**Assignment Details**

**BTech Third year Except Swayam**

**Note:**

### **Instructions for DSA Practice Sheet (13 Oct – 02 Nov 2025) – For Third Year Students**

1. **These questions are mandatory** for all **Second Year B.Tech students** and must be completed sincerely.
2. **The syllabus for this sheet includes topics from Array to Linked List*.***
3. **All solutions must be uploaded on GitHub** under a properly named repository and Your sincerity will be measured by github profile on daily basis contributions on github.
4. Each problem must include **clear comments** explaining the logic and reasoning.
5. Every question should have **brute-force** and **optimized solutions** wherever possible.
6. Maintain a **DSA Practice Notebook** (hardcopy or digital) containing:
   * Problem statement
   * Step-by-step logic
   * Time and Space Complexity
   * Final code summary
7. Ensure all assigned problems are **completed and uploaded on or before given date.**
8. Use the **LeetCode links provided** in the sheet for practice and submission reference.
9. Maintain proper **naming conventions and folder structure**, such as Array/, String/, LinkedList/.
10. Focus on **clean, readable, and efficient coding style** — proper indentation, meaningful variable names, and no redundant code.

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| **DAY WISE DETAILS** | | |
| Date of Submission | Problem Statement Link |  |
| .13/10/2025 | Array I |  |
| [Reversing the array](https://www.naukri.com/code360/problems/reverse-the-array_1262298), [finding maximum and minimum elements,](https://leetcode.com/problems/removing-minimum-and-maximum-from-array/description/) [Running sum of 1d Array](https://leetcode.com/problems/running-sum-of-1d-array/description/), [count elements with maximum frequency](https://leetcode.com/problems/count-elements-with-maximum-frequency/description/) , [left/right rotate an array by k positions.](https://leetcode.com/problems/rotate-array/description/) | | |
| .13/10/2025 | Array II | . |
| Content Summary: [find element in an array](https://www.geeksforgeeks.org/searching-elements-in-an-array-array-operations/),  [Remove duplicate elements from an sorted array](https://leetcode.com/problems/remove-duplicates-from-sorted-array/description/), [find repeating element an array](https://takeuforward.org/data-structure/find-all-repeating-elements-in-an-array/), [find equilibrium element in an array](https://leetcode.com/problems/find-pivot-index/description/). | | |
| .13/10/2025 | Array’s Sorting and Time and space complexity Analysis | . |
| Content Summary: [Bubble sort](https://www.geeksforgeeks.org/bubble-sort-algorithm/), [selection sort](https://www.geeksforgeeks.org/selection-sort-algorithm-2/), [Insertion Sort and complexity Analysis](https://www.geeksforgeeks.org/insertion-sort-algorithm/) | | |
| .13/10/2025 | Array III | . |
| Content Summary: [union and intersection of sorted arrays](https://leetcode.com/problems/intersection-of-two-arrays/description/), [maximum subarray sum (Kadane’s Algorithm)](https://leetcode.com/problems/maximum-subarray/description/), [maximum product subarray(based on Kandane’s)](https://leetcode.com/problems/maximum-product-subarray/description/) , [majority Element (moore’s voting algorithm)](https://leetcode.com/problems/majority-element/description/) | | |
| .13/10/2025 | Strings I | . |
| Content Summary: [check given string is palindrome or not](https://leetcode.com/problems/valid-palindrome/description/), [count number of vowel and consonant](https://takeuforward.org/data-structure/count-number-of-vowels-consonants-spaces-in-string/), [remove character except alphabet](https://takeuforward.org/data-structure/remove-characters-from-a-string-except-alphabets/). | | |
| .14/10/2025 | String  II | . |
| Content Summary: [Calculate frequency of a character](https://takeuforward.org/data-structure/calculate-frequency-of-characters-in-a-string/), [print maximum occurring character in a string](https://takeuforward.org/data-structure/maximum-occurring-character-in-a-string/),  [Remove duplicate character from a string](https://www.geeksforgeeks.org/remove-duplicates-from-a-given-string/), [count number of word in a string](https://takeuforward.org/data-structure/count-the-number-of-words-in-a-given-string/) | | |
| .14/10/2025 | Recursion I | . |
| Content Summary: [find factorial](https://www.geeksforgeeks.org/program-for-factorial-of-a-number/), [find power of a number](https://www.geeksforgeeks.org/problems/power-of-numbers-1587115620/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card), [(printing increasing, decreasing and Decreasing Increasing)](https://www.geeksforgeeks.org/problems/print-1-to-n-without-using-loops3621/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card), [count digit](https://www.geeksforgeeks.org/problems/count-digits5716/0), [sum of array using recursion](https://www.geeksforgeeks.org/problems/sum-of-array2326/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card) | | |
| .14/10/2025 | Recursion II | . |
| Content Summary: [find pivot index](https://leetcode.com/problems/find-pivot-index/description/), [remove duplicates](https://classroom.codingninjas.com/app/classroom/me/21313/content/451415/offering/6582572/problem/91?leftPanelTabValue=PROBLEM), [fibonacci number](https://www.geeksforgeeks.org/problems/nth-fibonacci-number1335/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card),  [tower of hanoi with recursion tree presentation](https://www.geeksforgeeks.org/problems/tower-of-hanoi-1587115621/1), | | |
| .14/10/2025 | Matrix Problems I | . |
| Content Summary: [Spiral traversal](https://leetcode.com/problems/spiral-matrix/description/), [searching elements in a matrix](https://leetcode.com/problems/search-a-2d-matrix/description/), [Printing elements in sorted order.](https://leetcode.com/problems/sort-an-array/description/) | | |
| .14/10/2025 | Matrix Problems  II | . |
| Content Summary: [Finding median in row-wise sorted matrix](https://leetcode.com/problems/median-of-a-row-wise-sorted-matrix/description/), [identifying rows with maximum 1s](https://leetcode.com/problems/row-with-maximum-ones/description/) , [rotating matrices by 90 degrees.](https://leetcode.com/problems/rotate-image/) | | |
| .15/10/2025 | LinkedList  Introduction. | . |
| Content Summary: [add Node on any position](https://leetcode.com/problems/design-linked-list/description/), [delete Node from given position](https://leetcode.com/problems/delete-node-in-a-linked-list/description/), [search Node in a linked List](https://medium.com/@itsanuragjoshi/search-an-element-in-a-linked-list-iterative-and-recursive-data-structures-algorithm-0c3fad1cd1d6), [Count Node in linked List](https://www.geeksforgeeks.org/problems/count-nodes-of-linked-list/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card) | | |
| . 15/10/2025 | LinkedList I | . |
| Content Summary: [reverse LinkedList](https://leetcode.com/problems/reverse-linked-list/description/), [find mid of the linkedList](https://leetcode.com/problems/middle-of-the-linked-list/description/), [Merge Two sorted LinkedList.](https://leetcode.com/problems/merge-two-sorted-lists/description/) | | |
| 15/10/2025 | LinkedList  II | . |
| Content Summary: [add two number](https://leetcode.com/problems/add-two-numbers/description/), [rotate list](https://leetcode.com/problems/rotate-list/description/), [remove duplicates from sorted list](https://leetcode.com/problems/remove-duplicates-from-sorted-list/description/) | | |
| 15/10/2025 | Stack Implementation | . |
| Content Summary: [Stack Implementation using Array](https://www.codechef.com/learn/course/stacks-and-queues/LSTACKS/problems/STACK03), [Next Greater Element](https://leetcode.com/problems/next-greater-element-i/description/) | | |
| 15/10/2025 | Stack I | . |
| Content Summary: [Smaller element on left](https://www.geeksforgeeks.org/problems/smaller-on-left20360700/1), [valid parentheses](https://leetcode.com/problems/valid-parentheses/description/), [Evaluate postfix expression](https://www.geeksforgeeks.org/problems/evaluation-of-postfix-expression1735/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card) | | |
| 16/10/2025 | Stack  II | . |
| Content Summary: [min stack](https://leetcode.com/problems/min-stack/description/), [asteroid collision](https://leetcode.com/problems/asteroid-collision/description/), [stock span problem](https://leetcode.com/problems/online-stock-span/description/) | | |
| 16/10/2025 | Queue Introduction. | . |
| Content Summary: [Queue implementation using array](https://www.geeksforgeeks.org/problems/implement-queue-using-array/1), [Implement circular queue](https://leetcode.com/problems/design-circular-queue/description/), [queue using stack](https://leetcode.com/problems/implement-queue-using-stacks/description/) | | |
| 16/10/2025 | Advance Array-I | . |
| Content summary: [Two sum](https://leetcode.com/problems/two-sum/),  [Best time to buy and sell stocks](https://leetcode.com/problems/best-time-to-buy-and-sell-stock/), [Sort 0, 1 and 2(Dutch flag algorithm)](https://leetcode.com/problems/sort-colors/), | | |
| 16/10/2025 | Advance Array-II | . |
| Content Summary: [container with most water](https://leetcode.com/problems/container-with-most-water/), [merge sorted array](https://leetcode.com/problems/merge-sorted-array/), [trapping rain water](https://leetcode.com/problems/trapping-rain-water/) | | |
| 17/10/2025 | Binary Search-I | . |
| Content Summary: [lower bound](https://www.geeksforgeeks.org/implement-lower-bound/) , [upper bound](https://www.geeksforgeeks.org/upper_bound-in-cpp/), [koko eating bananas](https://leetcode.com/problems/koko-eating-bananas/), [first bad version](https://leetcode.com/problems/first-bad-version/) | | |
| 17/10/2025 | Binary Search-II |  |
| Content Summary: [Search in rotated sorted array](https://leetcode.com/problems/search-in-rotated-sorted-array/), [Search in rotated sorted array II](https://leetcode.com/problems/search-in-rotated-sorted-array-ii/), [aggressive cows](https://www.geeksforgeeks.org/problems/aggressive-cows/0) | | |
| 17/10/2025 | Binary Tree Introduction | . |
| Content Summary: Introduction of Tree, type of tree, [implementation of tree.](https://leetcode.com/problems/create-binary-tree-from-descriptions/description/) | | |
| 17/10/2025 | Binary Tree Traversal | . |
| Content Summary:  Tree Traversal, [preorder traversal,](https://leetcode.com/problems/binary-tree-preorder-traversal/) [inorder traversal](https://leetcode.com/problems/binary-tree-inorder-traversal/), [postorder traversal](https://leetcode.com/problems/binary-tree-postorder-traversal/), [level order traversal( Morris traversal ).](https://leetcode.com/problems/binary-tree-level-order-traversal/) | | |
| 17/10/2025 | Binary Tree-III. | . |
| Content Summary: [Height of the tree](https://leetcode.com/problems/maximum-depth-of-binary-tree/), [same tree](https://leetcode.com/problems/same-tree/), [symmetric tree](https://leetcode.com/problems/symmetric-tree/), | | |
| 18/10/2025 | Binary Tree-IV. | . |
| Content Summary: [diameter of tree](https://leetcode.com/problems/diameter-of-binary-tree/), [path sum](https://leetcode.com/problems/path-sum/), [print left/right view of Binary tree](https://leetcode.com/problems/binary-tree-right-side-view/). | | |
| 18/10/2025 | Binary Search Tree. | . |
| Content Summary: [Implementation of BST](https://mathcenter.oxford.emory.edu/site/cs171/probSetBst/), [check valid BST](https://leetcode.com/problems/validate-binary-search-tree/) | | |
| 18/10/2025 | Hashmap Introduction. | . |
| Content Summary:  [HashMap Implementation (operations put, get, containsKey, KeySet)](https://leetcode.com/problems/design-hashmap/description/) | | |
| 18/10/2025 | HashMap-II. | . |
| Content Summary: [Two Sum](https://leetcode.com/problems/two-sum/), [highest frequency character](https://www.geeksforgeeks.org/problems/maximum-occuring-character-1587115620/0), [missing number](https://leetcode.com/problems/missing-number/) | | |
| 18/10/2025 | HashMap-III. |  |
| Content Summary: [intersection of two arrays](https://leetcode.com/problems/intersection-of-two-arrays/), [set matrix zeros](https://leetcode.com/problems/set-matrix-zeroes/), [valid anagram](https://leetcode.com/problems/valid-anagram/) | | |
| 19/10/2025 | hashmap/Sliding window-technique Algorithm | . |
| Content Summary:[longest consecutive sequence](https://leetcode.com/problems/longest-consecutive-sequence/), [longest substring without repeating character](https://leetcode.com/problems/longest-substring-without-repeating-characters/), [bulls and cows](https://leetcode.com/problems/bulls-and-cows/description/?envType=problem-list-v2&envId=hash-table) | | |
| 19/10/2025 | hashmap/Sliding window-technique Algorithm | . |
| Content Summary: [largest subarray with 0 sum](https://www.geeksforgeeks.org/problems/largest-subarray-with-0-sum/1), [count of zero sum subarray](https://www.geeksforgeeks.org/problems/zero-sum-subarrays1825/1), [length of largest subarray with contiguous element](https://leetcode.com/problems/contiguous-array/) | | |
| 19/10/2025 | Priority Queue | . |
| Content Summary: [Implementation of Priority queue](https://www.geeksforgeeks.org/problems/operations-on-priorityqueue/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card), [min and max Heap](https://www.naukri.com/code360/problems/build-heap_975375) | | |
| 20/10/2025 | priority Queue-II | . |
| Content Summary: [Inplace heap sort](https://www.csl.mtu.edu/cs2321/www/newLectures/09_Inplace_Heap_Sort.html), [kth largest element](https://leetcode.com/problems/kth-largest-element-in-an-array/), [kth smallest element](https://www.geeksforgeeks.org/problems/kth-smallest-element5635/1) | | |
| 20/10/2025 | priority Queue-III | . |
| Content Summary: [check max heap](https://www.geeksforgeeks.org/problems/is-binary-tree-heap/0), [top k frequent element](https://leetcode.com/problems/top-k-frequent-elements/), [sliding window maximum](https://leetcode.com/problems/sliding-window-maximum/) | | |
| 20/10/2025 | Sum up Binary tree and Binary search Tree | . |
| Content Summary: [sum of leaves](https://leetcode.com/problems/sum-of-left-leaves/), [top view](https://www.geeksforgeeks.org/problems/top-view-of-binary-tree/1), [bottom view](https://www.geeksforgeeks.org/problems/bottom-view-of-binary-tree/1), | | |
| 20/10/2025 | Sum up Hashmap / Sliding window technique. | . |
| Content Summary: [find all anagram in string](https://leetcode.com/problems/find-all-anagrams-in-a-string/description/), [isomorphic string](https://leetcode.com/problems/isomorphic-strings/) | | |
| 21/10/2025 | Bit Manipulation Introduction. | . |
| Content Summary: Introduction to AND, OR, XOR operations, [Count Set/unset Bits](https://www.geeksforgeeks.org/problems/count-total-set-bits-1587115620/1), [Toggle a given kth bit](https://www.geeksforgeeks.org/problems/toggle-bits-given-range0952/1), [check if nth bit is set or unset](https://www.geeksforgeeks.org/problems/check-whether-k-th-bit-is-set-or-not-1587115620/1),  [Check Power of Two/Four](https://leetcode.com/problems/power-of-two/description/). | | |
| 21/10/2025 | Bit Manipulation-II. | . |
| Content Summary:[Counting bits,](https://leetcode.com/problems/counting-bits/description/)  [Single Number 1](https://leetcode.com/problems/single-number/description/), [Single number 2,](https://leetcode.com/problems/single-number-ii/description/)  [Subsets using Bits ( power set problem)](https://leetcode.com/problems/subsets/description/) , [Find Missing number](https://leetcode.com/problems/missing-number/description/), [Duplicate Numbers.](https://leetcode.com/problems/find-the-duplicate-number/description/) | | |
| 21/10/2025 | Number theory basics. | . |
| Content Summary: [Sieve of Eratosthenes](https://leetcode.com/problems/count-primes/description/), [Modular Arithmetic](https://leetcode.com/problems/smallest-integer-divisible-by-k/description/), [Modular Exponentiation](https://leetcode.com/problems/super-pow/description/), [Chinese Remainder Theorem](https://leetcode.com/problems/super-pow/description/) | | |
| 21/10/2025 | Mathematical Algorithms. | . |
| Content Summary: [Euler’s Totient Function](https://cp-algorithms.com/algebra/phi-function.html), [Permutations and Combinations](https://leetcode.com/problems/permutations/description/), [Inclusion-Exclusion Principle,](https://cp-algorithms.com/combinatorics/inclusion-exclusion.html) [Catalan Numbers.](https://leetcode.com/problems/unique-binary-search-trees/description/) | | |
| 22/10/2025 | Advance Recursion. | . |
| Content Summary: [print all subset](https://leetcode.com/problems/subsets/description/), [permutation of a string](https://leetcode.com/problems/permutations/description/), [find all unique subset](https://www.geeksforgeeks.org/problems/subset-sum-ii/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card) | | |
| 22/10/2025 | Backtracking I | . |
| Content Summary: [rat in maze](https://leetcode.com/problems/escape-a-large-maze/description/), [rat in a maze all path](https://leetcode.com/problems/the-maze-ii/description/), [N Queens](https://leetcode.com/problems/n-queens/description/) | | |
| 22/10/2025 | Backtracking-2 | . |
| Content Summary: [combination](https://leetcode.com/problems/combinations/description/), [combination sum](https://leetcode.com/problems/combination-sum/description/), [combination sum-2](https://leetcode.com/problems/combination-sum-ii/description/) | | |
| 23/10/2025 | Backtracking-3 | . |
| Content Summary: [generate parentheses](https://leetcode.com/problems/generate-parentheses/description/), [subset-2](https://leetcode.com/problems/subsets-ii/description/), [sudoku solver](https://leetcode.com/problems/sudoku-solver/description/) | | |
| 23/10/2025 | Greedy I | . |
| Content Summary: [assign cookies](https://leetcode.com/problems/assign-cookies/description/), [array partition](https://leetcode.com/problems/array-partition/description/), [can place flower](https://leetcode.com/problems/can-place-flowers/description/), [lemonade change](https://leetcode.com/problems/lemonade-change/description/) | | |
| 23/10/2025 | Greedy-II. | . |
| Content Summary: [Activity selection](https://www.geeksforgeeks.org/problems/activity-selection-1587115620/1), [minimum platform](https://www.geeksforgeeks.org/problems/minimum-platforms-1587115620/1), [coin change](https://leetcode.com/problems/coin-change/description/) | | |
| 23/10/2025 | Greedy-III. | . |
| Content Summary: [max chunk to make sorted](https://leetcode.com/problems/max-chunks-to-make-sorted/description/), [max chunk to make sorted-2](https://leetcode.com/problems/max-chunks-to-make-sorted-ii/description/), [0/1 knapsack](https://www.geeksforgeeks.org/problems/0-1-knapsack-problem0945/1). | | |
| 24/10/2025 | Graph Introduction and representation. | . |
| Content Summary: Introduction,Representation using adjacency matrix and [adjacency list](https://www.geeksforgeeks.org/problems/print-adjacency-list-1587115620/1) | | |
| 24/10/2025 | Graph-Traversal Algorithm. | . |
| Content Summary: [Graph Traversal BFS(Breadth first search)](https://www.geeksforgeeks.org/problems/bfs-traversal-of-graph/1) and [DFS(Depth first search)](https://www.geeksforgeeks.org/problems/depth-first-traversal-for-a-graph/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card) | | |
| 24/10/2025 | Graph-III | . |
| Content Summary : [Connected Components](https://neetcode.io/problems/count-connected-components), [Detecting Cycles in Graphs](https://www.geeksforgeeks.org/problems/detect-cycle-in-a-directed-graph/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card) | | |
| 25/10/2025 | Graph Problems-IV. | . |
| Content summary: [find if path exist(has path)](https://leetcode.com/problems/find-if-path-exists-in-graph/description/), [print all path from source to destination](https://leetcode.com/problems/all-paths-from-source-to-target/description/), [Number of Island](https://leetcode.com/problems/number-of-islands/description/) | | |
| 25/10/2025 | Advanced Graph. | . |
| Content summary: [Number of Provinces](https://leetcode.com/problems/number-of-provinces/description/), [Flood Fill](https://leetcode.com/problems/flood-fill/description/),  [Number of closed islands.](https://leetcode.com/problems/number-of-closed-islands/) | | |
| 25/10/2025 | Minimum Spanning Tree algorithms. | . |
| Content summary: [Prim’s Algorithm](https://cp-algorithms.com/graph/mst_prim.html),  [Kruskal's algorithm](https://cp-algorithms.com/graph/mst_kruskal.html). | | |
| 26/10/2025 | Shortest Path Algorithm. | . |
| Content summary: [Dijkstra algorithm](https://cp-algorithms.com/graph/dijkstra.html), [Bellman ford algorithm](https://cp-algorithms.com/graph/bellman_ford.html). | | |
| 26/10/2025 | Trie | . |
| Content summary: what is trie DS, use of trie, hashmap vs trie, [implementation(representation,  insert node, search node)](https://leetcode.com/problems/implement-trie-prefix-tree/description/) | | |
| 26/10/2025 | Trie-II | . |
| Content Summary: [delete node](https://www.geeksforgeeks.org/trie-delete/), [application of trie](https://www.geeksforgeeks.org/applications-advantages-and-disadvantages-of-trie/), [count word in trie](https://www.geeksforgeeks.org/counting-number-words-trie/), [word break](https://leetcode.com/problems/word-break/), | | |
| 26/10/2025 | Huffman coding | . |
| Content Summary: [huffman coding algorithm](https://www.geeksforgeeks.org/problems/huffman-encoding3345/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card), decompression in huffman coding | | |
| 27/10/2025 | Dynamic programming | . |
| Content Summary: [introduction of dynamic programing](https://cp-algorithms.com/dynamic_programming/intro-to-dp.html), covering of prerequisites for dynamic programming, discussion of memoization and tabulation using [fibonacci number](https://leetcode.com/problems/fibonacci-number/)/ any problem | | |
| 27/10/2025 | Dynamic programming-II (both approach memoization and tabulation) | . |
| Content Summary: [staircase](https://leetcode.com/problems/climbing-stairs/), [min cost climbing stairs](https://leetcode.com/problems/min-cost-climbing-stairs/), [counting bits](https://leetcode.com/problems/counting-bits/), [perfect square](https://leetcode.com/problems/perfect-squares/) | | |
| 28/10/2025 | Dynamic programming-III(both approach memoization and tabulation) | . |
| Content Summary: [house robber](https://leetcode.com/problems/house-robber/), [house robber 2](https://leetcode.com/problems/house-robber-ii/), [goldmine](https://www.geeksforgeeks.org/problems/gold-mine-problem2608/1), [path with maximum gold](https://leetcode.com/problems/path-with-maximum-gold/) | | |
| 28/10/2025 | Dynamic programming-IV | . |
| Content Summary: [unique path-1](https://leetcode.com/problems/unique-paths/), [unique path-2](https://leetcode.com/problems/unique-paths-ii/), [minimum path sum](https://leetcode.com/problems/minimum-path-sum/), [target sum subset (DP)](https://leetcode.com/problems/target-sum/) | | |
| 29/10/2025 | Dynamic programming-V. | . |
| Content Summary: [coin change](https://leetcode.com/problems/coin-change/), [coin change-2](https://leetcode.com/problems/coin-change-ii/), [jump game](https://leetcode.com/problems/jump-game/), [jump game 2](https://leetcode.com/problems/jump-game-ii/) | | |
| 29/10/2025 | Dynamic programming-VI. | . |
| Content Summary: [longest common subsequences(recursive, memoization tabulation)](https://leetcode.com/problems/longest-common-subsequence/), [longest palindrome substring,](https://leetcode.com/problems/longest-palindromic-substring/) | | |
| 30/10/2025 | Dynamic programming-VII. | . |
| Content Summary: [longest palindrome subsequences](https://leetcode.com/problems/longest-palindromic-subsequence/), [palindromic substring](https://leetcode.com/problems/palindromic-substrings/) | | |
| 31/10/2025 | Dynamic programming-VIII. | . |
| Content Summary: [wildcard matching problem](https://leetcode.com/problems/wildcard-matching/), [egg dropping problem](https://leetcode.com/problems/super-egg-drop/) | | |
| 01/11/2025 | Revised Day on DP | . |
| Content Summary: [regular expression matching problem](https://leetcode.com/problems/regular-expression-matching/) | | |
| 01/11/2025 | Segment tree |  |
| Content Summary: [what is segment tree, what kind of problem we solve using segment tree,](https://cp-algorithms.com/data_structures/segment_tree.html) [max in interval](https://leetcode.com/discuss/interview-question/algorithms/199350/how-to-find-the-largest-number-in-an-interval), | | |
| 02/11/2025 | Segment tree-II/ range query | . |
| Content Summary: [sum of interval](https://cp-algorithms.com/data_structures/segment_tree.html#sum-queries), [sum of ranges(lazy propagation)](https://www.hackerearth.com/practice/notes/segment-tree-and-lazy-propagation/) | | |