Lab 4

Starting with the code in `~lliang/cs261/labs/lab4` You will want to copy it into a directory of your own.

File `supplied.o` contains code that can build, display, and destroy a *circular lineked list*.

For this lab, you will need to write the following two functions in `clist.cpp`, and add function prototypes for them to `clist.h`.

- `void addHead(node *& head, int value)`
  add `value` to the head of the circular linked list

- `void myDisplay(node * head)`
  recursively display the circular linked list. The head data should be displayed twice, once at the beginning of the listing and another time at the end of the listing, e.g. if the circular linked list contains 2 4 6 8, the display should by 2 4 6 8 2. After adding -10 at head, the display should be -10 2 4 6 8 -10

After implementing the two functions, you need to invoke the functions in `main.cpp` to test. Please label your output so that the result is clear. E.g. "After adding: " or "My display:"

Create a makefile for the project and build it. Make sure your clean target doesn't remove supplied.o

Run your program in valgrind and make sure there is no memory leaks assuming the executable file is named **`app`**

```
valgrind --tool=memcheck --leak-check=full ./app
```

For lab4 submission, copy the above member function implementation into lab4.txt, then append the output of the app to the file. ftp lab4.txt to your local machine and upload it to the Desire2Learn dropbox.

```
./app >> lab4.txt
```