# CS 211 Micro Assignment #1

For this micro assignment, you must implement two Linked List functions. We will use the following example Linked List:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 | 0 | -1 | 5 | 7 |

### getElementAt(index)

This function should return the element (i.e. value) of the Nth item inside the linked list. For example, on the Linked List above, getElementAt(0) should return 2; getElementAt(3) should return 5.

### addElementAt(value, location)

This function should insert a new value at the given location. Note that the location supplied must be within bounds of the LinkedList. For example, we cannot call addElementAt(4, 11) on the above Linked List because 11 is beyond the size of the Linked List.

Here are some examples. If we call addElementAt(0, 1), the above Linked List would now look like:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | 2 | 0 | -1 | 5 | 7 |

If we again call addElementAt(2, 123), we would get:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 123 | 0 | -1 | 5 | 7 |

## Grading

Your submission will be graded based on the following:

1. [7] Your solution does not cause any runtime issues and your file passes all test cases
2. [3] Your code contains good style. For example,
   * You provide meaningful variable names
   * You provide sufficient and meaningful comments
   * Your code is well structured

## Due Date

This assignment must be submitted through Canvas no later than 3:00 PM on Thursday, August 1, 2016.