```
                                              ┌─────────────────────────────────┐
          ┌──────────────────────────┐        │       Avoid duplicates .        │
          │  Hashing Data Structure  │        │ Search/add/delete/update : O(1) / O(logn) │
          └──────────────────────────┘        └─────────────────────────────────┘
```

Hashing Data Structure

**Avoid duplicates .
Search/add/delete/update : O(1) / O(logn)**

Set

Map

Elements will be sorted in Ascending order.

Elements will be sorted in Ascending order based on Key.

HashSet

LinkedHashSet

TreeSet

HashMap

LinkedHashMap

TreeMap

Insertion Order not maintained

Insertion Order maintained

Insertion Order not maintained

Insertion Order maintained

Remove Duplicates

Array not ordered & unsorted Array

Input : {15,1,12,12,15}
Output : {15,1,12}

Input : {10,10,10}
Output : {10}

Single Number

Given a non-empty array of integers nums, every element appears twice except for one. Find that single one. You must implement a solution with a linear runtime complexity. (*Use Constant Space)

Input: nums = [2,2,1]
Output: 1

Input: nums = [4,1,2,1,2]
Output: 4

Input: nums = [1]
Output: 1