Day 12:

1. The Celebrity Problem **[Medium] [Microsoft, Apple, Amazon, Facebook, LinkedIn]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/409/the-celebrity-problem/18/module-5-problem-solving

2. Reverse a stack using recursion **[Medium]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/405/reverse-a-stack-using-recursion/18/module-5-problem-solving

3. Implement two stacks in single array **[easy] [Microsoft, Samsung, Snapdeal]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/895/implement-two-stacks-in-single-array/18/module-5-problem-solving

4. Petrol Filling Problem **[Medium] [Amazon, Hotstar, Google, Microsoft]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/412/petrol-filling-problem/18/module-5-problem-solving

5. Implement stack using Queues **[Easy] [Salesforce, Amazon, Goldman Sachs, Paypal, Microsoft]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/408/implement-stack-using-queues/18/module-5-problem-solving

Practice Problem:

6. In a town, there are n people labelled from 1 to n. There is a rumor that one of these people is secretly the town judge.

   If the town judge exists, then:

   - The town judge trusts nobody.
   - Everybody (except for the town judge) trusts the town judge.
   - There is exactly one person that satisfies properties 1 and 2.

   You are given trust, an array of pairs trust[i] = [a, b] representing that the person labelled a trusts the person labelled b.

   If the town judge exists and can be identified, return the label of the town judge. Otherwise, return -1. **[Easy] [Amazon, Apple, Facebook]**

   Practice link: https://leetcode.com/problems/find-the-town-judge/

7. Implement a first in first out (FIFO) queue using only two stacks. The implemented queue should support all the functions of a normal queue (push, peek, pop, and empty). **[Easy] [Amazon, Microsoft, Apple]**

   Practice link:
   https://leetcode.com/problems/implement-queue-using-stacks/

8. Given a string s of '(' , ')' and lowercase English characters.

   Your task is to remove the minimum number of parentheses ('(' or ')', in any positions) so that the resulting parentheses string is valid and return any valid string. **[Medium] [Facebook, Amazon, Uber, LinkedIn, Goldman Sachs]**

   Formally, a parentheses string is valid if and only if:

- It is the empty string, contains only lowercase characters, or
- It can be written as AB (A concatenated with B), where A and B are valid strings, or
- It can be written as (A), where A is a valid string.

Practice Link:
https://leetcode.com/problems/minimum-remove-to-make-valid-parentheses/