**Hashing :**

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|  | **Description** | **Status** |
|  | Print a Binary Tree in Vertical Order | Set 2 (Hashmap based Method) |  |
|  | Find whether an array is subset of another array |  |
|  | Union and Intersection of two linked lists |  |
|  | Given an array A[] and a number x, check for pair in A[] with sum as x |  |
|  | Minimum delete operations to make all elements of array same |  |
|  | Minimum operation to make all elements equal in array |  |
|  | Maximum distance between two occurrences of same element in array |  |
|  | Count maximum points on same line |  |
|  | Check if a given array contains duplicate elements within k distance from each other |  |
|  | Find duplicates in a given array when elements are not limited to a range |  |
|  | Find top k (or most frequent) numbers in a stream |  |
|  | Most frequent element in an array |  |
|  | Smallest subarray with all occurrences of a most frequent element |  |
|  | First element occurring k times in an array |  |
|  | Given an array of pairs, find all symmetric pairs in it |  |
|  | Find the only repetitive element between 1 to n-1 |  |
|  | Find any one of the multiple repeating elements in read only array |  |
|  | Find top three repeated in array |  |
|  | Group multiple occurrence of array elements ordered by first occurrence |  |
|  | How to check if two given sets are disjoint? |  |
|  | Non-overlapping sum of two sets |  |
|  | Find elements which are present in first array and not in second |  |
|  | Check if two arrays are equal or not |  |
|  | Pair with given sum and maximum shortest distance from end |  |
|  | Pair with given product | Set 1 (Find if any pair exists) |  |
|  | Find missing elements of a range |  |
|  | k-th missing element in increasing sequence which is not present in a given sequence |  |
|  | Find pair with greatest product in array |  |
|  | Minimum number of subsets with distinct elements |  |
|  | Remove minimum number of elements such that no common element exist in both arra |  |
|  | Count items common to both the lists but with different prices |  |
|  | Minimum Index Sum for Common Elements of Two Lists |  |
|  | Find pairs with given sum such that elements of pair are in different rows |  |
|  | Common elements in all rows of a given matrix |  |
|  | Find distinct elements common to all rows of a matrix |  |
|  | Find all permuted rows of a given row in a matrix |  |
|  | Change the array into a permutation of numbers from 1 to n |  |
|  | Count pairs with given sum |  |
|  | Count pairs from two sorted arrays whose sum is equal to a given value x |  |
|  | Count pairs from two linked lists whose sum is equal to a given value |  |
|  | Count quadruples from four sorted arrays whose sum is equal to a given value x |  |
|  | Number of subarrays having sum exactly equal to k |  |
|  | Count pairs whose products exist in array |  |
|  | Given two unsorted arrays, find all pairs whose sum is x |  |
|  | Frequency of each element in an unsorted array |  |
|  | Sort elements by frequency |  |
|  | Find pairs in array whose sums already exist in array |  |
|  | Find all pairs (a, b) in an array such that a % b = k |  |
|  | Convert an array to reduced form | Set 1 (Simple and Hashing) |  |
|  | Return maximum occurring character in an input string |  |
|  | Group words with same set of characters |  |
|  | Second most repeated word in a sequence |  |
|  | Smallest element repeated exactly ‘k’ times (not limited to small range) |  |
|  | Numbers with prime frequencies greater than or equal to k |  |
|  | Find k numbers with most occurrences in the given array |  |
|  | Find the first repeating element in an array of integers |  |
|  | Find sum of non-repeating (distinct) elements in an array |  |
|  | Non-Repeating Element |  |
|  | k-th distinct (or non-repeating) element in an array. |  |
|  | Print All Distinct Elements of a given integer array |  |
|  | Only integer with positive value in positive negative value in array |  |
|  | Pairs of Positive Negative values in an array |  |
|  | Find Itinerary from a given list of tickets |  |
|  | Find number of Employees Under every Employee |  |
|  | Count divisible pairs in an array |  |
|  | Check if an array can be divided into pairs whose sum is divisible by k |  |
|  | Longest subarray with sum divisible by k |  |
|  | Subarray with no pair sum divisible by K |  |
|  | Print array elements that are divisible by at-least one other |  |
|  | Find three element from different three arrays such that that a + b + c = sum |  |
|  | Find four elements a, b, c and d in an array such that a+b = c+d |  |
|  | Find the largest subarray with 0 sum |  |
|  | Printing longest Increasing consecutive subsequence |  |
|  | Longest Increasing consecutive subsequence |  |
|  | Longest subsequence such that difference between adjacents is one | Set 2 |  |
|  | Longest Consecutive Subsequence |  |
|  | Largest increasing subsequence of consecutive integers |  |
|  | Count subsets having distinct even numbers |  |
|  | Count distinct elements in every window of size k |  |
|  | Maximum possible sum of a window in an array such that elements of same window in other array are unique |  |
|  | Distributing items when a person cannot take more than two items of same type |  |
|  | Design a data structure that supports insert, delete, search and getRandom in constant time |  |
|  | Check if array contains contiguous integers with duplicates allowed |  |
|  | Length of the largest subarray with contiguous elements |  |
|  | Find if there is a subarray with 0 sum |  |
|  | Print all subarrays with 0 sum |  |
|  | Find subarray with given sum | Set 2 (Handles Negative Numbers) |  |
|  | Find four elements that sum to a given value |  |
|  | Implementing our Own Hash Table with Separate Chaining in Java |  |
|  | Implementing own Hash Table with Open Addressing Linear Probing in C++ |  |
|  | Vertical Sum in a given Binary Tree |  |
|  | Group Shifted String |  |
|  | Minimum insertions to form a palindrome with permutations allowed |  |
|  | Check for Palindrome after every character replacement Query |  |
|  | Maximum length subsequence with difference between adjacent elements as either 0 or 1 | Set 2 |  |
|  | Maximum difference between frequency of two elements such that element having greater frequency is also greater |  |
|  | Difference between highest and least frequencies in an array |  |
|  | Maximum difference between first and last indexes of an element in array |  |
|  | Maximum possible difference of two subsets of an array |  |
|  | Sorting using trivial hash function |  |
|  | Smallest subarray with k distinct numbers |  |
|  | Longest subarray not having more then K distinct elements |  |
|  | Sum of f(a[i], a[j]) over all pairs in an array of n integers |  |
|  | Find number of pairs in an array such that their XOR is 0 |  |
|  | Maximize elements using another array |  |
|  | Clone a Binary Tree with Random Pointers |  |
|  | Largest subarray with equal number of 0s and 1s |  |
|  | Longest subarray having count of 1s one more than count of 0s |  |
|  | Longest subarray having count of 1s one more than count of 0s |  |
|  | Count Substrings with equal number of 0s, 1s and 2s |  |
|  | Print all triplets in sorted array that form AP |  |
|  | All unique triplets that sum up to a given value |  |
|  | Find all triplets with zero sum |  |
|  | Count number of triplets with product equal to given number |  |
|  | Count of index pairs with equal elements in an array |  |
|  | Palindrome Substring Queries |  |
|  | Find smallest range containing elements from k lists |  |
|  | Range Queries for Frequencies of array elements |  |
|  | Elements to be added so that all elements of a range are present in array |  |
|  | Cuckoo Hashing – Worst case O(1) Lookup! |  |
|  | Subarrays with distinct elements |  |
|  | Count subarrays having total distinct elements same as original array |  |
|  | Count subarrays with same even and odd elements |  |
|  | Minimum number of distinct elements after removing m items |  |
|  | Distributing items when a person cannot take more than two items of same type |  |
|  | Maximum consecutive numbers present in an array |  |
|  | Maximum array from two given arrays keeping order same |  |
|  | Maximum number of chocolates to be distributed equally among k students |  |
|  | Find largest d in array such that a + b + c = d |  |
|  | Find Sum of all unique sub-array sum for a given array. |  |
|  | Advantages of BST over Hash Table |  |
|  | Internal Working of HashMap in Java |  |
|  | Hash Table vs STL Map |  |
|  | Recaman’s sequence |  |
|  | C++ program for hashing with chaining |  |
|  | Largest subset whose all elements are Fibonacci numbers |  |
|  | Pairs of Amicable Numbers |  |
|  | Find All Duplicate Subtrees |  |
|  | Hash Table vs STL Map |  |
|  | Find if there is a rectangle in binary matrix with corners as 1 |  |
|  | Maximum area rectangle by picking four sides from array |  |
|  | Root to leaf path with maximum distinct nodes |  |
|  | Game of replacing array elements |  |
|  | Length of longest strict bitonic subsequence |  |
|  | Last seen array element (last appearance is earliest) |  |