**You do not have to read through these at the start of the course. Come back to these resources as the course progresses!**

**Add your own at the end of the list, by clicking "Show related resources", and rate ones you found useful!**

If you're having trouble with a particular concept or simply want to have access to more information, try one of the following links.

Documentation

* [Official Python 3 Documentation](https://docs.python.org/3/library/index.html) - "official"/technical explanation of what a particular function/operator does, examples of correct syntax, what the various libraries are, etc.

Textbooks/Tutorials

* [Dive Into Python](http://www.diveintopython3.net/) - another survey of Python syntax, datatypes, etc.
* [Think Python](http://greenteapress.com/wp/think-python-2e/) by Allen Downey - a good general overview of the Python language. Includes exercises.
* [The Official Python Tutorial](https://docs.python.org/3/tutorial/) - self-explanatory
* [Learn Python the Hard Way](http://learnpythonthehardway.org/book/) - (note: for Python 2) another free online text
* [Reserved Keywords in Python](https://docs.python.org/3.0/reference/lexical_analysis.html#id8) - don't use these as variable names
* [PEP 8](https://www.python.org/dev/peps/pep-0008/) - Style Guide for Python Code - learn what is good and bad style in Python
* [CheckIO](https://checkio.org/) - learn Python by exploring a game world
* [Invent with Python](https://inventwithpython.com/) - develop your Python skills by making games or hacking ciphers
* [Codecademy](https://www.codecademy.com/learn/python) - (note: for Python 2) learn Python by building web apps and manipulating data; interactive tutorial sequence
* [Python Tutor](http://www.pythontutor.com/) - interactive tutorial sequence of exercises
* [Blog with tutorials](https://courses.edx.org/courses/course-v1:MITx+6.00.1x+2T2017_2/courseware/c77f2cc9fb2a42589f0d723e8fefbd35/c58684c1812443db80c4b0028aba9bc3/mitxcsjourney.blogspot.com) - created by one of our community TAs

Debugging

* [Python Tutor](http://www.pythontutor.com/) - an excellent way to actually visualize how the interpreter actually reads and executes your code
* [DiffChecker](https://www.diffchecker.com/) - compares two sets of text and shows you which lines are different
* [Debugging in Python](https://pythonconquerstheuniverse.wordpress.com/2009/09/10/debugging-in-python/) - steps you can take to try to debug your program

Software

* [Python Tools for Visual Studio](https://microsoft.github.io/PTVS/) - Visual Studio plug-in enabling Python programming

Other Q&A

* [Stack Overflow](http://stackoverflow.com/questions/tagged/python) - a large Q&A forum for programming concepts (not just Python). Try searching here before you post on the edX forum, and you may find that someone has already answered your question.

More practice problems

* [Python Challenge](http://www.pythonchallenge.com/) - a series of puzzles you can try to test your Python abilities
* [Project Euler](https://projecteuler.net/) - additional programming challenges you can try once your Python knowledge becomes stronger; problems are sorted by increasing difficulty
* [Coding Bat](http://codingbat.com/python) - problems you can solve within an online interpreter
* [Codewars](https://www.codewars.com/?language=python) - improve your skills by training on real code challenges