

### **COP 3502 Suggested Program Edits: Linked Lists, Stacks (Week 5 Programs)**

1) Add a function to the string example (string with a linked list) shown in class that takes in a string (pointer to a node) and a character, c, and returns the number of times the character c appears in the word. Here is the function prototype:

```
// Returns the number of times c appears in the string pointed to by str.  
int countChar(node* str, char c);
```

2) To linkedlist1.c, linkedlist2.c or linkedlist3.c add a function that takes in a pointer to the front of a linked list and an integer value add, and then adds that value to each node in the linked list. The function should not make any structural changes to the list.

3) Edit the cd.c example to allow for the deletion of a single CD.

4) Update stack.c so that the stack doubles the size of the internal array when it fills up instead of not allowing another push operation. If you want, also implement shrinking the internal array by 50% if the array is less than 25% full and larger than size 10.

5) Update evalpostfix.c to allow character input of operators and read in all tokens as strings initially, assuming all integers are operands.