1) Remove and replace elements

Input: nums = [3,2,2,3], remove = 3

Output: 2, nums = [2,2,_,_]

2) Given an integer array nums, return true if any value appears **at least twice** in the array, and return false if every element is distinct.

Input: nums = [1,2,3,1], Output: true

Input: nums = [1,2,3,4], **Output:** false

3) Given an integer num, repeatedly add all its digits until the result has only one digit, and return it.

Input: num = 38, Output: 2

Explanation: The process is 38 --> 3 + 8 --> 11, 11 --> 1 + 1 --> 2

4) Reverse String

Input: s = ["h","e","l","o"], **Output**: ["o","l","l","e","h"]

- 5) Fibonacci Number
- 6) Given a fixed-length integer array arr, duplicate each occurrence of zero, shifting the remaining elements to the right

Input: arr = [1,0,2,3,0,4,5,0] Output: [1,0,0,2,3,0,0,4]

7) Intersection of Two Arrays

Input: nums1 = [1,2,2,1], nums2 = [2,2]

Output: [2]

- 8) Transpose Matrix
- 9) Search word

Input: sentence = "i love eating burger", searchWord = "burg"

Output: 4

10) Minimum Sum of Four Digit Number After Splitting Digits

Input: num = 2932 **Output**: 52

Possible pair: [22, 93], [23, 92], [223, 9] and [2, 329]

The minimum sum can be obtained by the pair [29, 23]: 29 + 23 = 52.

- 11) A password is said to be strong if it satisfies all the following criteria: It has at least 8 characters, one lowercase letter, one uppercase letter, one digit, one special character.
- 12) The cost of stock on each day is given in an array A[] of size N. Find all the days on which you buy and sell the stock so that in between those days your profit is maximum.

Input: N = 7, $A[] = \{100,180,260,310,40,535,695\}$

Output: 4,6

Explanation: If the stock is bought on 5th day the cost is 40 and if the same stock is sold on 7th day then the profit is 655 which is the maximum.

13) Longest Substring Without Repeating Characters Given a string s, find the length of the longest substring without repeating characters.

Input: s = "abcabcbbd"

Output: 3

Explanation: The answer is "abcd", with the length of 3.

14) Given an integer array nums, When stacking an ascending array of non-zero elements, move all 0s to its end. Note that you must do this in-place without making a copy of the array.

Input: nums = [0,1,0,12,3] **Output**: [1,3,12,0,0]

15) Array Wrapper

Input: nums = [[1,2],[3,4]], operation = "Add"

Output: 10

Input: nums = [[23,98],[42,70]], operation = "String"

Output: "[23,98,42,70]"

16) Time Needed to Buy Tickets

There are n people in a line queuing to buy tickets, where the 0th person is at the front of the line and the (n - 1)th person is at the back of the line.

You are given a 0-indexed integer array tickets of length n where the number of tickets that the ith person would like to buy is tickets[i].

Each person takes exactly 1 second to buy a ticket. A person can only buy 1 ticket at a time and has to go back to the end of the line (which happens instantaneously) in order to buy more tickets.

If a person does not have any tickets left to buy, the person will leave the line.

Return the time taken for the person at position k (0-indexed) to finish buying tickets.

Input: tickets = [2,3,2], k = 2

Output: 6

Explanation: - In the first pass, everyone in the line buys a ticket and the line becomes [1, 2, 1]. - In the second pass, everyone in the line buys a ticket and the line becomes [0, 1, 0]. The person at position 2 has successfully bought 2 tickets and it took 3 + 3 = 6 seconds.

17) Remove Trailing Zeros From a String

Input: num = "51230100"

Output: "512301"

Explanation: Integer "51230100" has 2 trailing zeros, we remove them and return

integer "512301".