

CS2040/C

Friday, 14 September 2018

LAB DEMO 03

Single Linked List

- Write a C++ code to create single linked list using insertFirst function
- insertFirst function add a new node at the beginning of the list
- Use a dummy node as head of the list
- Students should do the coding.
- TA will guide to do it

Reverse a List

- Write C++ code to reverse a list
- Reverse the nodes of the list, not the elements
- Don't create a new list
- Students should do the coding and TA will guide them to finish it
- Time complexity should be $O(N)$

List using Template

- Create an integer list using C++ templates
- Perform some add/delete operations
- Print the list
- Reverse the list
- Learn how to use C++ standard library for list

Homework

- Write C++ code for followings:
 - Find the length of a list
 - Find an element in a list
 - insertAtIndex in a list