## Algorithms & DS: Assignment-03

- 1. Implement Singly Linear Linked List and perform following operations:
  - i) Sort the linked list elements by using:
    - 1. Selection sort (using pointer)
    - 2. Bubble sort(using pointer)
  - ii) Merge two already sorted linked lists into a third linked list
  - iii) Add node into a linked list in a sorted manner
- 2. Write a recursive function to reverse a singly linear linked list.
- 3. Write a function to find middle node in a linked list.
- 4. Write a function(recursive & non-recursive) to remove duplicate elements from a sorted linked list
- 5. Reverse a linked list in groups of given size

e.g. group size = 3

Input : 10 -> 20 -> 30 -> 40 -> 50 -> 60 -> 70 -> 80 -> 90 -> NULL Output: 30 -> 20 -> 10 -> 60 -> 50 -> 40 -> 90 -> 80 -> 70 -> NULL

6. Implement linked list of employees.