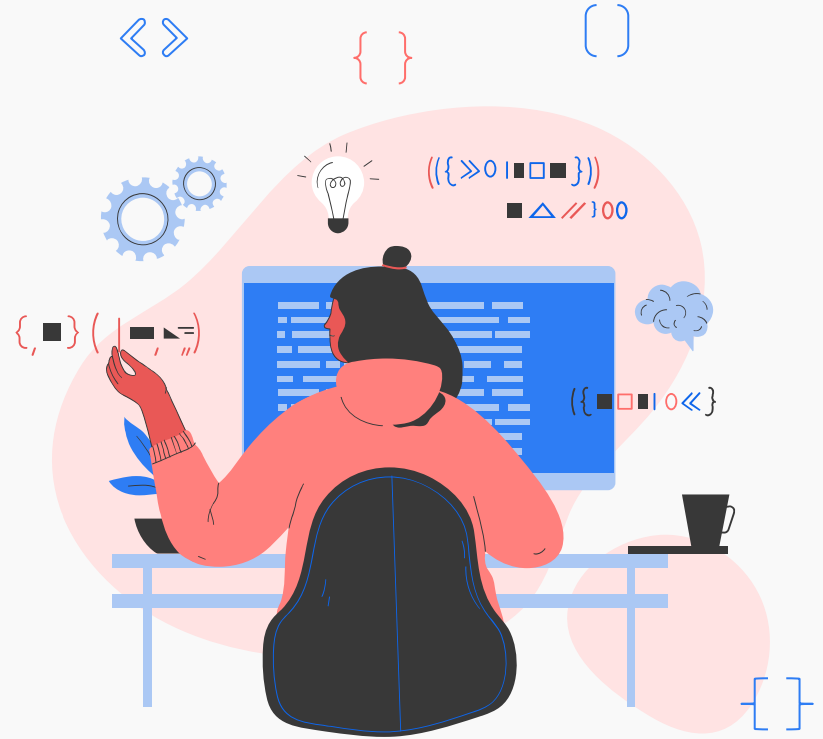


Python for Everyone

An Introduction to Fundamentals

Presented by Tina Li

Sponsored by the Fondren Fellowship Program



Research Study: IRB-FY2024-88

Primary Investigator: Catherine R. Barber



RICE

- Purpose: To identify and compare effective strategies for teaching coding.
- Location: Rice University (Fondren Library)
- Eligibility: 18 years old or older; participation in the Data@Rice Python workshop
- What's involved: Completing an online survey (approximately 10 minutes); allowing researchers to use your pre, post, and follow up quiz data.
- Participation is voluntary; you may provide feedback without participating in the study.
 - Check “Yes - You may use my data” if you wish to participate.
 - Check “No - You may not use my data” if you wish to provide feedback but not participate.
- No benefits to participants or compensation for participating.
- Risks involve the potential for a breach of confidentiality.
- Questions? Contact Catherine Barber at cb88@rice.edu
- [Link to survey](#) or use QR code:



This research study has been reviewed and approved by Rice University Institutional Review Board. If you have concerns regarding this study or questions regarding your rights as a study participant, please contact a Compliance Administrator-IRB, at Rice University. Email: irb@rice.edu or Telephone: 713-348-3586.

Why Python?



Major Language

ML, AI, Big Data, and Robotics, and Cyber Security



Easily Accessible

Free, Open Source, and Cross-Platform



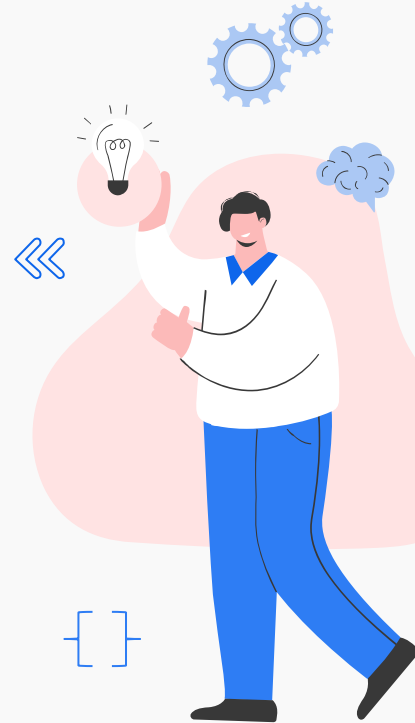
High-Level Language

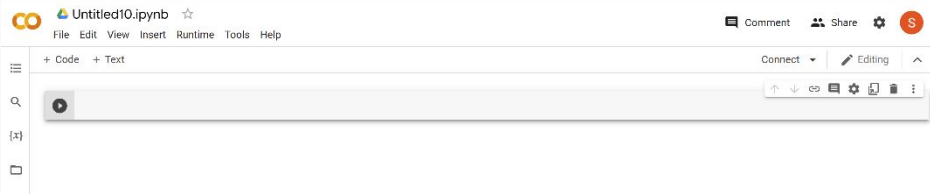
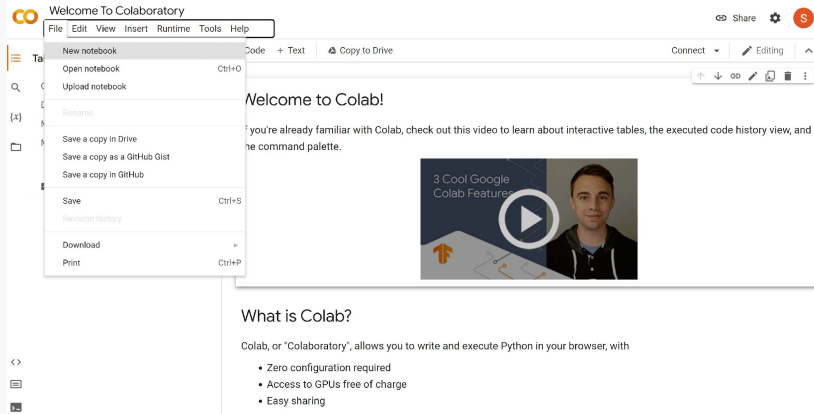
The syntax is relatively easy to understand



Large Standard Library

Useful packages are readily available





Google Colaboratory



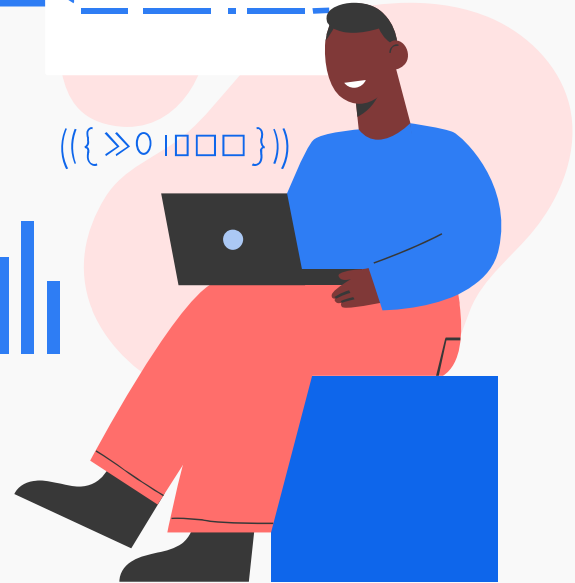
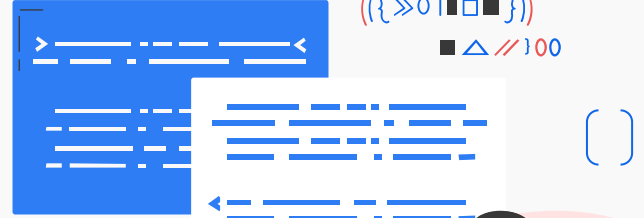
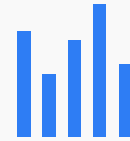
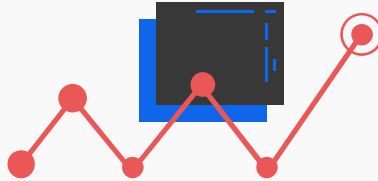
NO DOWNLOADING REQUIRED!

- Go to <https://colab.research.google.com/>
- Log in to your Google Account
- Create a new notebook
- Start coding!



What do We know?

Time for the Pre-Test!



$((\{ \gg 0 \mid \square \square \}))$



Learning Agenda



| | |
|----------------------------------|--|
| print() Function | Outputting objects to your console |
| Fundamental Object Types | Numbers, booleans, None, strings, lists |
| Variables | Variable assignments, valid variable names, using variables |
| Arithmetic and Comparison | +, -, /, *, ==, !=, <=, >=, <, > |
| Functions | Elements of a function (def, name, parameters, ...) |
| Conditionals | The if statement, else clause, elif clause, arithmetic comparisons |





Let's Start Coding!

Find a group, introduce yourselves, and let's dive into Python!



What have We Learned?

Time for the Post-Test!



Thanks!

Please scan this QR Code to fill out a short survey for this workshop!

