LINKED LISTS - SET 1 QUESTIONS

Question 1:

- ❖ **Problem link**:
  https://practice.geeksforgeeks.org/problems/detect-loop-in-linked-list/1
- ❖ **Difficulty level**: Easy
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)

Question 2:

- ❖ **Problem link**: https://leetcode.com/problems/reverse-linked-list/
- ❖ **Difficulty level**: Easy
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)

Question 3:

- ❖ **Problem link**:
  https://practice.geeksforgeeks.org/problems/remove-duplicate-element-from-sorted-linked-list/1
- ❖ **Difficulty level**: Easy
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)

Question 4:

- ❖ **Problemlink**: https://leetcode.com/problems/intersection-of-two-linked-lists/
- ❖ **Difficulty level**: Easy
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)

Question 5:

- ❖ **Problem link**: https://leetcode.com/problems/odd-even-linked-list/
- ❖ **Difficulty level**: Medium
- ❖ **Expected Complexity**:
  - ➢ Time: O(n)
  - ➢ Extra space: O(1)

Question 6:

- ❖ **Problem link**: https://leetcode.com/problems/rotate-list/
- ❖ **Difficulty level**: Medium
- ❖ **Expected Complexity**:
  - ➢ Time: O(n) n=length of linkedlist
  - ➢ Extra space: O(1)

Question 7:

❖ **Problem link**: https://leetcode.com/problems/add-two-numbers/
❖ **Difficulty level**: Medium
❖ **Expected Complexity**:
➢ Time: O(max(m,n))
➢ Extra space: O(max(m,n)) - considering new list

Question 8:

❖ **Problem link**:
https://practice.geeksforgeeks.org/problems/clone-a-linked-list-with-next-and-random-pointer/1
❖ **Difficulty level**: Hard
❖ **Expected Complexity**:
➢ Time: O(n)
➢ Extra space: O(1)

Question 9:

❖ **Problem link**: https://leetcode.com/problems/reverse-nodes-in-k-group/
❖ **Difficulty level**: Hard
❖ **Expected Complexity**:
➢ Time: O(n)
➢ Extra space: O(1)

Note: The solutions of all these questions will be provided on 1st June, 2021