Day 8:

1. Alternative split of single linked lists **[Easy] [Amazon]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/808/alternative-split-of-singly-linked-list/18/module-5-problem-solving

2. Clone linked list with Random Pointer **[Medium] [Amazon, Microsoft, Facebook, Google, Uber]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/400/clone-list-with-random-pointer/18/module-5-problem-solving

3. XOR Linked list [A memory efficient Doubly linked list] **[Medium]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/398/xor-linked-list-a-memory-efficient-doubly-linked-list/18/module-5-problem-solving

4. Add two numbers **[Medium] [Amazon, Google, Apple, Microsoft, Adobe, Facebook, Uber, Yahoo]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/402/add-two-numbers/18/module-5-problem-solving

5. Split a circular linked list into two halves **[Easy] [Yahoo]**

   https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/392/split-a-circular-linked-list-into-two-halves/18/module-5-problem-solving

Practice problems:

6. Given the head of a singly linked list and an integer k, split the linked list into k consecutive linked list parts.

   The length of each part should be as equal as possible: no two parts should have a size differing by more than one. This may lead to some parts being null.

   The parts should be in the order of occurrence in the input list, and parts occurring earlier should always have a size greater than or equal to parts occurring later.

   Return an array of the k parts. **[Medium] [Amazon, Adobe]**

   Practice link: https://leetcode.com/problems/split-linked-list-in-parts/

7. You are given two non-empty linked lists representing two non-negative integers. The digits are stored in reverse order, and each of their nodes contains a single digit. Add the two numbers and return the sum as a linked list.

   You may assume the two numbers do not contain any leading zero, except the number 0 itself. **[Medium] [Amazon, Google, Bloomberg, Apple, Microsoft, Adobe, Facebook, Uber, Yahoo]**

   Practice link: https://leetcode.com/problems/add-two-numbers/

8. A polynomial linked list is a special type of linked list where every node represents a term in a polynomial expression.

   Each node has three attributes:

   - coefficient: an integer representing the number multiplier of the term. The coefficient of the term 9x4 is 9.
   - power: an integer representing the exponent. The power of the term 9x4 is 4.

- next: a pointer to the next node in the list, or null if it is the last node of the list. **[Medium] [Amazon]**

Practice link:
https://leetcode.com/problems/add-two-polynomials-represented-as-linked-lists/

9. You are given an array of k linked-lists lists, each linked-list is sorted in ascending order.

   Merge all the linked-lists into one sorted linked-list and return it.
   [Hard] [Amazon, Facebook, Microsoft, Bloomberg, Apple, Google, Adobe, Oracle]

   Practice link: https://leetcode.com/problems/merge-k-sorted-lists/