COMP 2160 Programming Practices
Assignment 2

Assignment 1
Due Date: Oct 26th at 11:59 pm

Objectives
- Design by Contract

Question 1

A concordance stores every word found in a document (without duplicates). `concordLLStart.c` implements a concordance but is missing the code for a number of key routines (prototypes provided). You must provide the implementation of a linear linked list (storing strings) via these routines.

Requirements

You **must** apply the principles of Design by Contract to your code. Include all pre and post conditions that must be met by the prototyped routines.

You need to include adequate coding to ensure that the program will not crash if the assertions are turned off. To turn off assertions, you compile with -DNDEBUG (make sure you test with assertions turned off!).

The comment prior to each prototype serves as the specifications for that routine. Your implementation **must** adhere to the specification. For example, the insert simply inserts at the beginning of the list (without performing a search).

The marker will use `relativity.txt` to test your program. We also provided a txt file (`output.txt`) containing the sample output that your program should produce when using `relavitity.txt` as the input. Note that `relativity.txt` and `output.txt` contains some special characters which may not be visible in some text editors.

Don't worry about punctuation when processing the file -- tokenizing based on whitespace is fine.

Hand-in Instructions
Create a directory called `comp2160-a1-<yourlastname>-<yourstudentid>`, and place your `.c` files inside the directory.

Then run the command:

```
handin 2160 a2 comp2160-a2-<yourlastname>-<yourstudentid>
```

- You may *optionally* include a README file in your directory that explains anything unusual about compiling or running your programs.
- You may resubmit your assignment as many times as you want, but **only the latest** submission will be kept.
- We only accept homework submissions via handin. Please **do not** e-mail your homework to the instructor or TAs – it will be ignored.
- You **must** submit an Honesty Declaration (digitally in UMLearn). Assignments submitted without a corresponding Honesty Declaration **will not be graded**.

- We reserve the right to refuse to grade the homework, or to deduct marks if these instructions are not followed.