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/]