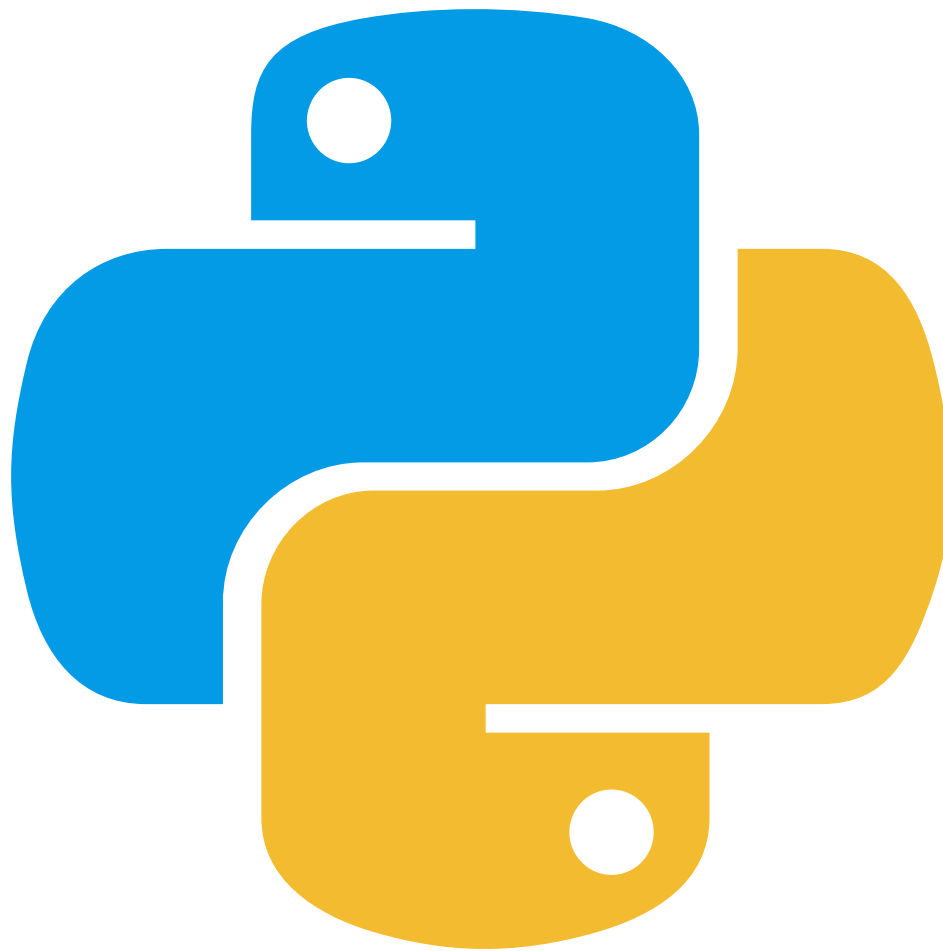


Roadmap to Master **Python Programming**



Basics

- Basic Syntax
- Variables
- Data types
- Conditionals
- Typecasting
- Exceptions
- Functions
- Lists, Tuples, Set
- Dictionaries

OOP

- Classes
- Inheritance
- Methods (including Dunder Methods)

Advanced

- List Comprehensions
- Generators
- Expressions
- Paradigms
- Regex
- Decorators
- Iterators
- Lambdas

Data Science

- NumPy
- Pandas
- Matplotlib
- Seaborn
- Scikit-learn
- TensorFlow
- PyTorch

Package Managers

- PyPI
- pip
- conda

Data Structures & Algorithms

- Arrays and Linked Lists
- Heaps, Stacks, Queues
- Hash Tables
- Binary Search Trees
- Recursion
- Sorting Algorithms

Web Frameworks

- Django
- Flask
- FastAPI
- Tornado

Testing

- Unit Testing (unittest, pytest)
- Integration Testing
- End-to-End Testing (Selenium, PyAutoGUI) Test Driven development (TDD)

Automation

- File manipulation (os, shutil, pathlib)
- Web scraping
BeautifulSoup, Scrapy
- GUI automation
(PyAutoGUI)
- Network automation