

Muhammad Farhan's DSA Sheet						
REMEMBER Nothing worth having comes easy! CONSISTENCY is the Key. Do atleast one question every day						
Serial	Problem Name	Done (Y/N)	Solution	Comments / Hints for the Problem		
	Math / Array / String					
1	<a href="#">Add Two Integers - LeetCode</a>	.				
2	<a href="#">Concatenation of Array - LeetCode</a>	.				
3	<a href="#">Convert the Temperature - LeetCode</a>	.				
4	<a href="#">Smallest Even Multiple - LeetCode</a>	.				
5	<a href="#">Fizz Buzz - LeetCode</a>	.				
6	<a href="#">Ant on the Boundary - LeetCode</a>	.				
7	<a href="#">Average Value of Even Numbers That Are Divisible by Three - LeetCode</a>	.				
8	<a href="#">Maximum Nesting Depth of the Parentheses - LeetCode</a>	.	<a href="#">Solution</a>			
9	<a href="https://leetcode.com/problems/three-divisors/description">https://leetcode.com/problems/three-divisors/description</a>	.				
10	<a href="#">Number of Common Factors - LeetCode</a>	.				
11	<a href="https://leetcode.com/problems/find-greatest-common-divisor-of-array/description/">https://leetcode.com/problems/find-greatest-common-divisor-of-array/description/</a>	.			Greatest Common Divisor (GCD) is an important mathematical concept	
12	<a href="#">Defanging an IP Address - LeetCode</a>	.				
13	<a href="#">Two Sum - LeetCode</a>	.				
14	<a href="#">Minimum Number Game - LeetCode</a>	.	<a href="#">Solution</a>			
15	<a href="#">To Lower Case - LeetCode</a>	.			Understand ASCII Values	
16	<a href="https://leetcode.com/problems/robot-return-to-origin/description/">https://leetcode.com/problems/robot-return-to-origin/description/</a>	.				
17	<a href="https://leetcode.com/problems/furthest-point-from-origin/">https://leetcode.com/problems/furthest-point-from-origin/</a>	.				
18	<a href="#">Palindrome Number - LeetCode</a>	.				
19	<a href="#">Subtract the Product and Sum of Digits of an Integer - LeetCode</a>	.				
20	<a href="#">Difference Between Element Sum and Digit Sum of an Array - LeetCode</a>	.				
21	<a href="#">Count Integers With Even Digit Sum - LeetCode</a>	.				
22	<a href="https://leetcode.com/problems/harshad-number/description/">https://leetcode.com/problems/harshad-number/description/</a>	.				
23	<a href="https://leetcode.com/problems/perfect-number/description/">https://leetcode.com/problems/perfect-number/description/</a>	.				
24	<a href="https://leetcode.com/problems/valid-perfect-square/description/">https://leetcode.com/problems/valid-perfect-square/description/</a>	.				
25	<a href="https://leetcode.com/problems/truncate-sentence/description/">https://leetcode.com/problems/truncate-sentence/description/</a>	.				
26	<a href="https://leetcode.com/problems/reverse-words-in-a-string-iii/description/">https://leetcode.com/problems/reverse-words-in-a-string-iii/description/</a>	.				
27	<a href="#">Buy Two Chocolates - LeetCode</a>	.			Array, Sorting	
28	<a href="#">Divisible and Non-divisible Sums Difference - LeetCode</a>	.				
29	<a href="https://leetcode.com/problems/detect-capital/description/">https://leetcode.com/problems/detect-capital/description/</a>	.				
30	<a href="https://leetcode.com/problems/check-if-two-string-arrays-are-equivalent/description/">https://leetcode.com/problems/check-if-two-string-arrays-are-equivalent/description/</a>	.				
31	<a href="https://leetcode.com/problems/shuffle-string/description/">https://leetcode.com/problems/shuffle-string/description/</a>	.				
32	<a href="#">Keep Multiplying Found Values by Two - LeetCode</a>	.				
33	<a href="https://leetcode.com/problems/count-negative-numbers-in-a-sorted-matrix/description/">https://leetcode.com/problems/count-negative-numbers-in-a-sorted-matrix/description/</a>	.				
34	<a href="#">Maximum Area of Longest Diagonal Rectangle - LeetCode</a>	.				
35	<a href="https://leetcode.com/problems/number-of-1-bits/description/">https://leetcode.com/problems/number-of-1-bits/description/</a>	.				
36	<a href="https://leetcode.com/problems/fibonacci-number/">https://leetcode.com/problems/fibonacci-number/</a>	.			Fibonacci is a very important concept. Understand it thoroughly	
37	<a href="https://leetcode.com/problems/climbing-stairs/description/">https://leetcode.com/problems/climbing-stairs/description/</a>	.				
38	<a href="#">Binary Search - LeetCode</a>	.			Binary Search	
39	<a href="#">Search Insert Position - LeetCode</a>	.			Binary Search	
40	<a href="#">Goal Parser Interpretation - LeetCode</a>	.				
41	<a href="#">Find the Maximum Achievable Number - LeetCode</a>	.				
42	<a href="#">Missing Number - LeetCode</a>	.				
43	<a href="#">Alternating Digit Sum - LeetCode</a>	.				
44	<a href="https://leetcode.com/problems/count-items-matching-a-rule/description/">https://leetcode.com/problems/count-items-matching-a-rule/description/</a>	.				
45	<a href="https://leetcode.com/problems/maximum-average-subarray-i/description/">https://leetcode.com/problems/maximum-average-subarray-i/description/</a>	.			Learn Sliding Windows Technique First	
46	<a href="https://leetcode.com/problems/capitalize-the-title/description/">https://leetcode.com/problems/capitalize-the-title/description/</a>	.				
47	<a href="https://leetcode.com/problems/convert-integer-to-the-sum-of-two-no-zero-integers/description/">https://leetcode.com/problems/convert-integer-to-the-sum-of-two-no-zero-integers/description/</a>	.				
48	<a href="https://leetcode.com/problems/find-first-palindromic-string-in-the-array/description/">https://leetcode.com/problems/find-first-palindromic-string-in-the-array/description/</a>	.				
49	<a href="#">Maximum Number of Words Found in Sentences - LeetCode</a>	.				
50	<a href="#">Plus One - LeetCode</a>	.				
51	<a href="#">191. Number of 1 Bits</a>	.				
52	<a href="#">Maximum Odd Binary Number - LeetCode</a>	.				
53	<a href="#">Find the Distance Value Between Two Arrays - LeetCode</a>	.				
54	<a href="https://leetcode.com/problems/sum-of-values-at-indices-with-k-set-bits/">https://leetcode.com/problems/sum-of-values-at-indices-with-k-set-bits/</a>	.			Learn Binary Number System	
55	<a href="#">Count of Matches in Tournament - LeetCode</a>	.				
56	<a href="#">Find N Unique Integers Sum up to Zero - LeetCode</a>	.				
57	<a href="#">Single Number - LeetCode</a>	.				
58	<a href="https://leetcode.com/problems/left-and-right-sum-differences/description/">https://leetcode.com/problems/left-and-right-sum-differences/description/</a>	.				
59	<a href="https://leetcode.com/problems/decompress-run-length-encoded-list/description/">https://leetcode.com/problems/decompress-run-length-encoded-list/description/</a>	.				
60	<a href="#">Contains Duplicate - LeetCode</a>	.			Use sorting	
61	<a href="#">Minimum Common Value - LeetCode</a>	.		Two Pointers		
62	<a href="#">Final Value of Variable After Performing Operations - LeetCode</a>	.				
63	<a href="https://leetcode.com/problems/check-if-a-string-is-an-acronym-of-words/description/">https://leetcode.com/problems/check-if-a-string-is-an-acronym-of-words/description/</a>	.				
64	<a href="#">Find the Difference - LeetCode</a>	.				
65	<a href="https://leetcode.com/problems/find-missing-and-repeated-values/description/">https://leetcode.com/problems/find-missing-and-repeated-values/description/</a>	.		String		
66	<a href="#">Check If Two String Arrays are Equivalent - LeetCode</a>	.				
67	<a href="https://leetcode.com/problems/squares-of-a-sorted-array/description/">https://leetcode.com/problems/squares-of-a-sorted-array/description/</a>	.		Learn Sliding Window Approach		
68	<a href="https://leetcode.com/problems/maximum-length-substring-with-two-occurrences/description/">https://leetcode.com/problems/maximum-length-substring-with-two-occurrences/description/</a>	.				
69	<a href="https://leetcode.com/problems/find-resultant-array-after-removing-anagrams/description/">https://leetcode.com/problems/find-resultant-array-after-removing-anagrams/description/</a>	.		Medium - Easy		
70	<a href="https://leetcode.com/problems/find-all-duplicates-in-an-array/description/">https://leetcode.com/problems/find-all-duplicates-in-an-array/description/</a>	.		Medium - Easy		
71	<a href="#">Partitioning Into Minimum Number Of Deci-Binary Numbers - LeetCode</a>	.			String Medium Problem (But easy - look at hints)	
	Congratulations! 71 Questions, Now you need to understand hash map / set. It's fun to solve with it !					
	Hash Map					
72	<a href="#">Two Sum - LeetCode</a>	.			Instead two loops. solve with one loop using hash map / set	
73	<a href="#">Majority Element - LeetCode</a>	.				
74	<a href="#">Contains Duplicate - LeetCode</a>	.			Already done with sorting. now do with hashmap (Less time complexity)	
75	<a href="https://leetcode.com/problems/most-frequent-number-following-key-in-an-array/description/">https://leetcode.com/problems/most-frequent-number-following-key-in-an-array/description/</a>	.				
76	<a href="https://leetcode.com/problems/n-repeated-element-in-size-2n-array/description/">https://leetcode.com/problems/n-repeated-element-in-size-2n-array/description/</a>	.				
77	<a href="#">Maximum Number of Pairs in Array - LeetCode</a>	.				
78	<a href="https://leetcode.com/problems/valid-anagram/description/">https://leetcode.com/problems/valid-anagram/description/</a>	.				
79	<a href="https://leetcode.com/problems/find-the-difference-of-two-arrays/description/">https://leetcode.com/problems/find-the-difference-of-two-arrays/description/</a>	.				
80	<a href="https://leetcode.com/problems/first-unique-character-in-a-string/description/">https://leetcode.com/problems/first-unique-character-in-a-string/description/</a>	.				
81	<a href="https://leetcode.com/problems/first-letter-to-appear-twice/description/">https://leetcode.com/problems/first-letter-to-appear-twice/description/</a>	.				
82	<a href="#">Check if the Sentence Is Pangram - LeetCode</a>	.				
83	<a href="#">Jewels and Stones - LeetCode</a>	.				
84	<a href="#">Largest Positive Integer That Exists With Its Negative - LeetCode</a>	.				
85	<a href="#">Minimum Common Value - LeetCode</a>	.				
86	<a href="https://leetcode.com/problems/find-missing-and-repeated-values/description/">https://leetcode.com/problems/find-missing-and-repeated-values/description/</a>	.				
87	<a href="#">Number of Good Pairs - LeetCode</a>	.				
88	<a href="#">Distribute Candies - LeetCode</a>	.				
89	<a href="#">Count Elements With Maximum Frequency - LeetCode</a>	.				
90	<a href="#">Remove Duplicates from Sorted Array - LeetCode</a>	.				



Sl. No	Question link			
<b>Warm-Ups</b>		Read This		
1	<a href="#">Convert the Temperature</a>	<a href="https://www.rareskills.io/post/best-50-leetcode-questions-to-start">https://www.rareskills.io/post/best-50-leetcode-questions-to-start</a>		
2	<a href="#">Add Two Integers</a>			
3	<a href="#">Smallest Even Multiple</a>			
4	<a href="#">Final Value of Variable after Performing Operations</a>			
5	<a href="#">Count of Matches in Tournament</a>			
6	<a href="#">Number of Common Factors</a>			
7	<a href="#">XOR Operation in an Array</a>			
<b>Array</b>				
8	<a href="#">Fizz Buzz</a>			
9	<a href="#">Check if Array is Sorted and Rotated</a>			
10	<a href="#">Check if a Word Occurs as a Prefix of Any Word in a Sentence</a>			
11	<a href="#">Subtract the Product and Sum of Digits of an Integer</a>			
12	<a href="#">Find First Palindromic String in the Array</a>			
13	<a href="#">Running Sum of 1D Array</a>			
14	<a href="#">Merge Two Sorted Lists</a>			
15	<a href="#">Find Greatest Common Divisor of Array</a>			
16	<a href="#">Maximum Number of Words Found in Sentences</a>			
17	<a href="#">Final Value of Variable after Performing Operations</a>			
18	<a href="#">Shuffle the Array</a>			
19	<a href="#">Shuffle String</a>			
20	<a href="#">Cells in a Range on an Excel Sheet</a>			
21	<a href="#">Minimum Sum of Four Digit Number after Splitting Digits</a>			
22	<a href="#">Decompress Run-Length Encoded List</a>			
<b>String</b>				
23	<a href="#">Length of Last Word</a>			
24	<a href="#">To Lower Case</a>			
25	<a href="#">To Upper Case (Opposite)</a>			
26	<a href="#">Reverse String (Without two-pointers)</a>			
27	<a href="#">Valid Palindrome</a>			
28	<a href="#">Count Vowel Substrings of a String</a>			
29	<a href="#">Repeated Substring Pattern</a>			
30	<a href="#">Defanging an IP Address</a>			
31	<a href="#">Determine Color of a Chessboard Square</a>			
32	<a href="#">Add Digits</a>			
33	<a href="#">Jewels and Stones</a>			
34	<a href="#">Roman to Integer</a>			
<b>2D Array</b>				
35	<a href="#">Richest Customer Wealth</a>			
36	<a href="#">Flipping an Image</a>			
37	<a href="#">Lucky Numbers in a Matrix</a>			
38	<a href="#">Shift 2D Grid</a>			
39	<a href="#">Available Captures for Rook</a>			
<b>Hash Table</b>				
40	<a href="#">Jewels and Stones</a>			
41	<a href="#">Decode the Message</a>			
42	<a href="#">Unique Morse Code Words</a>			
43	<a href="#">Check if the Sentence is Pangram</a>			
44	<a href="#">First Letter to Appear Twice</a>			
45	<a href="#">Sum of Unique Elements</a>			
46	<a href="#">Merge Similar Items</a>			

47	<u>Divide Array into Equal Pairs</u>				
48	<u>Destination City</u>				
49	<u>Number of Good Pairs</u>				

<a href="https://leetcode.com/problems/split-a-string-in-balanced-strings/description/">https://leetcode.com/problems/split-a-string-in-balanced-strings/description/</a>			
<a href="https://leetcode.com/problems/cells-in-a-range-on-an-excel-sheet/description/">https://leetcode.com/problems/cells-in-a-range-on-an-excel-sheet/description/</a>			
<a href="https://leetcode.com/problems/number-of-steps-to-reduce-a-number-to-zero/description/">https://leetcode.com/problems/number-of-steps-to-reduce-a-number-to-zero/description/</a>			
<a href="https://leetcode.com/problems/decode-the-message/description/">https://leetcode.com/problems/decode-the-message/description/</a>			
<a href="https://leetcode.com/problems/sorting-the-sentence/description/">https://leetcode.com/problems/sorting-the-sentence/description/</a>			
<a href="https://leetcode.com/problems/remove-one-element-to-make-the-array-strictly-increasing/description/">https://leetcode.com/problems/remove-one-element-to-make-the-array-strictly-increasing/description/</a>			
<a href="https://leetcode.com/problems/reverse-only-letters/description/">https://leetcode.com/problems/reverse-only-letters/description/</a>			
<a href="https://leetcode.com/problems/greatest-common-divisor-of-strings/description/">https://leetcode.com/problems/greatest-common-divisor-of-strings/description/</a>			
<a href="https://leetcode.com/problems/check-if-the-number-is-fascinating/description/">https://leetcode.com/problems/check-if-the-number-is-fascinating/description/</a>			
<a href="https://leetcode.com/problems/remove-trailing-zeros-from-a-string/description/">https://leetcode.com/problems/remove-trailing-zeros-from-a-string/description/</a>			
<a href="https://leetcode.com/problems/next-greater-element-i/description/">https://leetcode.com/problems/next-greater-element-i/description/</a>			
<a href="https://leetcode.com/problems/count-elements-with-maximum-frequency/description/">https://leetcode.com/problems/count-elements-with-maximum-frequency/description/</a>			
<a href="https://leetcode.com/problems/split-strings-by-separator/description/">https://leetcode.com/problems/split-strings-by-separator/description/</a>			
<a href="https://leetcode.com/problems/capitalize-the-title/description/">https://leetcode.com/problems/capitalize-the-title/description/</a>			
<a href="https://leetcode.com/problems/detect-capital/description/">https://leetcode.com/problems/detect-capital/description/</a>			
<a href="https://leetcode.com/problems/longest-common-subsequence/description/?envType=daily-question&amp;envId=2024-01-25">https://leetcode.com/problems/longest-common-subsequence/description/?envType=daily-question&amp;envId=2024-01-25</a>			Medium
<a href="https://leetcode.com/problems/design-an-ordered-stream/description/">https://leetcode.com/problems/design-an-ordered-stream/description/</a>			
<a href="https://leetcode.com/problems/longest-common-prefix/description/">https://leetcode.com/problems/longest-common-prefix/description/</a>	trie		
<a href="https://leetcode.com/problems/roman-to-integer/description/">https://leetcode.com/problems/roman-to-integer/description/</a>			
<a href="https://leetcode.com/problems/integer-to-roman/description/">https://leetcode.com/problems/integer-to-roman/description/</a>	Medium		
<a href="https://leetcode.com/problems/pascals-triangle/description/">https://leetcode.com/problems/pascals-triangle/description/</a>			
<a href="https://leetcode.com/problems/pascals-triangle-ii/description/">https://leetcode.com/problems/pascals-triangle-ii/description/</a>			
<a href="https://leetcode.com/problems/merge-similar-items/description/">https://leetcode.com/problems/merge-similar-items/description/</a>			
<a href="https://leetcode.com/problems/merge-two-2d-arrays-by-summing-values/description/">https://leetcode.com/problems/merge-two-2d-arrays-by-summing-values/description/</a>			
<a href="https://leetcode.com/problems/check-if-numbers-are-ascending-in-a-sentence/">https://leetcode.com/problems/check-if-numbers-are-ascending-in-a-sentence/</a>			
<a href="https://leetcode.com/problems/minimum-right-shifts-to-sort-the-array/description/">https://leetcode.com/problems/minimum-right-shifts-to-sort-the-array/description/</a>			
<a href="https://leetcode.com/problems/check-if-array-is-sorted-and-rotated/description/">https://leetcode.com/problems/check-if-array-is-sorted-and-rotated/description/</a>			
<a href="https://leetcode.com/problems/kth-largest-element-in-an-array/description/">https://leetcode.com/problems/kth-largest-element-in-an-array/description/</a>	Med		

<b>Linear &amp; Binary Search</b>
<b>Linked List</b>
<a href="#">Convert Binary Number in a Linked List to Integer - LeetCode</a>
<a href="#">Reverse Linked List - LeetCode</a>
<a href="#">Middle of the Linked List - LeetCode</a>
<a href="#">Palindrome Linked List - LeetCode</a>
<a href="#">Linked List Cycle</a>
<a href="#">Intersection of Two Linked Lists - LeetCode</a>
<a href="#">Insert Greatest Common Divisors in Linked List - LeetCode</a>
<a href="#">Delete the Middle Node of a Linked List - LeetCode</a>
<b>Recursion</b>

<a href="https://leetcode.com/problems/design-hashset/description/">https://leetcode.com/problems/design-hashset/description/</a>
<a href="https://leetcode.com/problems/design-hashmap/description/">https://leetcode.com/problems/design-hashmap/description/</a>
<b>Trie</b>
<a href="https://leetcode.com/problems/longest-common-prefix/description/">https://leetcode.com/problems/longest-common-prefix/description/</a>
<a href="https://leetcode.com/problems/implement-trie-prefix-tree/description/">https://leetcode.com/problems/implement-trie-prefix-tree/description/</a>
<a href="https://leetcode.com/problems/search-suggestions-system/description/">https://leetcode.com/problems/search-suggestions-system/description/</a>

Tree	
<a href="#">Add One Row to Tree - LeetCode</a>	Medm



Linkedin	<a href="https://www.linkedin.com/in/muhammadfarhankt/">https://www.linkedin.com/in/muhammadfarhankt/</a>
Github	<a href="https://github.com/muhammadfarhankt/">https://github.com/muhammadfarhankt/</a>
Leetcode	<a href="https://leetcode.com/muhammadfarhankt/">https://leetcode.com/muhammadfarhankt/</a>