

STEP 4: BINARY SEARCH				
TOPIC	Problem Statement	practice link	video solution link	Difficulty
Lec 1: BS on 1D Arrays	Binary Search to find X in sorted array	https://leetcode.com/problems/binary-search/description/	https://youtu.be/MH6awe89ww	easy
	Implement Lower Bound	https://www.geeksforgeeks.org/problems/floor-in-a-sorted-array-1587115620/1	https://youtu.be/6zhGS79oQ4k	easy
	Implement Upper Bound	https://www.geeksforgeeks.org/problems/ceil-the-floor2802/1?utm_source=youtu	https://youtu.be/6zhGS79oQ4k	easy
	Search Insert Position	https://leetcode.com/problems/search-insert-position/description/	https://youtu.be/6zhGS79oQ4k	easy
	Floor/Ceil in Sorted Array	https://www.naukri.com/code360/problems/ceil-in-a-sorted-array_1825404	https://youtu.be/6zhGS79oQ4k	medium
	Find the first or last occurrence of a given number in a sorted array	https://leetcode.com/problems/find-first-and-last-position-of-element-in-sorted	https://youtu.be/hj811VvX8YI	easy
	Count occurrences of a number in a sorted array with duplicates	https://www.geeksforgeeks.org/problems/number-of-occurrence2259/1?utm_s	https://youtu.be/hj811VvX8YI	easy
	Search in Rotated Sorted Array I	https://leetcode.com/problems/search-in-rotated-sorted-array/description/	https://youtu.be/5oGrJbhtqFs	medium
	Search in Rotated Sorted Array II	https://leetcode.com/problems/search-in-rotated-sorted-array-ii/description/	https://youtu.be/w2G2W8l_pc	medium
	Find minimum in Rotated Sorted Array	https://leetcode.com/problems/find-minimum-in-rotated-sorted-array/description/	https://youtu.be/nhEMDKMB44g	medium
Lec 2: BS on Answers	Find out how many times has an array been rotated	https://www.geeksforgeeks.org/problems/rotation4723/1?utm_source=youtu	https://youtu.be/fISWTPLwd0	easy
	Single element in a Sorted Array	https://leetcode.com/problems/single-element-in-a-sorted-array/description/	https://youtu.be/4QOmHuhHxQg	easy
	Find peak element	https://leetcode.com/problems/find-peak-element/description/	https://youtu.be/cXombm5GXM	hard
	Find square root of a number in log n	https://www.geeksforgeeks.org/problems/square-root/0?utm_source=youtu	https://youtu.be/8sv3FPUX_BA	medium
	Find the Nth root of a number using binary search	https://www.geeksforgeeks.org/problems/find-nth-root-of-m5843/1?utm_sour	https://youtu.be/rjEJeYCasHs	medium
	Koko Eating Bananas	https://leetcode.com/problems/koko-eating-bananas/description/	https://youtu.be/oyfeKrNci90	Hard
	Minimum days to make M bouquets	https://leetcode.com/problems/minimum-number-of-days-to-make-m-bouquet	https://youtu.be/7XAuxey8Tdg	Hard
	Find the smallest Divisor	https://leetcode.com/problems/find-the-smallest-divisor-given-a-threshold/des	https://youtu.be/Uv8KTVaG6U8	easy
	Capacity to Ship Packages within D Days	https://leetcode.com/problems/capacity-to-ship-packages-within-d-days/descri	https://youtu.be/7MS-A4TbeTY	hard
	Kth Missing Positive Number	https://leetcode.com/problems/kth-missing-positive-number/description/	https://youtu.be/vi20N_h2yay	easy
Lec 3: BS on 2D Arrays	Aggressive Cows	https://www.geeksforgeeks.org/problems/aggressive-cows/0	https://youtu.be/R_Mfwew-Yo	hard
	Book Allocation Problem	https://www.geeksforgeeks.org/problems/allocate-minimum-number-of-pages0	https://youtu.be/20hwjft5t14	hard
	Split array - Largest Sum	https://leetcode.com/problems/split-array-largest-sum/description/	https://youtu.be/thJd_Win6wk	hard
	Painter's partition	https://www.naukri.com/code360/problems/painter-s-partition-problem_10895	https://youtu.be/thJd_Win6wk	hard
	Minimize Max Distance to Gas Station	https://www.geeksforgeeks.org/problems/minimize-max-distance-to-gas-station	https://youtu.be/KMS8vZ_HA	hard
	Median of 2 sorted arrays	https://leetcode.com/problems/median-of-two-sorted-arrays/description/	https://youtu.be/C2Rzr-JdK8	hard
	Kth element of 2 sorted arrays	https://www.geeksforgeeks.org/problems/k-th-element-of-two-sorted-array131	https://youtu.be/D1oDwWcQ50g	medium
	Find the row with maximum number of 1's	https://www.geeksforgeeks.org/problems/row-with-max-1s0023/1?utm_source	https://youtu.be/5Cz-1TtyDI	easy
	Search in a 2 D matrix	https://leetcode.com/problems/search-a-2d-matrix/description/C33.E33	https://youtu.be/KUAAKf7yk	medium
	Search in a row and column wise sorted matrix	https://leetcode.com/problems/search-a-2d-matrix-ii/description/	https://youtu.be/9Zb8387J4k	medium
Lec 4: Medium Problems of DDL	Find Peak Element (2D Matrix)	https://leetcode.com/problems/find-a-peak-element-ii/description/	https://youtu.be/nGSp5Xbc44g	hard
	Matrix Median	https://www.geeksforgeeks.org/problems/median-in-a-row-wise-sorted-matrix1	https://youtu.be/Q9wJgduj48	hard
Step 5 : Strings [Basic and Medium]				
Lec 1: Basic and Easy String Problem	Remove outermost Paranthesis	https://leetcode.com/problems/remove-outermost-parentheses/description/		easy
	Reverse words in a given string / Palindrome Check	https://leetcode.com/problems/reverse-words-in-a-string/description/		easy
	Largest odd number in a string	https://leetcode.com/problems/largest-odd-number-in-string/description/		easy
	Longest Common Prefix	https://leetcode.com/problems/longest-common-prefix/description/		easy
	Isomorphic String	https://leetcode.com/problems/isomorphic-strings/description/		easy
	check whether one string is a rotation of another	https://leetcode.com/problems/rotate-string/description/		medium
	Check if two strings are anagram of each other	https://leetcode.com/problems/valid-anagram/description/		medium
	Sort Characters by frequency	https://leetcode.com/problems/sort-characters-by-frequency/description/		easy
	Maximum Nesting Depth of Paranthesis	https://leetcode.com/problems/maximum-nesting-depth-of-the-parentheses/description/		easy
	Roman Number to Integer and vice versa	https://leetcode.com/problems/roman-to-integer/description/		easy
Lec 2: Medium String Problems	Implement Atoi	https://leetcode.com/problems/string-to-integer-atoi/description/		medium
	Count Number of Substrings	https://www.geeksforgeeks.org/problems/count-number-of-substrings4528/1?utm_source=youtu&utm_medium=collab_striver_youtu		medium
	Longest Palindromic Substring[Do it without DP]	https://leetcode.com/problems/longest-palindromic-substring/description/		hard
	Sum of Beauty of all substring	https://leetcode.com/problems/sum-of-beauty-of-all-substrings/description/		medium
	Reverse Every Word in A String	https://leetcode.com/problems/reverse-words-in-a-string/description/		easy
Step 6 : Learn LinkedList [Single LL, Double LL, Medium, Hard Problems]				
Lec 1: Learn 1D LinkedList	Introduction to LinkedList, learn about struct, and how is node represented	https://www.geeksforgeeks.org/problems/introduction-to-linked-list/1?utm_sou	https://youtu.be/Nq7ok-OyEpg	easy
	Inserting a node in LinkedList	https://www.geeksforgeeks.org/problems/linked-list-insertion-1587115620/0?utm	https://youtu.be/vaEC03Dz-g	easy
	Deleting a node in LinkedList	https://leetcode.com/problems/delete-node-in-a-linked-list/description/	https://youtu.be/vaEC03Dz-g	medium
	Find the length of the linkedlist [learn traversal]	https://www.geeksforgeeks.org/problems/count-nodes-of-linked-list/0?utm_sou	https://youtu.be/Nq7ok-OyEpg	easy
	Search an element in the LL	https://www.geeksforgeeks.org/problems/search-in-linked-list-1664434326/1?u	https://youtu.be/Nq7ok-OyEpg	easy
	Introduction to DLL, learn about struct, and how is node represented	https://www.geeksforgeeks.org/problems/introduction-to-doubly-linked-list/1?u	https://youtu.be/0eKMU10uEDl	easy
	Insert a node in DLL	https://www.geeksforgeeks.org/problems/insert-a-node-in-doubly-linked-list/1?	https://youtu.be/0eKMU10uEDl	easy
	Delete a node in DLL	https://www.geeksforgeeks.org/problems/delete-node-in-doubly-linked-list/1?u	https://youtu.be/0eKMU10uEDl	medium
	Reverse a DLL	https://www.geeksforgeeks.org/problems/reverse-a-doubly-linked-list/1?utm_sc	https://youtu.be/u3WUW2ge6ww	medium
	Middle of a LinkedList [TortoiseHare Method]	https://leetcode.com/problems/middle-of-the-linked-list/description/	https://youtu.be/7UQ578aEfc	easy
Lec 3: Medium Problems of LL	Reverse a LinkedList [Iterative]	https://leetcode.com/problems/reverse-linked-list/description/	https://youtu.be/D2v2DNJGd8	easy
	Reverse a LL [Recursive]	https://leetcode.com/problems/reverse-linked-list/description/	https://youtu.be/D2v2DNJGd8	easy
	Detect a loop in LL	https://leetcode.com/problems/linked-list-cycle/description/	https://youtu.be/wiQ0DC5GGA	medium
	Find the starting point in LL	https://leetcode.com/problems/linked-list-cycle-ii/description/	https://youtu.be/2x0KXmmHfc	medium
	Length of Loop in LL	https://www.geeksforgeeks.org/problems/find-length-of-loop/1?utm_source=y	https://youtu.be/4g1qk1Pus	easy
	Check if LL is palindrome or not	https://leetcode.com/problems/palindrome-linked-list/description/	https://youtu.be/7BY_E-u_Bk	medium
	Segregate odd and even nodes in LL	https://leetcode.com/problems/odd-even-linked-list/description/	https://youtu.be/af5ap7Gz05Q	medium
	Remove Nth node from the back of the LL	https://leetcode.com/problems/remove-nth-node-from-end-of-list/description/	https://youtu.be/3KMKYQzWNIU	medium
	Delete the middle node of LL	https://leetcode.com/problems/delete-the-middle-node-of-a-linked-list/descrip	https://youtu.be/ePpV_pP0el	medium
	Sort LL	https://leetcode.com/problems/sort-list/description/	https://youtu.be/8ocB7a_cCc	medium
Lec 5: Hard Problems of LL	Sort a LL of 0's 1's and 2's by changing links	https://www.geeksforgeeks.org/problems/given-a-linked-list-of-0s-1s-and-2s-sor	https://youtu.be/gRIU7LhdJwC	medium
	Find the intersection point of Y LL	https://leetcode.com/problems/intersection-of-two-linked-lists/description/	https://youtu.be/0570p2zTg68	medium
	Add 1 to a number represented by LL	https://www.geeksforgeeks.org/problems/add-1-to-a-number-represented-as-li	https://youtu.be/aQCNHbvT3w0	medium
	Add 2 numbers in LL	https://leetcode.com/problems/add-two-numbers/	https://youtu.be/ym8rGrB6u4g	medium
	Delete all occurrences of a key in DLL	https://www.geeksforgeeks.org/problems/delete-all-occurrences-of-a-given-key	https://youtu.be/MhONH_SD92k	medium
	Find pairs with given sum in DLL	https://www.geeksforgeeks.org/problems/find-pairs-with-given-sum-in-doubly-l	https://youtu.be/viR4dQsdde	medium
	Remove duplicates from sorted DLL	https://www.geeksforgeeks.org/problems/remove-duplicates-from-a-sorted-dou	https://youtu.be/YKVTrnOUXSY	medium
	Reverse LL in group of given size K	https://leetcode.com/problems/reverse-nodes-in-k-group/description/	https://youtu.be/1g1skcQVI	hard
	Rotate a LL	https://leetcode.com/problems/rotate-list/description/	https://youtu.be/17Y7XbTY8	medium
	Flattening of LL	https://www.geeksforgeeks.org/problems/flattening-a-linked-list/1?utm_source	https://youtu.be/ykelywHwUlg	hard
	Clone a Linked List with random and next pointer	https://leetcode.com/problems/copy-list-with-random-pointer/description/	https://youtu.be/g570bkdmIw	hard