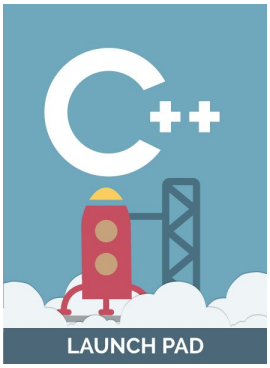

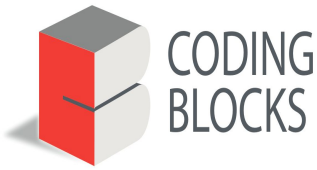

Linked List Assignment

Batch: Launchpad

1. Eliminate duplicates from a sorted linked list
2. Merge two sorted linked lists into one.
3. Find midpoint of a Linked List
4. Implement Bubble Sort, Selection Sort, Insertion Sort and Merge Sort using recursion.
5. Implement Bubble Sort, Selection Sort, Insertion Sort without using recursion.
6. Check if a linked list is a palindrome
7. Reverse Linked List
    a. Using recursion
    b. Without using recursion
8. Arrange elements in a Linked List such that all even numbers are placed after odd numbers.
9. Print a given linked list in reverse order. Tail first. You can't change any pointer in the linked list.
10. Append the last n elements of a linked list to the front.
    e.g. for 1→ 2→ 3 → 4 → 5 → 6→ null and n = 2 return 5→ 6→ 1→ 2→ 3 → 4 → null
11. Implement kReverse(int k) i.e. you reverse first K elements then reverse next K elements and join the linked list and so on.
    3 → 4 → 5 → 2 → 6 → 1 → 9 for kreverse(3) becomes 5 → 4 → 3 → 1 → 6 → 2 → 9 → 1
12. Create your own Doubly Linked List Class and Implement following functions on Doubly Linked List
    a. Insert Element at the end
    b. Insert Element at the beginning
    c. Print elements from start to end using head.

d. Print elements from end to start using tail
e. Find position of element with given data
f. Delete Element at Position K
g. Insert Element at Position K
h. Sort the list using Merge Sort
i. Delete element at end
j. Delete element at beginning