# CSE 4304: Data Structures Lab

## Lab 03 Group 1B

## Task 1:

Create a Singly Linked List Class containing the following methods:

- **PushBack(key):** Adds key to the back end of the list.
- **Display():** Displays the whole list from the front to the end.
- **Reverse():** reverses the whole list.
- **PopBack():** deletes the last key in the list.

Note: A Skeleton Code is given for your convenience.

## Task 2:

Write a function that will take a Singly Linked List **X** as input and return a new Singly Linked List that contains the 2nd half of **X**. You can safely imagine the length of **X** will be at least 2.

**Example 1:**

**Input:** X = [1,2,3]
**Output:** [2,3]

**Example 2:**

**Input:** X = [1,2,3,4]
**Output:** [3,4]

## Task 3:

Solve the same problem of Task 2 with a single loop and without any additional array.