COURSE OUTLINE

Programming Languages Advance

S.NO	Lecture Topic	Lab
1	Names Scope and Binding	In Class Questions
2	Lifetime and Scope Rules	In Class Questions
3	Semantic Analysis	In Class Questions
4	Memory Management	Dangling Pointer Memory Out of Bound
5	Imperative Programming Paradigm	Introduction to Programming in C (C environment, Data types, Variables, Storage Classes and Operators) , I/O
6.	Decision & Control Structures	If/else, Nested if/else, Switch/Case, for loop, while loop, Nested loops
7.	Data Abstraction & Modularity	Arrays & Pointers in C
8.	Introduction to Object Oriented Programming I	Introduction to Python (Basic data types, I/O, if/else, loops)
9	Introduction to Object Oriented Programming II	Working with classes and objects
10.	Data Structures in Python	Working with Strings and lists in Python
11.	Advance Programming Concepts I	Working with tuples and Dictionary in Python
12	Advance Programming Concepts II	Functions and Classes in Python
13	Dynamic Programming	Python libraries Numpy, Pandas
14	Concurrent Programming	Python Application Programming