

Set and Map

Basic Level Questions:

- Implement a class Map using arrays or vectors, which performs the following operation in $O(1)$ Time Complexity:
 - Insert
 - Delete
 - Find
 - GetRandom (gets you any random value from the ones which are present inside the map currently)
- Find the only repetitive number between 1 to $n-1$
[Follow here: <https://www.geeksforgeeks.org/find-repetitive-element-1-n-1/>]
- Difference between set, multiset, unordered_set, unordered_multiset.
[Follow here: https://www.geeksforgeeks.org/difference-set-multiset-unordered_set-unordered_multiset/]
- Find the only element that appears “b” times
[Follow here: <https://www.geeksforgeeks.org/find-element-appears-b-times/>]
- Remove Duplicate or Repeated words from String
[Follow here: <https://www.geeksforgeeks.org/remove-duplicaterepeated-words-string/>]
- Find total no. of distinct years from a string
[Follow here: <https://www.geeksforgeeks.org/find-total-number-of-distinct-years-from-a-string/>]
- Equally divide into 2 sets such that one set has maximum distinct elements
[Follow here: <https://www.geeksforgeeks.org/equally-divide-into-two-sets-such-that-one-set-has-maximum-distinct-elements/>]
- Check if a pair with given product exist in a Linked List
[Follow here: <https://www.geeksforgeeks.org/check-if-a-pair-with-given-product-exists-in-linked-list/>]

- Check loop in linked list and remove the loop using map
[Follow here: <https://www.geeksforgeeks.org/detect-and-remove-loop-in-a-linked-list/>]
- Count of pairs between 2 arrays such that the sums are distinct
[Follow here: <https://www.geeksforgeeks.org/count-of-pairs-between-two-arrays-such-that-the-sums-are-distinct/>]
- K^{th} missing element in an unsorted array
[Follow here: <https://www.geeksforgeeks.org/k-th-missing-element-in-an-unsorted-array/>]
- Number of Strings that satisfy the given condition in the link below
[Follow here: <https://www.geeksforgeeks.org/number-of-strings-that-satisfy-the-given-condition/>]
- Number of ways to choose an integer such that there are exactly “k” elements greater than it in the given array
[Follow here: <https://www.geeksforgeeks.org/noble-integers-in-an-array-count-of-greater-elements-is-equal-to-value/>]
- Number of unique pairs in an array
[Follow here: <https://www.geeksforgeeks.org/number-of-unique-pairs-in-an-array/>]
- Largest Subset possible for an array satisfying the given condition in the link below:
[Follow here: <https://www.geeksforgeeks.org/largest-sub-set-possible-for-an-array-satisfying-the-given-condition/>]
- Check if the array has an element which is equal to product of remaining elements
[Follow here: <https://www.geeksforgeeks.org/check-if-the-array-has-an-element-which-is-equal-to-product-of-remaining-elements/>]
- Find if array has an element whose value is half of array sum.
[Follow here: <https://www.geeksforgeeks.org/find-if-array-has-an-element-whose-value-is-half-of-array-sum/>]