

DAY	TOPIC	DETAILS
DAY 1	Arrays	definition, declaration, accessing elements, basic operations (insertion, deletion, traversal)
	Linear Search	algorithm explanation, implementation in C++, time complexity
	Binary Search	algorithm explanation, conditions for binary search (sorted array), implementation in C++, time complexity analysis
	Bubble Sort	algorithm explanation, implementation in C++, time complexity analysis
	Selection Sort	algorithm explanation, implementation in C++, time complexity analysis
	Insertion Sort	algorithm explanation, implementation in C++, time complexity analysis
	Merge Sort	algorithm explanation, implementation in C++, time complexity analysis
DAY 2	Stacks	definition, operations (push, pop, pick), implementation using arrays, applications, implementation in C++
	Queues	definition, operations (enqueue, dequeue, front), types (simple, circular, priority), implementation using arrays, applications, implementation in C++
	Linked List	definition, types (singly, doubly, circular), basic operations (insertion, deletion, traversal), implementation in C++
	Introduction to Trees	definition, terminology (root, node, leaf, height, depth), types (binary tree, binary search tree), basic operations (insertion, deletion, traversal), implementation of a basic binary tree in C++
	Binary Search Tree (BST)	definition, properties, operations (insertion, deletion, search), implementation in C++
	Tries	definition, use cases, basic operations (insertion, search), implementation in C++