Data Structure Mistakes

Q : Implement an Algo if str has unique chars , without additional data structure

1. Missed taken edge cased
   1. What if string is empty ? []
   2. What if string has only one Character? [a]

Q: Three Sum

I missed 3 months back and I missed it again today 12th Aug 2025

3 Sum is based on 2 sum and 2 sum sorted array problem .

Mistake

1. Should have thought of sorting first
2. Two pointer approach became obvious
3. Handling of duplicates sets
   1. How to move pointers when you got the set left or right

Q: Container With Most Water

Had two pointer in my mind but which pointer to move on what condition. Left or right

You need to maximize height and distance right ? so move which one is smaller between l and r

Was over thinking about hash map or sorting

Q: Reverse Polish Notation

I didn’t understood RPN notion , instead of taking last two digits from stack I took all from stack.

My division was in correct as it was asked result should be always truncates toward zero, I missed Negative numbers cases and using math.Floor in general .

Q: Create min stack

Could think of using another stack to maintain minimum number pointer with each append of number

Q: Generate Parentheses \*\*

Bold me clean , understood that it going to need some permutation and combination but didn’t reach to solution could think of backtracking is a key.

Need more practice and understanding of backtracking algo

Q: Car fleet

High level logic was correct but code wasn’t accurate

* + Speed calculation should be float
  + Stack top pop() should be next not the one head. As faster car following going to merge and adopt same speed as ahead car

Note: remember when ever order matter think of Stack