

Homework 3 – Destructors

Code for a linked list program is given in the *userid* directory. Add destructors as necessary to make sure the storage used by the linked list is freed. *main.cpp* should not be changed.

Add print statements to the destructors for the *DataBin* and *LinkedListNode* classes. The print statement I added to *DataBin*'s destructor was:

```
std::cout << "deleting DataBin " << *datum << std::endl;
```

and the print statement for *LinkedListNode* was

```
std::cout << "deleting node " << getDatum( ) << ", " << *datum2 << std::endl;
```

My output is shown below. Your output does not need to match exactly, but I need to be able to see that destructors are called as needed.

```
visiting node 9, 19
visiting node 8, 18
visiting node 7, 17
visiting node 6, 16
visiting node 5, 15
visiting node 4, 14
visiting node 3, 13
visiting node 2, 12
visiting node 1, 11
visiting node 0, 10
deleting node 9, 19
deleting node 8, 18
deleting node 7, 17
deleting node 6, 16
deleting node 5, 15
deleting node 4, 14
deleting node 3, 13
deleting node 2, 12
deleting node 1, 11
deleting node 0, 10
deleting DataBin 0
deleting DataBin 1
deleting DataBin 2
deleting DataBin 3
deleting DataBin 4
deleting DataBin 5
deleting DataBin 6
deleting DataBin 7
deleting DataBin 8
deleting DataBin 9
```

What to turn in:

Your code should be in a directory whose name is your *userid*. If your code does not compile on linux with *g++ -std=c++11 *.cpp* include a makefile that will allow it to compile on a linux machine.