# Data Structures and Algorithms I 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:
 January 2, 2023

 Term:
 Fall 2022

# **GROUP DESCRIPTION**

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

#### GROUP OBJECTIVES

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

## **PREREQUISITES**

Prior experience with Python. Optimism and interest in the subject. Any prior experience with another programming language is a plus.

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

## TENTATIVE SCHEDULE

Week	Description
1	Algorithm Analysis
2	Lab
3	Recursion
4	Lab
5	Array-based Sequence
6	Lab
7	Stacks, Queues, and Deques
8	Lab
9	Linked Lists
10	Lab
11	Trees
12	Lab