

## **I/O Handling**

- Sending Output to STDOUT Using the print() Method
- Reading Input with the input() Method
- Creating File Objects with the open() Method
- Controlling File Access Modes
- Working with File Object Attributes
- Closing File Objects with the close() Method
- Reading and Writing to File Objects with read() and write()
- Using File Processing Functions from the OS Module

## **Data Management**

- Best Practices for Data Management
- Storing Data in Local Databases
- Discussing and Understanding the DB API
- Understanding and Using Common SQL Statements
- Connecting to a MySQL/SQLite Database
- Using Cursors to interact with Data from a Database
- CRUD Operations
- Implementing Error Handling with Database Connections
- Transaction management

## **GUI Programming, Numpy, Scipy, Pandas, and Matplotlib stack**

- Introduction
- Tkinter programming
- Tkinter widgets
- Machine Learning and Deep Learning
- Numpy, Scipy
- Pandas, Matplotlib
- Live Project
- Assignments for Weekend