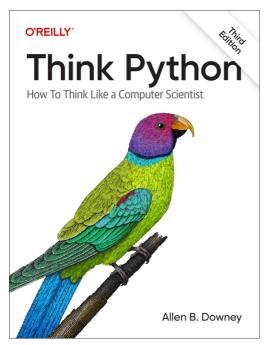
# **Think Python**

# **Contents**

- The notebooks
- Resources for teachers

*Think Python* is an introduction to Python for people who have never programmed before – or for people who have tried and had a hard time. You can order print and ebook versions of the third edition from Bookshop.org and Amazon.



Here is the landing page for the book at Green Tea Press.

For the third edition, the biggest changes are:

- The book is now entirely in Jupyter notebooks, so you can read the text, run the code, and work on the exercises all in one place. Using the links below, you can run the notebooks on Colab, so you don't have to install anything to get started.
- The text is substantially revised and a few chapters have been reordered. There are more exercises now, and I think a lot of them are better.
- At the end of every chapter, there are suggestions for using tools like ChatGPT and Colab AI to learn more and to get help with the exercises.

# The notebooks

## **Chapter 1: Programming as a way of thinking**

• Click here to run Chapter 1 on Colab

## **Chapter 2: Variables and Statements**

• Click here to run Chapter 2 on Colab

## **Chapter 3: Functions**

• Click here to run Chapter 3 on Colab

## **Chapter 4: Functions and Interfaces**

• Click here to run Chapter 4 on Colab

## **Chapter 5: Conditionals and Recursion**

• Click here to run Chapter 5 on Colab

## **Chapter 6: Return Values**

• Click here to run Chapter 6 on Colab

## **Chapter 7: Iteration and Search**

• Click here to run Chapter 7 on Colab

## **Chapter 8: Strings and Regular Expressions**

Click here to run Chapter 8 on Colab

## **Chapter 9: Lists**

• Click here to run Chapter 9 on Colab

## **Chapter 10: Dictionaries**

• Click here to run Chapter 10 on Colab

## **Chapter 11: Tuples**

• Click here to run Chapter 11 on Colab

## **Chapter 12: Text Analysis and Generation**

• Click here to run Chapter 12 on Colab

## **Chapter 13: Files and Databases**

• Click here to run Chapter 13 on Colab

## **Chapter 14: Classes and Functions**

• Click here to run Chapter 14 on Colab

#### **Chapter 15: Classes and Methods**

• Click here to run Chapter 15 on Colab

## **Chapter 16: Classes and Objects**

• Click here to run Chapter 16 on Colab

## **Chapter 17: Inheritance**

• Click here to run Chapter 17 on Colab

## **Chapter 18: Python Extras**

• Click here to run Chapter 18 on Colab

## **Chapter 19: Final Thoughts**

Click here to run Chapter 19 on Colab

# Resources for teachers

If you are teaching with this book, here are some resources you might find useful.

- You can download notebooks with solutions from this GitHub repository.
- Quizzes for each chapter, and a summative quiz for the whole book, are available on request.
- *Teaching and Learning with Jupyter* is an online book with suggestions for using Jupyter effectively in the classroom. You can read the book here.
- One of the best ways to use notebooks in the classroom is live coding, where an
  instructor writes code and students follow along in their own notebooks. To learn about
  live coding and a lot of other great advice about teaching programming I
  recommend the teacher training provided by The Carpentries, which you can read here.

• For each chapter, I've created a "blank" notebook with the original text, but most of the code removed. These notebooks are useful for doing follow-along exercises where learners fill in the blanks. Links to the blank notebooks are here.