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:
 July 7, 2022

 Term:
 Summer 2022

GROUP DESCRIPTION

This group is for Data Structures and Algorithms I 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 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. 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	Analysis Lab
3	Recursion
4	Recursion Lab
5	Array-based Sequence
6	Sequence Lab
7	Stacks, Queues, and Deques
8	Stacks, Queues, and Deques Lab
9	Linked Lists
10	Linked Lists Lab
11	Trees
12	Trees Lab