

TOPIC	PROBLEM STATEMENT
LEC 1 : CONCEPTS	Introduction to Binary Search Tree Search in a Binary Search Tree Find Min/Max in BST Ceil in a Binary Search Tree Floor in a Binary Search Tree Insert a given Node in Binary Search Tree Delete a Node in Binary Search Tree Find K-th smallest/largest element in BST Check if a tree is a BST or BT LCA in Binary Search Tree Construct a BST from a preorder traversal Inorder Successor/Predecessor in BST Merge 2 BST's Two Sum In BST Check if there exists a pair with Sum K Recover BST Correct BST with two nodes swapped Largest BST in Binary Tree
Lec 2: Practice Problems	
Lec 1: Learning	Graph and Types Graph Representation C++ Graph Representation Java Connected Components Logic Explanation BFS DFS
Lec 2: Problems on BFS/DFS	Number of provinces (leetcode) Connected Components Problem in Matrix Rotten Oranges Flood fill Cycle Detection in unirected Graph (bfs) Cycle Detection in undirected Graph (dfs) 0/1 Matrix (Bfs Problem) Surrounded Regions (dfs) Number of Enclaves [flood fill implementation - multisourc Word ladder - 1 Word ladder - 2 Number of Distinct Islands [dfs multsource] Bipartite Graph (DFS) Cycle Detection in Directed Graph (DFS)
Lec 3: Topo Sort and Problems	Topo Sort Kahn's Algorithm Cycle Detection in Directed Graph (BFS) Course Schedule - I Course Schedule - II Find eventual safe states Alien dictionary

Lec 4: Shortest Path Algorithms and Problems	<ul style="list-style-type: none"> Shortest Path in UG with unit weights Shortest Path in DAG Dijkstra's Algorithm Why priority Queue is used in Dijkstra's Algorithm Shortest path in a binary maze Path with minimum effort Cheapest flights within k stops Network Delay time Number of ways to arrive at destination Minimum steps to reach end from start by performing mul Bellman Ford Algorithm Floyd Warshal Algorithm Find the city with the smallest number of neighbors in a th
Lec 5: MinimumSpanningTree/Disjoint Set and	<ul style="list-style-type: none"> Minimum Spanning Tree Prim's Algorithm Disjoint Set [Union by Rank] Disjoint Set [Union by Size] Kruskal's Algorithm Number of operations to make network connected Most stones removed with same rows or columns Accounts merge Number of island II Making a Large Island Swim in rising water
Lec 6: Other Algorithms	<ul style="list-style-type: none"> Bridges in Graph Articulation Point Kosaraju's Algorithm

STEP-14 BINARY SEARCH TREES

PRACTICE LINK	VIDEO LINK	DIFFICULTY LEVEL
https://www.geeksforgeeks.org/problems/t	https://youtu.be/p7-9UvDQZ3w?si=xvYxGQI	EASY
https://leetcode.com/problems/search-in-a	https://youtu.be/KcNt6v_56cc?si=-620OmM	EASY
https://www.geeksforgeeks.org/problems/r	NO VIDEO	MEDIUM
https://www.geeksforgeeks.org/problems/i	https://youtu.be/KSsk8AhdOZA?si=vpEewpN	EAST
https://www.geeksforgeeks.org/problems/f	https://youtu.be/xm_W1ub-K-w?si=ayLDTJ7	EASY
https://leetcode.com/problems/insert-into-	https://youtu.be/FiFiNvM29ps?si=A6qbtioYk	EASY
https://leetcode.com/problems/delete-nod	https://youtu.be/kouxip_H5WE?si=ADZZH_5	MEDIUM
https://leetcode.com/problems/kth-smalles	https://youtu.be/9TJYWh0adf?si=kEPD1D7	MEDIUM
https://leetcode.com/problems/validate-bir	https://youtu.be/f-sj7I5oXEI?si=RkVegHitF4c	MEDIUM
https://leetcode.com/problems/lowest-corr	https://youtu.be/cX_kPV_foZc?si=HaM0W1I	MEDIUM
https://leetcode.com/problems/construct-b	https://youtu.be/UmJT3j26t1I?si=T0WT5hv7	MEDIUM
https://leetcode.com/problems/inorder-suc	https://youtu.be/SXKAD2svfml?si=bMxnUOj	MEDIUM
https://leetcode.com/problems/binary-sear	https://youtu.be/D2jMcmxU4bs?si=FI0oJ2V	HARD
https://leetcode.com/problems/two-sum-iv	https://youtu.be/ssL3sHwPeb4?si=8yVvu6Q	MEDIUM
https://leetcode.com/problems/recover-bir	https://youtu.be/ZWGW7FminDM?si=WILbI	HARD
https://leetcode.com/problems/lowest-corr	https://youtu.be/X0oXMDtUDwo?si=lbWhEf	HARD

Step 15 : Graphs [Concepts & Problems]

https://www.geeksforgeeks.org/problems/g	https://youtu.be/M3_pLsDdeuU?si=TSe2jYII	EASY
https://www.geeksforgeeks.org/problems/g	https://youtu.be/3ol-34aPMWM?si=2ieWj9i	EASY
https://www.geeksforgeeks.org/problems/r	https://youtu.be/3ol-34aPMWM?si=j2vf6Q7	EASY
https://leetcode.com/problems/number-of-	https://youtu.be/lea-Wl_uWXY?si=v-rTWKw	HARD
https://www.geeksforgeeks.org/problems/t	https://youtu.be/-tgVpUgsQ5k?si=cjGfEgVG	MEDIUM
https://www.geeksforgeeks.org/problems/c	https://youtu.be/Qzf1a--rhp8?si=t2bMSjLCv	HARD
https://leetcode.com/problems/number-of-	https://youtu.be/ACzkVtewUYA?si=wLd9PcC	MEDIUM
https://www.geeksforgeeks.org/problems/r	NO VIDEO	HARD
https://leetcode.com/problems/rotting-ora	https://youtu.be/yf3oUhkvqA0?si=Wav7ldI	MEDIUM
https://leetcode.com/problems/flood-fill/	https://youtu.be/C-2_uSRli8o?si=dwtSLUrwI	HARD
https://www.geeksforgeeks.org/problems/c	https://youtu.be/BPIrALf1LDU?si=zBWCuIF2	HARD
https://www.geeksforgeeks.org/problems/c	https://youtu.be/zQ3zgFypzX4?si=zn_AK7Vx	HARD
https://leetcode.com/problems/01-matrix/c	https://youtu.be/edXdVwkYHF8?si=vBfSv91	MEDIUM
https://leetcode.com/problems/surroundec	https://youtu.be/BtdgAys4yMk?si=sB1HBs4i	HARD
https://leetcode.com/problems/number-of-	https://youtu.be/rxKcepXQgU4?si=N1EHSxn	HARD
https://leetcode.com/problems/word-ladde	https://youtu.be/tRPda0rcf8E?si=XaOfvj_8w	HARD
https://leetcode.com/problems/word-ladde	https://youtu.be/tRPda0rcf8E?si=oNpxwWlI	HARD
https://leetcode.com/problems/number-of-	https://youtu.be/muncqIKJrH0?si=s-ge7AGN	HARD
https://leetcode.com/problems/is-graph-big	https://youtu.be/KG5YFfR0j8A?si=JaICpZmE	MEDIUM
https://leetcode.com/problems/course-sche	https://youtu.be/9twcmtQj4DU?si=PSpGdKc	HARD
https://www.geeksforgeeks.org/problems/t	https://youtu.be/5IZ0iJMrUMk?si=fgstGSKF	HARD
https://www.geeksforgeeks.org/problems/t	https://youtu.be/73sneFXuTEg?si=3JAJSptwI	HARD
https://www.geeksforgeeks.org/problems/c	https://youtu.be/iTBaI90lpDQ?si=tq2ixWY8i	HARD
https://leetcode.com/problems/course-sche	https://youtu.be/WAOfKpxYHR8?si=USaZTPi	HARD
https://leetcode.com/problems/course-sche	https://youtu.be/WAOfKpxYHR8?si=DAIL785	HARD
https://leetcode.com/problems/find-eventu	https://youtu.be/2gtg3VsDGyc?si=WwRV-Gi	HARD
https://leetcode.com/problems/alien-dictio	https://youtu.be/U3N_je7tWAs?si=zG3LLYXi	HARD

<https://www.geeksforgeeks.org/problems/s> <https://youtu.be/C4gxoTal71U?si=izwQkJWY> HARD
<https://www.geeksforgeeks.org/problems/s> https://youtu.be/ZUFQfFaU-8U?si=rd_XNA-r HARD
<https://www.geeksforgeeks.org/problems/i> https://youtu.be/rp1SMw7HSO8?si=tqr5Z_3 HARD
<https://www.geeksforgeeks.org/problems/i> <https://youtu.be/rp1SMw7HSO8?si=8i0v2eC> MEDIUM
<https://leetcode.com/problems/shortest-path> <https://youtu.be/U5Mw4eyUmw4?si=ZPsSg> MEDIUM
<https://leetcode.com/problems/path-with-minimum-cost> <https://youtu.be/0ytpZyiZFhA?si=pNUIgu2F> MEDIUM
<https://leetcode.com/problems/cheapest-flights-within-k-stops> <https://youtu.be/9XybHVqTHcQ?si=NnMtCZ> HARD
<https://leetcode.com/problems/network-delay-time> NO VIDEO MEDIUM
<https://leetcode.com/problems/number-of-islands> https://youtu.be/_0mx0SmYxA?si=4TJQtTk MEDIUM
<https://www.geeksforgeeks.org/problems/r> https://youtu.be/_BvEJ3VIDWw?si=FOxPI6n HARD
<https://www.geeksforgeeks.org/problems/c> <https://youtu.be/0vVofAhAYjc?si=ySfE9Tbgf> HARD
<https://www.geeksforgeeks.org/problems/i> <https://youtu.be/YbY8cVwWAvw?si=sOUmc> HARD
<https://leetcode.com/problems/find-the-city-with-the-smallest-number-of-neighbors-at-a-distance-of-k> <https://youtu.be/9XybHVqTHcQ?si=T4LvD4Y> HARD
<https://www.geeksforgeeks.org/problems/r> <https://youtu.be/ZSPjZuZWCME?si=6FQOfYI> HARD
<https://www.geeksforgeeks.org/problems/r> <https://youtu.be/mJcZjjKzeqk?si=Dajk-wWFf> HARD
<https://www.geeksforgeeks.org/problems/c> <https://youtu.be/aBxjDBC4M1U?si=QLFKjW> HARD
<https://www.geeksforgeeks.org/problems/c> <https://youtu.be/aBxjDBC4M1U?si=lnkr8Sill> HARD
<https://www.geeksforgeeks.org/problems/r> https://youtu.be/DMnDM_sxVig?si=gOmIO2 HARD
<https://leetcode.com/problems/number-of-islands> https://youtu.be/FYrI7iz9_ZU?si=BZ9uesPXN MEDIUM
<https://leetcode.com/problems/most-stones-within-a-k-distance> <https://youtu.be/OwMNx8SPavM?si=K5RJ0> MEDIUM
<https://leetcode.com/problems/accounts-merge> https://youtu.be/FMwpt_aQOGw?si=d4MO HARD
<https://leetcode.com/problems/number-of-islands> <https://youtu.be/Rn6B-Q4SNyA?si=8off6QU> HARD
<https://leetcode.com/problems/making-a-longer-palindrome-by-repeating-substring> <https://youtu.be/lgiz0Oup6gM?si=gP5WbRS> HARD
<https://leetcode.com/problems/swim-in-rising-water> NO VIDEO HARD
<https://leetcode.com/problems/critical-points-in-a-linkedList> https://youtu.be/qrAub5z8FeA?si=0QrZ_Uel HARD
<https://www.geeksforgeeks.org/problems/e> <https://youtu.be/j1QDfU21iZk?si=ON-FHZFft> HARD
<https://www.geeksforgeeks.org/problems/s> https://youtu.be/R6uoSjZ2imo?si=kuR3_yR1 HARD