

CSE 4304: Data Structures Lab

Lab 03 Group 1A

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.

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.