












# Python Resources





We have two textbooks that will be used for our assigned readings. Both are free for students to access and relatively friendly for beginners:

- [Think Python - How to Think Like a Computer Scientist, 2nd Edition](https://runestone.academy/runestone/books/published/thinkcspy/index.html)    
(<https://runestone.academy/runestone/books/published/thinkcspy/index.html>)
- [Problem Solving with Algorithms and Data Structures using Python](https://runestone.academy/runestone/books/published/pythonds/index.html)    
(<https://runestone.academy/runestone/books/published/pythonds/index.html>)


There are lots more online resources that can be useful while learning python. None of these are required for this course, but can be useful nonetheless:

- [MIT Course Introduction to Computer Science and Programming](https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-0001-introduction-to-computer-science-and-programming-in-python-fall-2016/)    
(<https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-0001-introduction-to-computer-science-and-programming-in-python-fall-2016/>)
- [The Python Tutorial](https://docs.python.org/3/tutorial/index.html)    
(<https://docs.python.org/3/tutorial/index.html>)
- [Learn Python](https://www.learnpython.org/)    
(<https://www.learnpython.org/>)
- [W3schools](https://www.w3schools.com/python/)    
(<https://www.w3schools.com/python/>)
- [W3resource](https://www.w3resource.com/python/python-tutorial.php)    
(<https://www.w3resource.com/python/python-tutorial.php>)
- [Python Programming](https://en.wikibooks.org/wiki/Python_Programming)    
([https://en.wikibooks.org/wiki/Python\\_Programming](https://en.wikibooks.org/wiki/Python_Programming))
- [Khan Academy](https://www.khanacademy.org/computing/ap-computer-science-principles/programming-101)    
(<https://www.khanacademy.org/computing/ap-computer-science-principles/programming-101>)


We are able to run Python code using an online editor such as [Repl.it](https://repl.it/languages/python3)    
(<https://repl.it/languages/python3>). However if you have a weak internet connection, it would be recommended to install Python on your computer. Python can be downloaded at [python.org/downloads](https://python.org/downloads)    
(<https://python.org/downloads>). Please ensure that you are using Python 3 or above.

Some students benefit from using a Python Integrated Development Environment (IDE). I will recommend a free Python IDE editor called [Wing101](https://wingware.com/downloads/wing-101)    
(<https://wingware.com/downloads/wing-101>). You can also feel free to use any other text editors such as [Spyder](https://www.spyder-ide.org/)    
(<https://www.spyder-ide.org/>), [IDLE](https://docs.python.org/3/library/idle.html)    
(<https://docs.python.org/3/library/idle.html>), [Sublime](https://www.sublimetext.com/)    
(<https://www.sublimetext.com/>), etc.

Code style is also an important aspect of writing good code:

- The [Python Style Guidelines](https://www.python.org/dev/peps/pep-0008/)    
(<https://www.python.org/dev/peps/pep-0008/>) details the recommended style to write python code
- The [PEP8 Online](http://pep8online.com/)    
(<http://pep8online.com/>) code checker lets you see recommended style changes for your code

Additional Resources:

- **Python Visualizer**  <http://www.pythontutor.com/visualize.html>: A tool to better understand the functionality of your code