Data Structures and Algorithms in Python
Acme-Tutors

Python

Instructor:	Hugh Weng	**Location:**	Zoom Meeting
Email:	tutors@acme-nyc.com	**Group Day/Time:**	Thursdays, 6:30 PM - 8:30 PM
Phone:	646-280-7089		
Start Date:	July 7, 2022		
Term:	Summer 2022		

GROUP DESCRIPTION

This group is for Data Structures and Algorithms in Python programming. This is a rigorous introduction to basic functional and object oriented programming paradigms in Python and algorithmic problem sets with data structures.

GROUP OBJECTIVES

- To build understanding of algorithms and data structures in Python.
- To develop an adequate working knowledge to be able to code algorithms and data structures in Python.
- Understand the syntax and semantics of the langauge.
- Engage in active discussions.
- Build algorithms in Python.

PREREQUISITES

Prior experience with Python. Any prior experience with another programming language is a plus.

TEXTBOOK: *Data Structures and Algorithms in Python*, Wiley, 2013

TENTATIVE SCHEDULE

Week	Description
1	Algorithm Analysis
2	Recursion
3	Array-based Sequence
4	Stacks, Queues, and Deques
5	Linked Lists
6	Trees
7	Priority Queues
8	Maps, Hash Tables, and Skip Lists
9	Search Trees
10	Sorting and Selection
11	Graph Algorithms
12	Memory Management and B-Trees