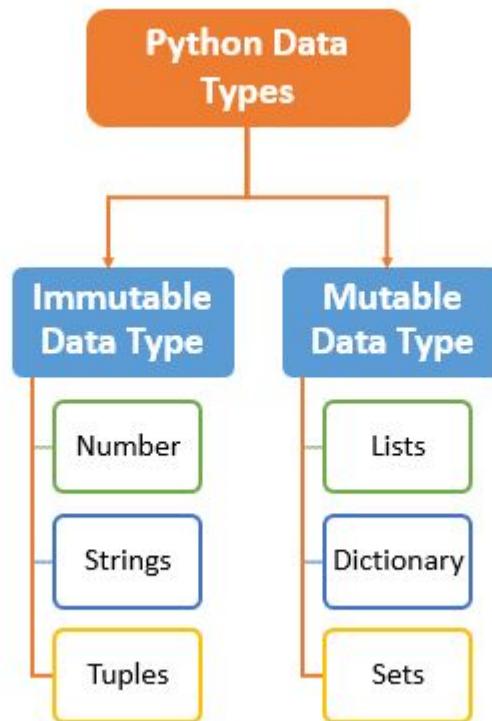


In the Previous Session...

- Numeric types
 - Integer (int)
 - Float
- Sequence types
 - String (str)
 - List
 - Tuple



Data Types: Numeric vs. Sequence



In the Previous Session...

Numeric data types - Integer (int) vs Float (float)

	Integer (int)	Float (float)
Contains positive or negative values?		
Contains fractions or decimals?		

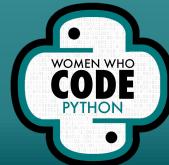
In the Previous Session...

Sequence data types - String (str) and List (list)

String (str)	A collection of one or more characters put in a single, double or triple quote	“Hi, my name is Rishika”
List (list)	A collection of data that can contain different data types like Integers, Strings or Objects	<code>thislist = ["python", "java", "C++"]</code>
Tuple (tuple)	Same function as list except tuple cannot be edited after it is created	<code>thislist = ("python", "java", "C++)</code>

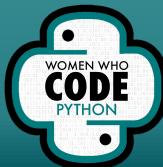
Python Data Type: Boolean

- Truth or falsehood
 - 2 possible values: “True” or “False”
- Output `<class 'bool'>` indicates the boolean type
- “True”/“False” keywords must be uppercase
- Integers and floating-point numbers can be converted to Boolean
- Boolean arithmetic → operators
 - `and`
 - `or`
 - `not`
 - `==`
 - `!=`



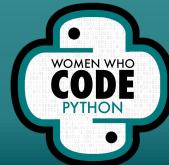
Python Data Type: Set

- An unordered collection that is iterable and mutable
- Has no duplicate elements
- Order of elements is undefined though various mixed-up data type values can be passed to the set)
- Created by using the built-in set() function with an iterable object or a sequence by placing the sequence inside {}, separated by ‘comma’
- Items cannot be accessed by referring to an index (items has no index b/c sets are unordered), but can loop through the set items using a for loop, or ask if a specified value is present in a set, by using the ‘in’ keyword.



Python Data Type: Dictionary

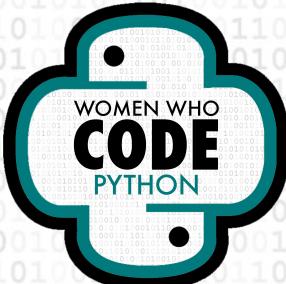
- Unordered collection of data values, store data values like a map, that can hold a single value as an element
- Created by placing sequence of elements within {} separated by ;;
- Holds key:value pair
 - Key: provided to make it more optimized, cannot be repeated and must be immutable, case-sensitive
 - Value: corresponding pair element, any data type, can be duplicated
- Add element in multiple ways
- Access element: refer to its key name or get() method
- Remove element: del() or pop()



Time for Live Coding!

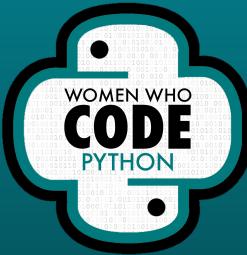
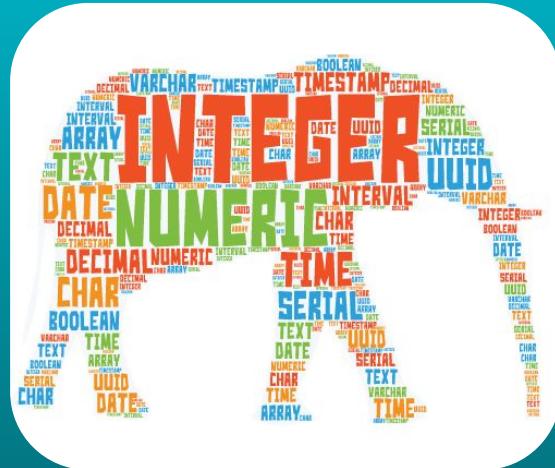
Google Colab link:

https://colab.research.google.com/drive/1RBHKQ1_D2Iwn_tCNgF4c2IINJqQolubu?usp=sharing



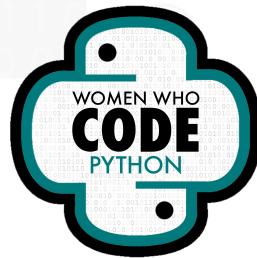
Wrap-Up

- Python Data Types covered today:
 - Boolean
 - Set
 - Dictionary
- Next session: Programming Logic!



WOMEN WHO Questions?

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



Thanks, everyone!

