ADS Lab: 18-December-2020

**Topic: Linked List** 

**Practice Session (not to be evaluated)** 

# Assignment 1

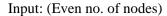
Write a program to pairwise swap the elements of a linked list. Consider integer elements in the list. The program must include the following functionalities:

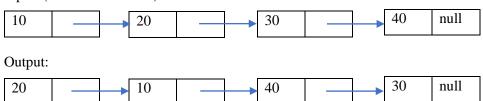
**InsertAtBeginning()** - This function inserts a new node at the beginning of the linked list. Head pointer must be passed as argument to this function. This function helps to create the linked list initially.

**Swap()** - This function pairwise swaps the elements of a linked list, from left to right.

**PrintList()** – This Function prints the entire linked list. Head pointer must be passed as argument to this function.

### For Example,

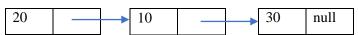




Input: (Odd no. of nodes)



#### Output:



#### Assignment 2

Write a program to check whether a character linked list is a palindrome or not?

**InsertAtBeginning()** - This function inserts a new node at the beginning of the linked list. Head pointer must be passed as argument to this function. This function helps to create the linked list initially.

**CheckPalindrome**()- This function checks, if the linked list is a palindrome or not?

## Palindrome Example:



Not a Palindrome Example:

