CSC 340.02 - Fall 2021 - Assignment 04
Due: 11/14/2021 11:55pm
Grade: 150pt - 15%
Extra credit: 50pt - 5%

Guidelines for the assignment submissions:

What to submit?
- One zip/tar.gz file:
  - Name: `<First Name><Last Name>-Assignment-##.zip`
  - Source code should include only files that we create and edit (*.cpp and/or *.h)

How to submit?
  iLearn, Assignment Submission section

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1. Linked list: (150pt)

   Use provided source files, implement the following functions for our linked list within LinkedList.h. You may use aClient.cpp to test your implementation.

   - copy constructor
   - assignment operator
   - operator==
   - operator+
   - replace function

2. AddTwoNumber: (50pt)

   Given two linked lists that represent numbers starting with the most significant digit, add the two numbers together and return a list that represents the sum of the two numbers. You may assume the numbers are non-negative and have no leading zeros.

   Example 1:

   ```
   321 + 432 = 753
     3 -> 2 -> 1 -> null
   + 4 -> 3 -> 2 -> null
   = 7 -> 5 -> 3 -> null
   ```

Example 2:

```
999 + 99 = 1098
  9 -> 9 -> 9 -> null
+ 9 -> 9 -> null
= 1 -> 0 -> 9 -> 8 -> null
```

Add your implementation to the included AddTwoNumber.cpp file.

Grading:
- 50% If only test case 1 is passing
- 100% If both test case 1 and test case 2 are passing