Name:			
Other students in group work:			

Course:	CS 355	Assignment Number:	3
Semester:	Fall 2012	Assignment Type:	Homework 3

Assignment Description:	Implement LinkedList class as specified, provide appropriate test cases, answer analysis questions. The LinkedList MUST be singly linked.
Assignment Due Date:	Tuesday, September 11, 2012 (precisely at 12:30 p.m.)
To Be Included in Portfolio:	YES

Total Grade: Coding Requirements Grade (60), Test cases Grade (20), Analysis Grade (20)

Implement a complete Linked List class as specified in class. Create test cases to ensure the Linked List works. After completing the work, answer the Analysis questions.

Coding Requirements:

1. _____ Templated Node class complete
    a. ____3 Node Constructors
2. _____Templated Singly-Linked List class complete
    a. ____Linked List constructor
    b. ____Linked List copy constructor
    c. ____Destructor
    d. ____Assignment operator
    e. ____Insert (in order, return true or false, place cursor at new item)
    f. ____Remove (given item to remove, return true or false, place cursor at item following removed item, place at end of list if not found)
    g. ____Search (return address if found from cursor to end of list, return NULL if not found, place cursor at found location or at end of list if not found)
    h. ____Test Print Routine (Print the list separated by tabs, print square brackets around the value at cursor)
    i. ____AtCursor (return data item at the cursor)
    j. ____GoToBeginning (move cursor to beginning of the list, NULL if empty)
    k. ____GoToEnd (move cursor to last item in list, NULL if empty)
    l. ____GoToNext (move cursor to next slot, if on last item, move to first item)
    m. ____GotToPrev (move cursor to the previous slot. If on first item, move to last)
    n. ____ClearList (deallocate space, set head and cursor to NULL, can be called from destructor)
    o. ____EmptyList (return true if empty, false otherwise)

3. _____Use the driver provided to test work.
4. _____const is used wherever appropriate

Test Case Requirements Met:
____ created at least one test case for each method
____ test cases showed methods were correct

Analysis Requirements Met:
____ Clear and correct communication
____ Reasonable/correct answers and justifications

Name:

Course: CS 355

Semester: Fall 2012

Assignment Number: 3

Assignment Type: Homework 3 – Test Cases

Assignment Description: Create Test cases for each of the methods. You should show enough test cases to demonstrate the method works. Be sure to think about special cases such as multiple removes from an empty list. Try to break your code.

Assignment Due Date: Tuesday, September 11, 2012 (precisely at 12:30 p.m.)

To Be Included in Portfolio: YES

Test Case 1

Date/Time:	Expected Result	Actual Result	Action needed (Yes/No)

Test Case 2

Date/Time:	Expected Result	Actual Result	Action needed (Yes/No)

Name:

Course: CS 355

Semester: Fall 2012

Assignment Number: 3

Assignment Type: Homework 3 - Analysis

Assignment Description: Carefully answer the questions below. Be sure you answer in complete sentences
and with correct grammar.

Assignment Due Date: Thursday, September 13, 2012 (precisely at 12:30 p.m.)

To Be Included in Portfolio: YES

Questions will be posted Tuesday afternoon.