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://doi.dr-chuck.com/pythonlearn/EN us/pythonlearn.pdf

Printed "Python for Everybody" book on <u>Amazon India</u> (low-cost shipping within India thanks to <u>Shroff Publishing</u>). Also available on Amazon USA – used books (below \$10)

YouTube Videos on Python by Dr. Charles R. Severance https://www.youtube.com/watch?v=8DvywoWv6fl

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)

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

<u>Pierian-Data</u>: <u>Complete-Python-3-Bootcamp</u>

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.pdfhttps://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

 $\frac{\text{https://www.kdnuggets.com/2020/01/10-python-tips-tricks-learn-}}{\text{today.html}\#:^{\sim}:\text{text=List}\%20 comprehensions}\%20 are \%20 used \%20 for, to \%20 iterate \%20 over \%20 each \%20 element.}$

- 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/Classes/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/