

Lab 4

Start with the code in `~lliang/cs260/labs/lab4`. You will want to copy it into a directory of your own.

Copy your linked list code (`linkedlist.h` and `linkedlist.cpp`) from **Lab 3** into your Lab 4 directory. Modify your linked list code so that each node holds an `int` instead of a `char`.

Add two public functions to your linked list class:

- `int sum(void)` *Iteratively* compute and return the sum of the ints contained in the linked list.
- `int sumR(void)` *Recursively* compute and return the sum of the ints contained in the linked list. You will need to add a private function to your linked list class for `sumR` to call. Once you figure out how to do the recursion, you should see why you need the private function.

In `app.cpp`, the function `randomArray` is used to return an array containing random numbers. The function prints the numbers in the array, along with their sum. You can use this information to check the accuracy of your code. The function is provided in object code file `randomArray.o`.

You can build the app using the `make` utility, which is supported by the file named `makefile` provided in the directory.

For lab4 submission, copy the member function `int sumR()` 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
```