

Assignment 1 – Line Editor

Write a simple line editor. Keep the entire text in a linked list, each line in a separate node. Start the program by entering `EDIT <file>`, after which a prompt appears along with the line number. If the letter `I` is entered with a number n following it, then insert the text to be followed before line n . If `I` is not followed by a number, then insert the text before the current line. If `D` is entered with two numbers n and m , one n , or no number following it, then delete lines n through m , line n , or the current line. Do the same with the command `L`, which stands for listing lines. Command `E` signifies exit and saving the text in a file.

Here is an example:

```
$ ./edit test.txt
1>The first line
2>
3>And another line
4>I 3
3>The second line
4>One more line
5>L
1> The first line
2>
3> The second line
4> One more line
5> And another line
6>D 2
5>L
1> The first line
2> The second line
3> One more line
4> And another line
5>E

$ cat test.txt
The first line
The second line
One more line
And another line

$
```