

# DSA Sheet 21/2/22-----27/2/22

## Topics

1. DP
2. Greedy
3. Binary Search
4. Sorting

## Greedy:

1. <https://leetcode.com/problems/partitioning-into-minimum-number-of-deci-binary-numbers/>
2. <https://leetcode.com/problems/max-increase-to-keep-city-skyline/>
3. <https://leetcode.com/problems/minimize-maximum-pair-sum-in-array/>
4. <https://leetcode.com/problems/balance-a-binary-search-tree/>
5. <https://leetcode.com/problems/partition-labels/>
6. <https://leetcode.com/problems/find-valid-matrix-given-row-and-column-sums/>
7. <https://leetcode.com/problems/maximum-number-of-coins-you-can-get/>
8. <https://leetcode.com/problems/minimum-add-to-make-parentheses-valid/>
9. <https://leetcode.com/problems/score-after-flipping-matrix/>
10. <https://leetcode.com/problems/minimum-adjacent-swaps-to-reach-the-kth-smallest-number/>

## Binary Search:

1. <https://leetcode.com/problems/capacity-to-ship-packages-within-d-days/>
2. <https://leetcode.com/problems/max-consecutive-ones-iii/>
3. <https://leetcode.com/problems/kth-smallest-element-in-a-sorted-matrix/>
4. <https://leetcode.com/problems/range-sum-of-sorted-subarray-sums/>
5. <https://leetcode.com/problems/single-element-in-a-sorted-array/>
6. <https://leetcode.com/problems/find-the-duplicate-number/> using floyd's cycle detection algorithm
7. <https://leetcode.com/problems/two-sum-ii-input-array-is-sorted/> two pointer approach
8. <https://leetcode.com/problems/minimum-limit-of-balls-in-a-bag/>
9. <https://leetcode.com/problems/maximize-the-confusion-of-an-exam/>
10. <https://leetcode.com/problems/minimum-number-of-days-to-make-m-bouquets/>

**Sorting:**

1. <https://leetcode.com/problems/sort-the-matrix-diagonally/>
2. <https://leetcode.com/problems/minimize-maximum-pair-sum-in-array/>
3. <https://leetcode.com/problems/all-elements-in-two-binary-search-trees/>
4. <https://leetcode.com/problems/maximum-number-of-coins-you-can-get/>
5. <https://leetcode.com/problems/arithmetic-subarrays/>
6. <https://leetcode.com/problems/reveal-cards-in-increasing-order/>
7. <https://leetcode.com/problems/sort-integers-by-the-power-value/>
8. <https://leetcode.com/problems/queue-reconstruction-by-height/>
9. <https://leetcode.com/problems/custom-sort-string/>
10. <https://leetcode.com/problems/reduce-array-size-to-the-half/>

**DP:**

1. <https://leetcode.com/problems/count-sorted-vowel-strings/>
2. <https://leetcode.com/problems/count-square-submatrices-with-all-ones/>
3. <https://leetcode.com/problems/number-of-good-ways-to-split-a-string/>
4. <https://leetcode.com/problems/partition-array-for-maximum-sum/>
5. <https://leetcode.com/problems/sort-integers-by-the-power-value/>
6. <https://leetcode.com/problems/egg-drop-with-2-eggs-and-n-floors/>
7. <https://leetcode.com/problems/count-number-of-teams/>
8. <https://leetcode.com/problems/generate-parentheses/>
9. <https://leetcode.com/problems/minimum-cost-tree-from-leaf-values/>
10. <https://leetcode.com/problems/minimum-falling-path-sum/>