Topic	Youtube Link	Problem link
торіс	TOULUBE LINK	Frozeni nik
11.Heaps		
11.1Learning		
Introduction to Priority Queues using Binary Heaps		https://www.geeksforgeeks.org/problems/implementation-of-priority-queue-using-binary-heap/17utm_source=youtube&utm_medium=collab_striver_videscription&utm_campaign=implementation-of-priority-queue-using-binary-heap
Min Heap and Max Heap Implementation		https://www.geeksforgeeks.org/problems/operations-on-binary-min-heap/12ulm_source=youtube&utm_medium=collab_striver_ytdescription&utm_campaign=operations-on-binary-min-heap
Check if an array represents a min-heap or not		https://peeksforpeeks.org/problemsfotes-array-represent-heap/345/17um.source-youtube&um-medium-collab-striver videosriofion&um-camanign-edons-array-represent-heap thtps://peeksforpeeks.org/problemsfoorest-min-heap-345/17um-source-youtube&um-medium-collab-striver videosriofion&um-camanign-edons-array-represent-heap thtps://peeksforpeeks.org/problemsfoorest-min-heap-1-max-heap-array-heap-array-represent-hea
Convert min Heap to max Heap		https://www.geekstorgeeks.org/problems/convert-min-heap-to-max-heap-18983851U9/17/ufm_source=youtube&ufm_medium=collab_striver_ytdescription&ufm_campaign=convert-min-heap-to-max-heap
11.2medium problems		
sort K sorted array		https://ieetoode.com/problems/kth-largest-element-in-an-array/
Kth smallest element in an array [use priority queue]		https://www.geeksforgeeks.org/problems/kth-smallest-element5635/1?utm_source=youtube&utm_medium=collab_striver_ytdescription&utm_campaign=kth-smallest-element
Sort K sorted array Merge M sorted Lists		https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_medium-collab_striver_videscription&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_medium-collab_striver_videscription&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_medium-collab_striver_videscription&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_medium-collab_striver_videscription&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_medium-collab_striver_videscription&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_medium-collab_striver_videscription&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_campaign=merge-k-sorted-arrays https://www.geeksforgeeks.org/problems/merge-k-sorted-arrays/17ufm_source-youtube&um_campaign=merge-k-sorted-arrays https://www.geeksfor
Replace each array element by its corresponding rank		nuts://eetcode.com/protesms/metrge-e-storie-issu.  https://www.gesforgeek.com/proteems/metrge-e-storie-issu.  https://www.gesforgeek.com/proteems/metrge-e-storie-issu.  https://www.gesforgeek.com/proteems/metrge-e-storie-issu.  https://www.gesforgeek.com/proteems/metrge-e-storie-issu.
Task Scheduler		https://eetcode.com/problems/task-scheduler/
Hands of Straights		https://leetcode.com/problems/hand-of-straights/
44.00		
11.3Hard problems  Design twitter		https://leetoode.com/problems/design-twitter/description/
Connect 'n' ropes with minimal cost		https://www.perksforgeeks.org/problems/roc/uting0840/17utm_source=voutube&utm_medium=collab_striver_ytdescription&utm_campaign=rod-cutting
Kth largest element in a stream of running integers		https://leetcode.com/problems/kth-largest-element-in-a-stream/description/
Maximum Sum Combination		https://www.interviewbit.com/problems/maximum-sum-combinations/
Find Median from Data Stream		https://leetoode.com/problems/find-median-from-data-sream/description/
K most frequent elements		https://leetcode.com/problems/top-k-frequent-elements/description/
12. Greedy Algorithms		
12.1 Easy problems Assign Cookies	https://www.youtube.com/watch?v=DIX2p7vb9co	https://leetcode.com/problems/assign-cookies/
Fractional Knapsack Problem	https://www.youtube.com/watch?si=8R2Bv3wpHo0zZVHE&v=1ibsQrnuEEq&feature=voutu.be	INUS. INSTITUTO CONTINUENTS SASSILI COUNTRIES. HINDS // INSTITUTO CONTINUENTS SASSILI CONTINUENT
Greedy algorithm to find minimum number of coins	https://www.youtube.com/watch?v=mVg9CfJvayM&list=PLgUwDviBlf0p4ozDR_kJJkONnb1wdx2Ma&index=48	https://www.geeksforgeeks.org/find-minimum-number-of-coins-that-make-a-change/
<u>Lemonade Change</u>	https://www.youtube.com/watch?v=n_tmibEhO6Q	https://leetcode.com/problems/lemonade-change/
Valid Paranthesis Checker	https://www.youtube.com/watch?si=XRHeyh7jOaLaTy3g&v=cHT6sG_hUZl&feature=youtu.be	https://leetoode.com/problems/valid-parenthesis-string/
12.2 Medium/Hard		
N meetings in one room	https://www.youtube.com/watch?v=mKfhTotEguk	https://practice.geeks.org/groblems/h-meetings-in-one-room-158711562011
Jump Game	https://www.youtube.com/watch?si=voKd7n9VTLDRRNzJ&v=tZAa_jJ3SwQ&feature=youtu.be	https://leetcode.com/problems/jump-game/
Jump Game 2	https://www.youtube.com/watch?si=9uUouBELh9K3m2jZ&v=7SBVnw7GSTk&feature=youtu.be	https://leetcode.com/problems/jrump-game-ii/
Minimum number of platforms required for a railway  Job sequencing Problem	https://www.youtube.com/watch?si=165acXU_dtqOHuo9&v=AsGzwR_FWok&feature=youtu.be https://www.youtube.com/watch?si=wv:cemJ5BLPITRmkG&v=ObwttemZbRg&feature=youtu.be	https://practicion.geeksforgeeks.org/problems/iniminum-platforms:15871156201f8  Thtts://practicion.geeksforgeeks.org/problems/iniminum-platforms:15871156201f8  Thtts://practicion.geeksforgeeks.org/problems/iniminum-platforms/initiago/problems/ini
Candy	https://www.youtube.com/watch?si=EimuXZJNLQLUkEd7&v=IIoVFvKE6RY&feature=youtu.be	Intus products gensor deers or producting up-sequenting-productin-1567 115620 1#  this //Betroic control/betroic control/betro
Program for Shortest Job First (or SJF) CPU Scheduling	https://www.youtube.com/watch?si=IH8QZUblr01F7UoQ&v=3-QbX1iDbXs&feature=youtu.be	https://bit.ly/3DYC/Fb
Program for Least Recently Used (LRU) Page Replacement Algorithm		https://bit.ly/3dtFqHG
Insert Interval Merge Intervals	https://www.youtube.com/watch?si=a7aPulw16zDx2lAa&v=xxRE-46OCC8&feature=youtu.be https://www.youtube.com/watch?v=2JzRBPFYbKE&list=PLgUwDviBIf0rPG3lctpu74YWBQ1CaBkm2&index=6	https://lentode.com/problems/inert-interval/ https://lentode.com/problems/inert-interval/ https://lentode.com/problems/inerge-intervals/
Non-overlapping Intervals	https://www.youtube.com/watch?si=JVtLoboGdpUTOVif&v=HDHQ8IAWakY&feature=voutu.be	titusreticote.com/probernismetye-inervais/
The state of the s		
13.Binary trees		
13.1 Traversals		
Introduction to Trees	https://www.youtube.com/watch?v=_ANrF3FJm7I	https://bit.lv/3EsRmTM
Binary Tree Representation in C++	https://www.youtube.com/watch?v=ctCpP0REDEc	https://bit.ly/3gn5Soh
Binary Tree Representation in Java	https://www.youtube.com/watch?v=hyLyW7rP24I	https://bit.ly/3gn5Sch
Binary Tree Traversals in Binary Tree  Preorder Traversal of Binary Tree	https://www.youtube.com/watch?v=jmy0LaGET1I https://www.voutube.com/watch?v=RIUu72JrOCQ	https://www.codingnings.com/codestudo/problems/free-traversal 3812697.ulm_source=striver&ulm_medium=website&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal 3812697.ulm_source=striver&ulm_medium=website&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal 3812697.ulm_source=striver&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal 3812697.ulm_source=striver&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal 3812697.ulm_source=striver&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal 3812697.ulm_source=striver&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal 3812697.ulm_source=striver&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal 3812697.ulm_source=striver&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal 3812697.ulm_source=striver&ulm_campaign=a_zoursetuf https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codingnings/free-traversal https://www.codingnings.com/codesstudo/problems/free-traversal https://www.codingnings.com/codingnings/free-traversal https://www.codingnings.com/codingnings/free-traversal https://www.codingnings.com/codingnings/free-traversal https://www.codingnings/free-traversal https://www.codingnings/free-traversal https://www.codingnings/free-traversal https:/
Inorder Traversal of Binary Tree	https://www.youtube.com/watch?v=RIUU7ZJFUCQ	ntps://eetcode.com/problems/inary-tree-predote-traversai/. https://eetcode.com/problems/inary-tree-predote-traversai/.
Post-order Traversal of Binary Tree	https://www.youtube.com/watch?v=COQOU6klsBg	https://ieetoode.com/problems/binary-tree-postorder-traversal/
Level order Traversal / Level order traversal in spiral form	https://www.youtube.com/watch?v=EoAsWbQ7sqg	https://ieetcode.com/problems/binary-tree-level-order-traversal/
Iterative Preorder Traversal of Binary Tree Iterative Inorder Traversal of Binary Tree	https://www.youtube.com/watch?v=Bfqd8BsPVuw https://www.youtube.com/watch?v=lxTGsVXjwvM	https://lebtoode.com/profilems/binary-free-preceder-fraeversal/
Post-order Traversal of Binary Tree Post-order Traversal of Binary Tree using 2 stack	https://www.youtube.com/watch?v=ix1GsVXjwvMl https://www.youtube.com/watch?v=2YBhNLodD8Q	Intos://ieetcode.com/problems/briany-freenorder-traversal/ https://ieetcode.com/problems/briany-freenorder-traversal/ https://ieetcode.com/problems/briany-freenorder-traversal/
Post-order Traversal of Binary Tree using 1 stack	https://www.youtube.com/watch?v=NzIGLLwZBS8	https://leetcode.com/problems/binary-tree-postorder-traversal/
Preorder, Inorder, and Postorder Traversal in one Traversal	https://www.youtube.com/watch?v=ySp2epYvgTE	https://bit.ly/3T30W9M
13.2 Medium Problems		
Height of a Binary Tree	https://www.youtube.com/watch?v=eD3tmO66aBA	https://leetcode.com/problems/maximum-depth-of-binary-tree/
Check if the Binary tree is height-balanced or not	https://www.youtube.com/watch?v=Yt50Jfbd8Po	https://leetcode.com/problems/balanced-binary-tree/
Diameter of Binary Tree	https://www.youtube.com/watch?v=Rezetez59Nk	https://leetcode.com/problems/diameter-of-binary-tree/
Maximum path sum Check if two trees are identical or not	https://www.youtube.com/watch?v=WszrfSwMz58 https://www.youtube.com/watch?v=BhuvFPWS0	https://lectoode.com/problems/binary-free-maximum-path-sum/ https://lectoode.com/problems/binary-free-maximum-path-sum/ https://lectoode.com/problems/siams-free/
Zig Zag Traversal of Binary Tree	https://www.youtube.com/watch?v=BhtvFPWSU https://www.youtube.com/watch?v=3OXWEdIIGI48feature=youtu.be	nuas_restcose_comprobemssame_tree_ https://setcose_comprobemssame_tree_ https://setco
Boundary Traversal of Binary Tree	https://www.youtube.com/watch?v=0ca1nvR0be4	https://leetcode.com/problems/poundary-of-binary-tree/
Vertical Order Traversal of Binary Tree	https://www.youtube.com/watch?v=q_a6lpbKJdw&feature=youtu.be	https://leetcode.com/problems/vertical-order-traversal-of-a-binary-tree/
Top View of Binary Tree	https://www.youtube.com/watch?v=Ef9OCDNvJ78	https://gractice.geeksforgeeks.org/problems/top-view-of-binary-tree/1
Bottom View of Binary Tree Right/Left View of Binary Tree	https://www.youtube.com/watch?v=0FtVY6I4pB8 https://www.youtube.com/watch?v=KV4mRzTiIAk	https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://hottoge.org/problems/hottom-view-of-kinary-tree/1 https://hottoge.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://practice.geekstryrepeks.org/problems/hottom-view-of-kinary-tree/1 https://document.org/problems/hottom-view-of-kinary-tree/1 https://document.org/problems/hottom-view-of-kinary-tr
Symmetric Binary Tree	https://www.youtube.com/watCH/V=NV4HIRZTJPAK	ntus://eetcode.com/probems/ten-gnr:sue-view/ https://eetcode.com/probems/symmetric-tree/
.,,		
13.3 Hard Problems		https://iii.lu/sQA600Q
Root to Node Path in Binary Tree	https://www.youtube.com/watch?v=fmfiMgVOC7k	

LCA in Binary Tree	https://www.youtube.com/watch?y= -QHfMDde90	https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-tree/
Maximum width of a Binary Tree	https://www.youtube.com/watch?v=ZbybYvcVLks	https://leetcode.com/problems/maximum-width-of-binary-tree/
Check for Children Sum Property	https://www.youtube.com/watch?v=fnmisPM6cVo	https://bit.ly/3dEr73g
Print all the Nodes at a distance of K in a Binary Tree	https://www.youtube.com/watch?v=i9ORIEy6EsI	https://leetcode.com/problems/all-nodes-distance-k-in-binary-tree/
Minimum time taken to BURN the Binary Tree from a Node	https://www.youtube.com/watch?v=2r5wLmQfD6g	https://bit.ly/3wcg7k1
Count total Nodes in a COMPLETE Binary Tree	https://www.youtube.com/watch?y=u-yWemKGWO0	https://leetcode.com/problems/count-complete-tree-nodes/
Requirements needed to construct a Unique Binary Tree   Theory	https://www.youtube.com/watch?v=9GMECGQgWrQ	https://bit.lu/3UVCR1U
Construct Binary Tree from inorder and preorder	https://www.youtube.com/watch?v=aZNaLrVebKQ	https://leetcode.com/problems/construct-binary-tree-from-preorder-and-inorder-traversal/
Construct the Binary Tree from Postorder and Inorder Traversa	https://www.youtube.com/watch?v=LgLRTaEMRVc	https://leetcode.com/problems/construct-binary-tree-from-inorder-and-postorder-traversal/
Serialize and deserialize Binary Tree	https://www.youtube.com/watch?v=-YbXySKJsX8	https://leetcode.com/problems/serialize-and-deserialize-binary-tree/
Morris Preorder Traversal of a Binary Tree	https://www.youtube.com/watch?v=80Zug6D1_r4&feature=youtu.be	https://leetcode.com/problems/binary-tree-inorder-traversal/
Morris Inorder Traversal of a Binary Tree	https://www.youtube.com/watch?v=80Zug6D1_r4&feature=youtu.be	https://leetcode.com/problems/binary-tree-inorder-traversal/
Flatten Binary Tree to LinkedList	https://www.youtube.com/watch?v=sWf7k1x9XR4	https://leetcode.com/problems/flatten-binary-tree-to-linked-list/