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Module	Video	Topic	Note page	★	Github
mod-1 (time complexity)	v-1.2	Time complexity basic	A-93		Link
	v-1.3	Calculate Time complexity	A-94		
	v-1.4	O(n)	A-95 96		
	v-1.5	O(logN)	A-97		
	v-1.6	O(sqrtN)	A-98		
	v-1.7	O(n^2)	A-99		
	v-1.8	O(NlogN)	A-100		
	v-1.9	Best to Worst Complexity	A-101		
	v-1.11	calculate real time from time complexity	A-101	★★★	
mod-2 (STL-Vector)	v-2.1	Vector initialization	B-1-->3		Link
	v-2.2	Vector Capacity v.size() v.capacity() v.push_back(x)	B-4		
	v-2.3	Vector Modifiers value assign v.push_back() v.insert() v.erase() replace() find()	B 5-->9		
	v-2.5	Vector element access	B-10		
	v-2.6	Vector iterators v.begin() v.end()	B-11		
	v-2.7	Vector Input Ouput	B-12 13		
	v-2.8	Vector String	B-14		
Practice day		week 1 practice_01			Link

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Module	Video	Topic	Note page	★	Github	
mod-3 (prefix sum & Binary search)	v-3.1	Codeforce Range Sum Query (TLE)	B-16 17	★★ ★	Link	
	v-3.2	Prefix sum concept	B-18			
	v-3.3	Prefix sum concept in range sum query	B-19 20 21			
	v-3.4	Codeforce Range Sum Query (Accepted)	B-22			
	v-3.7	Binary Search concept	B-24	★		
	v-3.9	Binary Search animated				
	v-3.10	Binary Search code	B-25			
	v-3.11	Binary Search CF				
Practice day		week 1 practice_02			Link	
Assignment		assignment_01	80/100		Link	
mod-5 (Linked list)	v-5.1	Limitations of Array & Vector	B-27 28		Link	Repeat this module in free time
	v-5.2	Singly Linked List concept	B-29			
	v-5.3	Create node for Linked list	B 30-->33	★★ ★★		
	v-5.4	Node Constructor				
	v-5.5	Dynamic node	B-34			
	v-5.8	Print Linked list	B-35			
	v-5.8	Print Linked list (remember this code)	B-36	★★★ ★		
mod-6	v-6.1	Reference of a pointer	B-39 40 41			
	v-6.2	Insert Head	B 42-->44			
	v-6.4	Insert Tail	B 45-->47			

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Module	Video	Topic	Note page	★	Github
(Linked List)	v-6.6	Insert at Any Position	B 49-->54	★★★ ★★	Link
	v-6.8	Complexity of 3 insertion			
	v-6.9	Insert Tail Optimise	B 57-->60		
	v-6.11	Input linked list	B-70		
	v-6.12	Reverse Linked List	B 71-->73		
Practice day		week 2 practice_01			Link
mod-7 (Linked List)	v-7.1	Delete at head	B-76 79		Link
	v-7.3	Delete at Any position	B-80 85		
	v-7.4	Delete at Tail	B-85.1 86		
	v-7.6	Time complexity			
	v-7.9	Selection Sort	B-87		
	v-7.10	Selection Sort Linked List	B-89		
Practice day		week 2 practice_02			Link
Assignment		assignment_02	80/100		Link
mod-9 (Doubly LInked List)	v-9.1	Doubly intro	B-91		Link
		Create & Connect Doubly	B-92 93		
	v-9.2	Print Doubly	B-94		
	v-9.5	Insert at Head	B-95		
	v-9.7	Insert at Tail	B-96		
	v-9.9	Insert at any Position	B-97		
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Module	Video	Topic	Note page	★	Github
	v-9.13	Delete at tail	B-100 101		
	v-9.15	Delete at any position	B-102		
	v-9.16	Complexity Analysis Array vs Singly vs Doubly	B-102 103		
mod-10 (STL List)	v-10.1	List Constructors list<int> l	B-105 106		Link
	v-10.2	List Capacity Functions l.size() l.clear() l.empty()	B-107		
	v-10.3	List Modifiers l.push_back() l.push_front() l.pop_back() l.pop_front()	B 108-->111		
	v-10.5	List Operation Functions l.remove() l.sort() l.reverse()	B 114-->115		
	v-10.6	List Element access l.back() l.front()	B-116		
		List Modifiers l.begin() l.end()	B-117		
	v-10.7	Reverse Singly List	B 118-->119		
	v-10.8				
	v-10.9	Reverse Singly List Animation			
	v-10.10	Reverse Doubly List	B-120 121		
	v-10.12	Cycle detect Linked list	B-122 123		

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Module	Video	Topic	Note page	★	Github
Practice day		week 3 practice_01			Link
mod-11 (LeetCode)	v-11.1	Middle_of_the_Linked_List			Link
	v-11.2	Linked_List_Cycle			
	v-11.3	Remove_Duplicates from_Sorted_List			
	v-11.4	Reverse_Linked_List			
	v-11.5	Palindrome_Linked_List			
	v-11.6	Delete_Node_in_a_Linked_List			
Practice day		week 3 practice_02			Link
MID		MID Exam Data Structure	72/90		Link
mod-13 (Stack)	v-13.0	Built-in-Functions			Link
	v-13.3	Stack theory	B-127		
		Stack Operations	B-129		
	v-13.4	Stack using Vector	B-130		
	v-13.5				
	v-13.6	Stack Input Output	B-134		
	v-13.7	Stack using STL List	B-136		
	v-13.8	Stack using Doubly			
	v-13.9	STL Stack	B-136	★★ ★	
mod-14	v-14.0	Built-in-Functions			Link
	v-14.1	Queue theory	B-138		
		Queue Operations	B-139		
	v-14.3	Queue using Singly linked list	B-140		
	v-14.4	Queue Input Output			

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(Queue)	v-14.5	Queue using Doubly linked list	B-141		
	v-14.6	Stack using STL List			
	v-14.7	STL Queue	B-142	★★★	
Practice day		week 4 practice_01			Link
mod-15 (LeetCode & coding ninja)	v-15.1	20. Valid Parentheses		★★★	Link
	v-15.2	844. Backspace String Compare			
	v-15.3	Insert An Element At Its Bottom In A Given Stack			
	v-15.4	Maximum Equal Stack Sum			
	v-15.5	Reversing a Queue			
	v-15.6	155. Min Stack			
Practice Day		week 4 practice_02			Link
Assignment		assignment_03			Link
mod-17 (Binary Tree)	v-17.1	Tree intro	B-144		Link
	v-17.4	Binary Tree	B-145,146		
	v-17.5	Creating a Binary Tree	B 147-->149		
	v-17.7	Print Binary tree	B-150		
	v-17.8	Pre-order	B-151		
	v-17.9	Pre-order Implementation	B-152		
	v-17.10	Pre-order Animation		★★	
	v-17.11	In-order	B-153		
	v-17.13	Post-order	B-154		
	v-18.1	Level Order theory	B-155	★★	
		Level Order Concept	B 156-->158		
	v-18.2	Level Order			

Very very complex

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Module	Video	Topic	Note page	★	Github	
mod-18 (Binary Tree)	v-18.4	Binary Tree Input concept	B 159-->161	★★ ★★	Link	Very Very Important
		Input to Tree construction	B-162			
	v-18.5	Binary Tree input code	B 163-->164			
	v-18.6	Binary Tree input output animation				
	v-18.7	Count nodes in a Binary tree	B 167-->168			
	v-18.8	Count Leaf nodes in a Binary tree	B 169-->170			
	v-18.10	Height, Weight Concept	B- 171			
	v-18.11	Maximum Height of Binary tree	B 171-->172			
Practice Day		week 5 practice_01			Link	
mod-19 (Coding ninja)	v-19.1	Is Node Present?		★★ ★	Link	
	v-19.2	STL Pair	B 174-->176			
		Pair type Vector				
	v-19.3	Node Level				
	v-19.4	Left View Of a Binary Tree				
	v-19.5	Diameter Of Binary Tree				
	v-19.6	Special Binary Tree.				
	v-19.7	Reverse Level Order Traversal				
Practice Day		week 5 practice_02			Link	
Assignment		assignment_04	100/100		Link	
mod-21	v-21.1	BST theory	B 180-->182			
		Binary Search for BST	B-183			
	v-21.2	Duplicate handle in BST	B-184			

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(Binary search tree)	v-21.3	Searching in BST implementation	B- 185	★	Link
	v-21.5	BST Time Complexity	B-186		
	v-21.6	Insert in BST	B-187		
	v-21.8	Complexity of Insert in BST	B-188		
	v-21.9	Convert Array into BST	B 189-->190	★★	
mod-22 (Complete Binary tree & Heap memory)	v-22.1	Complete Binary Tree	B- 194		Link
	v-22.2	Array representation of complete binary tree	B 195-->196		
	v-22.3	Heap	B-197		
		Max Heap	B-198		
		Min Heap	B-199		
	v-22.4	Insert in Max heap theory	B 201-->204	★★★	
	v-22.5	Insert in Max heap Implementation	B- 205		
	v-22.7	Complexity of MIN/MAX Heap	B- 206		
	v-22.8	Delete from heap theory	B- 207		
	v-22.9	Delete from heap Implementation			
Practice Day		week 6 practice_01			Link
mod-23 (3 STL Priority Queue Map	v- 23.1	Prioruty Queue	B-209		Link
	v-23.2	Prioruty Queue VS Array	B-210		
	v-23.3	STL Priority queue	B-211	★★★	
	v-23.4	Custom compare class	B 211-->212	★★★★	
	v-23.5	Limitations of frequency array	B- 213		
		Limitaiton Overcome	B-215		

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Module	Video	Topic	Note page	★	Github
Map Set)	v-23.6	STL Map	B 216-->217	★★★	
	v-23.7	Count words using map			
	v-23.8	STL Set	B-219	★★★	
	v-23.9				
Practice Day		week 6 practice_02			Link
Final		Final Exam Data Structure			Link