CS 220 Bryan Clair

## Homework 7 - Due Wednesday, March 31

**Edit.C:** Write a line text editor. Line text editors date back to the days before video terminals, when all of a computers output was via a printer. Unix comes standard with a line text editor called "ed", which you can man if you're interested.

A line text editor holds an entire text document in memory, but always keeps track of one "current" line. The user can then do things to the current line with simple commands.

You need to implement the following commands:

- p Print current line
- List (up to) 20 lines beginning with the current line. Adjust current line to the end of the listing, so repeating l will list the entire file.
- i Insert text following the current line. After typing i, the user can type as many lines of text as they wish, and all will be inserted into the document. A line containing only "." signals the end of insertion.
- d Delete the current line from the document.
- f Move the current line forward one line (and print the new current line).
- b Move the current line back one line (and print the new current line).
- s Move the current line to the first line of the document.
- e Move the current line to the last line of the document.
- q Quit Edit.
- ? Print a list of valid commands

Notice that there is no way to insert before the first line of the file. There are also no load or save commands - include these for extra credit

Use a linked list to hold the lines of the file, with each node holding one (dynamically sized) string. You can use a singly linked list, or a doubly linked list.

There is a working version at ~bryan/cs220/bin/Edit. Edit is similar to Programming Problem 8.5 from the textbook.