

1. Remove duplicates from Linked list
  - a. 2 ways iterative and recursive
  - b. <https://leetcode.com/problems/remove-duplicates-from-sorted-list/submissions/>
  - c. <https://leetcode.com/problems/remove-duplicates-from-sorted-list-ii/>
2. Reverse Linked List
  - a. <https://leetcode.com/problems/reverse-linked-list-ii/solution/>
3. Detect cycle in linked list
  - a. Fast slow pointer concept
  - b. Once they intersect put slow at head and inc both 1 step again when they intersect that is point where cycle is generated.
  - c. <https://leetcode.com/problems/linked-list-cycle-ii/solution/>
  - d. Do see complexity analysis <https://leetcode.com/problems/linked-list-cycle/solution/>
4. Copy list with random pointers
  - a. <https://leetcode.com/problems/copy-list-with-random-pointer/>
    - b. Traverse first list and create second clone list
    - c. Now traverse the first list and store index <address, index> in map1.  
Traverse second list and store <index, address> in map2.
    - d. Now traverse both list together and find random address index using map1 and using map2  
assign its address to random pointer of current node.
  - e. [https://leetcode.com/problems/copy-list-with-random-pointer/discuss/43491/A-solution-with-constant-space-complexity-O\(1\)-and-linear-time-complexity-O\(N\)](https://leetcode.com/problems/copy-list-with-random-pointer/discuss/43491/A-solution-with-constant-space-complexity-O(1)-and-linear-time-complexity-O(N))
    - Iterate the original list and duplicate each node. The duplicate of each node follows its original immediately.
    - Iterate the new list and assign the random pointer for each duplicated node.
    - Restore the original list and extract the duplicated nodes.