Laboratory Manual

CPE2131: Data Structures and Algorithms Lab

Name: _____

Reg. No: _____

Section: _____

Department of Electrical and Computer Engineering

Capital University of Science and Technology

Islamabad, Pakistan

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List of Experiments

1. Introduction to Python Programming
2. Overview of User Defined Functions in Python
3. Python Data Types (Lists, Sets, Dictionaries, Tuples)
4. Singly Linked List in Python
5. Doubly Linked List in Python
6. Stack Implementation
7. Queue Implementation
8. Binary Tree Implementation
9. Graph Data Structure Implementation
10. Linear and Binary Search Algorithms
11. Bubble Sort, Selection Sort and Insertion Sort
12. Merge and Quick Sort Algorithms

SAFETY RULES AND REGULATIONS

- Be sure that all equipment is properly working before using them for laboratory exercises. Any defective equipment must be reported immediately to the Lab Engineer or Lab Technical Staff.
- Students should keep a safe distance from the circuit breakers, electric circuits or any moving parts during the experiment.
- Avoid any part of your body to be connected to the energized circuit and ground.
- Switch off the equipment and disconnect the power supplies from the circuit before leaving the laboratory.
- Make sure that the last connection to be made in your circuit is the power supply and first thing to be disconnected is also the power supply.
- Equipment should not be removed, transferred to any location without permission from the laboratory staff.

Sign: _____

Name: _____

Registration No: _____

Dated: _____