

Subject: CSC2040 Class Test 3 Feedback**Date:** Friday, 12 January 2018 at 10:53:37 Greenwich Mean Time**From:** Maire Bowler**To:** Dewei Liu

CSC2040 Data Structures and Algorithms and Programming Languages

Assessed Practical 3 Feedback sheet

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Part 1	
<code>int countStack(T item)</code> defined and implemented in <code>LinkedStack.h</code>	<i>Correct.</i>
items in stack counted either using a pointer, loop and if statement or using a temporary stack and <code>push()</code> and <code>pop()</code> or another acceptable method	<i>Correct.</i>
Testing:	
100 random integers from 0-9 are pushed onto s	<i>Correct.</i>
Returned counts 0-9 total 100	<i>Correct.</i>
Returned counts 10 – 19 total 0	<i>Correct.</i>

Part 2	
1. Code in main function completed as follows: (1) Changed to char	<i>Correct.</i>
(2) Added sentence.addAtEnd(ch);	<i>Correct.</i>
2. <code>void printList()</code> defined and implemented in <code>LinkedList.h</code> . List printed using a pointer and loop or functions of the <code>LinkedList</code> class such as <code>getAt(i)</code> or <code>getNext()</code> or <code>setAtStart()</code> ;	<i>Correct.</i>
function called in main method and prints one character per line including spaces and the final full stop	<i>Correct.</i>
3. <code>int searchList(T item)</code> defined and implemented in <code>LinkedList.h</code> using either: a pointer, a loop and an if statement, or functions of the <code>LinkedList</code> class such as <code>getAt(i)</code> or <code>getNext()</code> or <code>setAtStart()</code> ;	<i>Correct.</i>
Testing:	
A letter that is in the list is found	<i>Correct.</i>
-1 is returned for a letter not in the list	<i>Correct.</i>

Part 3

1. The binary tree shown in Figure 1 is built (test by calling traverse on the tree). Result should be X + Y - 23 * 6	<i>Correct.</i>
The <code>evaluate</code> function contains a test for base case	<i>No base case included to check if tree is null.</i>
The <code>evaluate</code> function contains a test for <code>tree->item</code> is an operator	<i>Correct.</i>
The <code>evaluate</code> function contains a test for <code>tree->item</code> is a variable	
The <code>evaluate</code> function contains a test for <code>tree -> item</code> is a constant	<i>Correct.</i>
Does <i>evaluate</i> produce correct result for 5,3? (-115)	<i>Correct.</i>

Grade Achieved :100