1. **Arrays**
2. Find the element that appears once TC=(log n)
3. Longest/count [Subarray with given sum](https://takeuforward.org/data-structure/longest-subarray-with-given-sum-k/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank) TC = O(n) SC = O(n)
4. Find all pairs with a given sum TC = O(n log n) SC = O(n)
5. Next Permutation Tc = O(n)
6. Longest Consecutive Sequence in an Array TC = O(n) SC = O(n)
7. Rotate matrix by 90 degree TC = O(n^2)
8. Spiral matrix TC = O(n\*m)
9. Majority 1/2 and 1/3 TC = O(n)
10. 3 sum
11. 4 sum
12. [Count number of subarrays with given xor K](https://takeuforward.org/data-structure/count-the-number-of-subarrays-with-given-xor-k/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)
13. [Merge Overlapping Subintervals](https://takeuforward.org/data-structure/merge-overlapping-sub-intervals/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)
14. [Merge two sorted arrays without extra space](https://takeuforward.org/data-structure/merge-two-sorted-arrays-without-extra-space/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)
15. [Find the repeating and missing number](https://takeuforward.org/data-structure/find-the-repeating-and-missing-numbers/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)
16. [Reverse Pairs](https://takeuforward.org/data-structure/count-reverse-pairs/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)
17. [Maximum Product Subarray](https://takeuforward.org/data-structure/maximum-product-subarray-in-an-array/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)

BINARY SEARCH

1. Search in Rotated Sorted Array II Tc = O(log n)
2. Koko Eating Bananas
3. **Median in a row-wise sorted Matrix**
4. [Find kth element of two sorted arrays](https://takeuforward.org/data-structure/k-th-element-of-two-sorted-arrays/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)
5. [Cycle Detection in unirected Graph (bfs)](https://takeuforward.org/data-structure/detect-cycle-in-an-undirected-graph-using-bfs/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)
6. [Number of Enclaves](https://takeuforward.org/graph/number-of-enclaves/" \t "https://takeuforward.org/strivers-a2z-dsa-course/strivers-a2z-dsa-course-sheet-2/_blank)
7. Number of Distinct Islands
8. Find eventual safe states using dfs
9. Cycle Detection in Directed Graph (DFS) kahn algo
10. Alien dictionary