



Weekly Plan

Python

Initial Understanding

- 1 Course introduction
- 2 Why Python?

Python setup

- 1 Command Line Basics
- 2 Installing python
- 3 Running Python Code
- 4 Git and GitHub Overview



Python object and data structure basics

- 1 Introduction to Python Data Types
- 2 Variable Assignments
- 3 Introduction to Strings
- 4 Indexing and Slicing with Strings
- 5 String Properties and Methods
- 6 Print Formatting with Strings
- 7 Lists in Python
- 8 Dictionaries in Python
- 9 Tuples with Python
- 10 Sets in Python
- 11 Booleans in Python

Python comparison operators

- 1 Comparison Operators in Python
- 2 Chaining Comparison Operators in Python with Logical Operators
- 3 Comparison Operators Quiz





Python statemantes

- 1 If Elif and Else Statements in Python
- 2 For loops in python
- 3 While Loops in Python
- 4 Useful Operators in Python
- 5 List Comprehensions in Python

Methodes and functions

- 1 Def Keyword
- 2 Basics of Python Functions
- 3 Logic with Python Functions
- 4 Tuple Unpacking with Python Functions
- 5 Interactions between Python Functions
- 6 *args and **kwargs in Python
- 7 Lambda Expressions, Map, and Filter Functions
- 8 Nested Statements and Scope

Practical Exercise 1

- 1 Displaying Information
- 2 Accepting User Input
- 3 Validating User Input
- 4 Simple User Interaction





**Practical exam based on
four week learning**

Exam

Object oriented programming

- 1 Object Oriented Programming - Introduction
- 2 Object Oriented Programming - Attributes and Class Keyword
- 3 Object Oriented Programming - Class Object Attributes and Methods
- 4 Object Oriented Programming - Inheritance and Polymorphism
- 5 Object Oriented Programming - Special (Magic/Dunder) Methods
- 6 Object Oriented Programming - Homework
- 7 Object Oriented Programming - Homework Solutions
- 8 Object Oriented Programming - Challenge Solution



Modules and packages

- 1 Pip Install and PyPi
- 2 Modules and Packages
- 3 `__name__` and `"__main__"`

Errors and exceptions handling

- 1 Errors and Exception Handling
- 2 Errors and Exceptions Homework
- 3 Errors and Exception Homework - Solutions

Web scraping with python

- 1 Setting Up Web Scraping Libraries
- 2 Python Web Scraping - Grabbing a Title
- 3 Python Web Scraping - Grabbing a Class
- 4 Python Web Scraping - Grabbing an Image





Python

08

Python generators

- 1 Python Collections Module
- 2 Opening and Reading Files and Folders (Python OS Module)
- 3 Python Datetime Module
- 4 Python Math and Random Modules
- 5 Python Debugger
- 6 Python Regular Expressions Part One
- 7 Python Regular Expressions Part Two
- 8 Python Regular Expressions Part Three

Week 8

**Practical exam based on
four week learning**



Exam

Emails with python

- 1 Sending Emails with Python
- 2 Receiving Emails with Python



Working with image with python

- 1 Working with Images with Python
- 2 Python Image Exercises - Overview

Working with pdfs and speradesheet csv file

- 1 Working with CSV Files in Python
- 2 Working with PDF Files in Python

advance python object and data structure



- 1 Advanced Numbers
- 2 Advanced Strings
- 3 Advanced Sets
- 4 Advanced Dictionaries
- 5 Advanced Lists

**Practical exam based on
complete course learning**



Exam



Congratulations!

You have successfully completed this course!