Striver’s SDE Sheet (👍) | 2022

Day 1: Arrays

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Set Matrix Zeroes	Link 1	YT	Link 2
	Pascal’s Triangle	Link 1	YT	Link 2
	Next Permutation	Link 1	YT	Link 2
	Kadane’s Algorithm	Link 1	YT	Link 2
	Sort an array of 0’s 1’s 2’s	Link 1	YT	Link 2
	Stock buy and Sell	Link 1	YT	Link 2

Day 2: Arrays Part-II

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Rotate Matrix	Link 1	YT	Link 2
	Merge Overlapping Subintervals	Link 1	YT	Link 2
	Merge two sorted Arrays without extra space	Link 1	YT	Link 2
	Find the duplicate in an array of N+1 integers.	Link 1	YT	Link 2
	Repeat and Missing Number	Link 1	YT	Link 2
	Inversion of Array (Pre-req: Merge Sort)	Link 1	YT	Link 2

Day 3: Arrays Part-III

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Search in a 2d Matrix	Link 1	YT	Link 2
	Pow(X,n)	Link 1	YT	Link 2
	Majority Element (>N/2 times)	Link 1	YT	Link 2
	Majority Element (>N/3 times)	Link 1	YT	Link 2
	Grid Unique Paths	Link 1	YT	Link 2
	Reverse Pairs (Leetcode)	Link 1	YT	Link 2

Day 4: Arrays Part-IV

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	2-Sum-Problem	Link 1	YT	Link 2
	4-sum-Problem	Link 1	YT	Link 2
	Longest Consecutive Sequence	Link 1	YT	Link 2
	Largest Subarray with 0 sum	Link 1	YT	Link 2
	Count number of subarrays with given Xor K	Link 1	YT	Link 2
	Longest Substring without repeat	Link 1	YT	Link 2

Day 5: Linked List

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Reverse a LinkedList	Link 1	YT	Link 2
	Find the middle of LinkedList	Link 1	YT	Link 2
	Merge two sorted Linked List (use method used in mergeSort)	Link 1	YT	Link 2
	Remove N-th node from back of LinkedList	Link 1	YT	Link 2
	Add two numbers as LinkedList	Link 1	YT	Link 2
	Delete a given Node when a node is given.(0(1) solution)	Link 1	YT	Link 2

Day 6: Linked List Part-II

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Find intersection point of Y LinkedList	Link 1	YT	Link 2
	Detect a cycle in Linked List	Link 1	YT	Link 2
	Reverse a LinkedList in groups of size k.	Link 1	YT	Link 2
	Check if a LinkedList is palindrome or not.	Link 1	YT	Link 2
	Find the starting point of the Loop of LinkedList	Link 1	YT	Link 2
	Flattening of a LinkedList	Link 1	YT	Link 2

Day 7: Linked List and Arrays

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Rotate a LinkedList	Link 1	YT	Link 2
	Clone a Linked List with random and next pointer	Link 1	YT	Link 2
	3 sum	Link 1	YT	Link 2
	Trapping rainwater	Link 1	YT	Link 2
	Remove Duplicate from Sorted array	Link 1	YT	Link 2
	Max consecutive ones	Link 1	YT	Link 2

Day 8: Greedy Algorithm

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	N meetings in one room	Link 1	YT	Link 2
	Minimum number of platforms required for a railway	Link 1	YT	Link 2
	Job sequencing Problem	Link 1	YT	Link 2
	Fractional Knapsack Problem	Link 1	YT	Link 2
	Greedy algorithm to find minimum number of coins	Link 1	YT	Link 2
	Activity Selection (it is the same as N meeting in one room)	Link 1	YT	Link 2

Day 9: Recursion

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of recursion.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Subset Sums	Link 1	YT	Link 2
	Subset-II	Link 1	YT	Link 2
	Combination sum-1	Link 1	YT	Link 2
	Combination sum-2	Link 1	YT	Link 2
	Palindrome Partitioning	Link 1	YT	Link 2
	K-th permutation Sequence	Link 1	YT	Link 2

Day 10: Recursion and Backtracking

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of recursion.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Print all permutations of a string/array	Link 1	YT	Link 2
	N queens Problem	Link 1	YT	Link 2
	Sudoku Solver	Link 1	YT	Link 2
	M coloring Problem	Link 1	YT	Link 2
	Rat in a Maze	Link 1	YT	Link 2
	Word Break (print all ways)	Link 1	YT	Link 2

Day 11: Binary Search

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	The N-th root of an integer	Link 1	YT	Link 2
	Matrix Median	Link 1	YT	Link 2
	Find the element that appears once in a sorted array, and the rest element appears twice (Binary search)	Link 1	YT	Link 2
	Search element in a sorted and rotated array/ find pivot where it is rotated	Link 1	YT	Link 2
	Median of 2 sorted arrays	Link 1	YT	Link 2
	K-th element of two sorted arrays	Link 1	YT	Link 2
	Allocate Minimum Number of Pages	Link 1	YT	Link 2

	Aggressive Cows	Link 1	YT	Link 2

Day 12: Heaps

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Max heap, Min Heap Implementation (Only for interviews)	Link 1	NA	NA
	Kth Largest Element	Link 1	NA	Link 2
	Maximum Sum Combination	Link 1	NA	Link 2
	Find Median from Data Stream	Link 1	NA	Link 2
	Merge K sorted arrays	Link 1	NA	Link 2
	K most frequent elements	Link 1	NA	Link 2

Day 13: Stack and Queue

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Implement Stack Using Arrays	Link 1	YT	Link 2
	Implement Queue Using Arrays	Link 1	YT	Link 2
	Implement Stack using Queue (using single queue)	Link 1	YT	Link 2
	Implement Queue using Stack (0(1) amortized method)	Link 1	YT	Link 2
	Check for balanced parentheses	Link 1	YT	Link 2
	Next Greater Element	Link 1	YT	Link 2
	Sort a Stack	Link 1	YT	Link 2

Day 14: Stack and Queue Part-II

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Next Smaller Element	Link 1	YT	Link 2
	LRU cache (IMPORTANT)	Link 1	YT	Link 2
	LFU Cache	Link 1	YT	Link 2
	Largest rectangle in a histogram	Link 1	YT1/YT2	Link 2
	Sliding Window maximum	Link 1	YT	Link 2
	Implement Min Stack	Link 1	YT	Link 2
	Rotten Orange (Using BFS)	Link 1	YT	Link 2
	Stock Span Problem	Link 1	YT	Link 2

	Find the maximum of minimums of every window size	Link 1	YT	Link 2
	The Celebrity Problem	Link 1	YT	Link 2

Day 15: String

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Reverse Words in a String	Link 1	YT	Link 2
	Longest Palindrome in a string	Link 1	YT	Link 2
	Roman Number to Integer and vice versa	Link 1	YT	Link 2
	Implement ATOI/STRSTR	Link 1	YT	Link 2
	Longest Common Prefix	Link 1	YT	Link 2

	Rabin Karp	Link 1	YT	Link 2

Day 16: String Part-II

Find both C++/Java codes of all problem in the articles in the first column.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Z-Function	Link 1	YT	Link 2
	KMP algo / LPS(pi) array	Link 1	YT	Link 2
	Minimum characters needed to be inserted in the beginning to make it palindromic	Link 1	YT	Link 2
	Check for Anagrams	Link 1	YT	Link 2
	Count and Say	Link 1	YT	Link 2

	Compare version numbers	Link 1	YT	Link 2

Day 17: Binary Tree

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Binary Trees.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Inorder Traversal	Link 1	YT1 / YT2	Link 2
	Preorder Traversal	Link 1	YT1 / YT2	Link 2
	Postorder Traversal	Link 1	YT1 / YT2	Link 2
	Morris Inorder Traversal	Link 1	YT	Link 2
	Morris Preorder Traversal	Link 1	YT	Link 2

	LeftView Of Binary Tree	Link 1	YT	Link 2
	Bottom View of Binary Tree	Link 1	YT	Link 2
	Top View of Binary Tree	Link 1	YT	Link 2
	Preorder inorder postorder in a single traversal	Link 1	YT	Link 2
	Vertical order traversal	Link 1	YT	Link 2
	Root to node path in a Binary Tree	Link 1	YT	Link 2
	Max width of a Binary Tree	Link 1	YT	Link 2

Day 18: Binary Tree part-II

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Binary Trees.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Level order Traversal / Level order traversal in spiral form	Link 1	YT	Link 2
	Height of a Binary Tree	Link 1	YT	Link 2
	Diameter of Binary Tree	Link 1	YT	Link 2
	Check if the Binary tree is height-balanced or not	Link 1	YT	Link 2
	LCA in Binary Tree	Link 1	YT	Link 2
	Check if two trees are identical or not	Link 1	YT	Link 2
	Zig Zag Traversal of Binary Tree	Link 1	YT	Link 2

	Boundary Traversal of Binary Tree	Link 1	YT	Link 2

Day 19: Binary Tree part-III

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Binary Trees.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Maximum path sum	Link 1	YT	Link 2
	Construct Binary Tree from inorder and preorder	Link 1	YT	Link 2
	Construct Binary Tree from Inorder and Postorder	Link 1	YT	Link 2
	Symmetric Binary Tree	Link 1	YT	Link 2
	Flatten Binary Tree to LinkedList	Link 1	YT	Link 2

	Check if Binary Tree is the mirror of itself or not	Link 1	YT	Link 2
	Check for Children Sum Property	Link 1	YT	Link 2

Day 20: Binary Search Tree

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Binary Trees.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Populate Next Right pointers of Tree	Link 1	YT	Link 2
	Search given Key in BST	Link 1	YT	Link 2
	Construct BST from given keys	Link 1	YT	Link 2
	Construct BST from preorder traversal	Link 1	YT	Link 2

	Check is a BT is BST or not	Link 1	YT	Link 2
	Find LCA of two nodes in BST	Link 1	YT	Link 2
	Find the inorder predecessor/successor of a given Key in BST.	Link 1	YT	Link 2

Day 21: Binary Search Tree Part-II

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Binary Trees.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Floor in a BST	Link 1	YT	Link 2
	Ceil in a BST	Link 1	YT	Link 2
	Find K-th smallest element in BST	Link 1	YT	Link 2

	Find K-th largest element in BST	Link 1	YT	Link 2
	Find a pair with a given sum in BST	Link 1	YT	Link 2
	BST iterator	Link 1	YT	Link 2
	Size of the largest BST in a Binary Tree	Link 1	YT	Link 2
	Serialize and deserialize Binary Tree	Link 1	YT	Link 2

Day 22: Binary Trees[Miscellaneous]

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Binary Trees.

	Problem	Practice Link 1	Video Solution	Practice Link 2

	Binary Tree to Double Linked List	Link 1	YT	Link 2
	Find median in a stream of running integers.	Link 1	YT	Link 2
	K-th largest element in a stream.	Link 1	YT	Link 2
	Distinct numbers in Window.	Link 1	YT	Link 2
	K-th largest element in an unsorted array.	Link 1	YT	Link 2
	Flood-fill Algorithm	Link 1	YT	Link 2

Day 23: Graph

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Graphs.

	Problem	Practice Link 1	Video Solution	Practice Link 2

	Clone a graph (Not that easy as it looks)	Link 1	YT	Link 2
	DFS	Link 1	YT	Link 2
	BFS	Link 1	YT	Link 2
	Detect A cycle in Undirected Graph using BFS	Link 1	YT	Link 2
	Detect A cycle in Undirected Graph using DFS	Link 1	YT	Link 2
	Detect A cycle in a Directed Graph using DFS	Link 1	YT	Link 2
	Detect A cycle in a Directed Graph using BFS	Link 1	YT	Link 2
	Topological Sort BFS	Link 1	YT	Link 2

	Topological Sort DFS	Link 1	YT	Link 2
	Number of islands(Do in Grid and Graph Both)	Link 1	YT	Link 2
	Bipartite Check using BFS	Link 1	YT	Link 2
	Bipartite Check using DFS	Link 1	YT	Link 2

Day 24: Graph Part-II

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Graphs.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Strongly Connected Component(using KosaRaju's algo)	Link 1	YT	Link 2
	Dijkstra's Algorithm	Link 1	YT	Link 2

	Bellman-Ford Algo	Link 1	YT	Link 2
	Floyd Warshall Algorithm	Link 1	YT	Link 2
	MST using Prim's Algo	Link 1	YT	Link 2
	MST using Kruskal's Algo	Link 1	YT	Link 2

Day 25: Dynamic Programming

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of DP.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Max Product Subarray	Link 1	YT	Link 2
	Longest Increasing Subsequence	Link 1	YT	Link 2

	Longest Common Subsequence	Link 1	YT	Link 2
	0-1 Knapsack	Link 1	YT	Link 2
	Edit Distance	Link 1	YT	Link 2
	Maximum sum increasing subsequence	Link 1	YT	Link 2
	Matrix Chain Multiplication	Link 1	YT	Link 2

Day 26: Dynamic Programming Part-II

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of DP.

	Problem	Practice Link 1	Video Solution	Practice Link 2
	Minimum sum path in the matrix, (count paths and similar type do, also backtrack to find the Minimum path)	Link 1	YT	Link 2

	Coin change	Link 1	YT	Link 2
	Subset Sum	Link 1	YT	Link 2
	Rod Cutting	Link 1	YT	Link 2
	Egg Dropping	Link 1	YT	Link 2
	Word Break	Link 1	YT	Link 2
	Palindrome Partitioning (MCM Variation)	Link 1	YT	Link 2
	Maximum profit in Job scheduling	Link 1	YT	Link 2

Day 27: Trie

Find both C++/Java codes of all problem in the articles in the first column.

I will recommend you to do this playlist at first, so that you learn A-Z of Tries.

	Problem	Practice Link 1	Video Solution	Practice Link 2

	Implement Trie (Prefix Tree)	Link 1	YT	Link 2
	Implement Trie – 2 (Prefix Tree)	Link 1	YT	Link 2
	Longest String with All Prefixes	Link 1	YT	Link 2
	Number of Distinct Substrings in a String	Link 1	YT	Link 2
	Power Set (this is very important)	Link 1	YT	Link 2
	Maximum XOR of two numbers in an array	Link 1	YT	Link 2
	Maximum XOR With an Element From Array	Link 1	YT	Link 2

Day 28: Operating System Revision (Refer Sheet for OS Questions)

1. Revise OS notes that you would have made during your sem
2. If not made notes, spend 2 or 3 days and make notes from Knowledge Gate.

Day 29: DBMS Revision (Refer Sheet for DBMS Questions)

1. Revise DBMS notes that you would have made during your sem
2. If not made notes, spend 2 or 3 days and make notes from Knowledge Gate.

Day 30: Computer Networks Revision (Refer Sheet for CN Questions)

1. Revise CN notes that you would have made during your sem
2. If not made notes, spend 2 or 3 days and make notes from Knowledge Gate.

Day 31: Project Overview

Make a note of how will your represent your projects, and prepare all questions related to tech which you have used in your projects. Prepare a note which you can say for 3-10 minutes when he asks you that say something about the project.

Hurrah!! You are ready for your placement after a month of hard work without a cheat day.

~Striver