

## Python Resources (listed in no particular order) – updated 11/5/2023

Anaconda Install for Windows (Python, Jupyter Lab, Spyder IDE, etc.) in 14 steps: <https://docs.anaconda.com/free/anaconda/install/windows/>

Free book - Python for Everybody by Dr. Charles R. Severance  
[https://do1.dr-chuck.com/pythonlearn/EN\\_us/pythonlearn.pdf](https://do1.dr-chuck.com/pythonlearn/EN_us/pythonlearn.pdf)

Printed “Python for Everybody” book on [Amazon India](#) (low-cost shipping within India thanks to [Shroff Publishing](#)). Also available on Amazon USA – used books (below \$10)

YouTube Videos on Python by Dr. Charles R. Severance  
<https://www.youtube.com/watch?v=8DvywoWv6fI>

Python programming materials & slides by Dr. Charles R. Severance  
<https://www.py4e.com/lessons>  
<https://github.com/ceteongvanness/Python-for-Everybody/tree/master/Slide/PDF>

Python for Everybody in Jupyter Notebook format (the same materials as in the links above)  
[https://eng.libretexts.org/Bookshelves/Computer\\_Science/Programming\\_Languages/Python\\_for\\_Everybody\\_\(Severance\)](https://eng.libretexts.org/Bookshelves/Computer_Science/Programming_Languages/Python_for_Everybody_(Severance))

Python Tutorials  
<https://zetcode.com/lang/python/>

Python 3 Notes  
<https://sites.pitt.edu/~naraehan/python3/>

Python Tutorials  
<https://pythonexamples.org/>

Python Tutorial – w3source  
<https://www.w3resource.com/python/python-tutorial.php>

Python Programming  
<https://thispointer.com/python-programming/>

Using the Python Interpreter  
<https://docs.python.org/3/tutorial/interpreter.html#invoking-the-interpreter>

Python Projects for Beginners: A Ten-Week Bootcamp Approach to Python Programming  
[https://github.com/shintwelv/10\\_weeks\\_python\\_bootcamp](https://github.com/shintwelv/10_weeks_python_bootcamp)

[Pierian-Data: Complete-Python-3-Bootcamp](#)

Whetting Your Appetite

<https://docs.python.org/3/tutorial/appetite.html>

Web-based Python Interpreter

<https://www.pythonmorsels.com/>

CS 1110: Introduction to Computing Using Python Spring 2016

<https://www.cs.cornell.edu/courses/cs1110/2016sp/lectures/index.php.html>

Basic Python Semantics: Variables and Objects

<https://jakevdp.github.io/WhirlwindTourOfPython/03-semantics-variables.html>

CS 1110: Introduction to Computing Using Python Spring 2016 (Lecture notes, slides, and example code)

<https://www.cs.cornell.edu/courses/cs1110/2016sp/lectures/index.php.html>

Mastering the Art of Data Cleaning in Python

<http://tdc-www.harvard.edu/Python.pdf><https://www.kdnuggets.com/mastering-the-art-of-data-cleaning-in-python>

Writing Parquet Files in Python with Pandas, PySpark, and Koalas

<https://mungingdata.com/python/writing-parquet-pandas-pyspark-koalas/>

An iterable is anything you can iterate over (an *iter-able*).

<https://www.pythonmorsels.com/iterable/>

List Comprehensions are more specialized than **for** loops

<https://www.pythonmorsels.com/what-are-list-comprehensions/>

10 Python Tips

<https://www.kdnuggets.com/2020/01/10-python-tips-tricks-learn-today.html#:~:text=List%20comprehensions%20are%20used%20for,to%20iterate%20over%20each%20element.>

- Concatenating Strings
- Using List Comprehensions
- Iterate With `enumerate()`
- Using ZIP When Working with Lists
- Using `itertools`
- Using Python Collections
- Convert Two Lists Into a Dictionary

- Using Python Generators
- Return Multiple Values From a Function
- Using sorted() Function

### 5 Ways of Filtering Python Lists

<https://www.kdnuggets.com/2022/11/5-ways-filtering-python-lists.html>

- Using for Loop
- List Comprehension
- Pattern Matching
- Using filter() Method
- Using Lambda Function

### 3 Advanced Python Features You Should Know

<https://www.kdnuggets.com/2020/07/3-advanced-python-features.html>

- List & Dict Comprehensions
- List Comprehensions
- Dictionary Comprehension
- Lambda Expressions
- Map Function

### 7 Must-Know Python Tips for Coding Interviews

<https://www.kdnuggets.com/2023/03/7-mustknow-python-tips-coding-interviews.html>

- Reverse an Array in Place
- Sort Arrays and Customize Sorts: Customize Sort with Lambda
- List and Dictionary Comprehensions
- Unpacking Iterables
- Join a List of Strings on a Separator
- Loop Using enumerate()
- Useful Math Functions to Know

### ChatGPT as a Python Programming Assistant

<https://www.kdnuggets.com/2023/01/chatgpt-python-programming-assistant.html>

### A Complete Guide to Python Virtual Environments

<https://www.dataquest.io/blog/a-complete-guide-to-python-virtual-environments/#what-are-python-virtual-environments>

### The Basics of Python For Loops: A Tutorial

<https://www.dataquest.io/blog/python-for-loop-tutorial/>  
<https://kaust-vislab.github.io/python-novice-gapminder/12-for-loops/>

Two Simple Ways to Loop More Effectively in Python: Use enumerate and zip  
<https://towardsdatascience.com/two-simple-ways-to-loop-more-effectively-in-python-886526008a70>

Python Dictionary Comprehension Tutorial (with 39 Code Examples)  
<https://www.dataquest.io/blog/python-dictionary-comprehension-tutorial/>  
<https://www.learndatasci.com/solutions/python-list-comprehension/>  
<https://www.dataquest.io/blog/filtering-pandas-dataframes/>  
<https://www.dataquest.io/path/data-analyst/>

Common Python Regex Patterns

<https://www.dataquest.io/blog/regular-expressions-data-scientists/>

Python Regex Lookahead

<https://www.pythontutorial.net/python-regex/python-regex-lookahead/>

Mastering Lookahead and Lookbehind

<https://www.rexegg.com/regex-lookarounds.html>

Python Regular Expression Tutorial

<https://tschwarz.mscs.mu.edu/Courses/PythonB/Modules/RegularExpressions/article.html>

Regular Expression HOWTO¶

<https://docs.python.org/3/howto/regex.html>

Short-cuts in Jupyter Notebook

<https://medium.com/@ashwin3005/shortcuts-in-jupyter-notebook-fc0543e72512>

Python 3 Quick Tip: The easy way to deal with file paths on Windows, Mac and Linux

<https://medium.com/@ageitgey/python-3-quick-tip-the-easy-way-to-deal-with-file-paths-on-windows-mac-and-linux-11a072b58d5f>

Learn Python Programming (Course advertisement with good pointers)

<https://www.edureka.co/blog/python-programming-language#PythonFundamentals>  
<https://www.edureka.co/blog/python-tutorial/>