Computer Science 1 – Program 2
KnightsMart (Linked Lists) – Grading Criteria
Total: 100 Points

Late Penalty: 10% for up to 24 hours late, and 25% for up to 48 hours late.

Implementation Restrictions (25 pts)

Read from and then print to a file (5 pts)
The three specified linked lists are made (15 pts – 5 pts each)
Appropriate functions to solve problem (5 pts)

Execution Points (60 pts)

10 points for not crashing. (No matter how incomplete the program is, if it doesn't crash it earns these 10 points. If it does crash, no matter how complete the program is it loses these 10 points.)

Remaining 50 points:
The output file is very large. You will NEED to use Winmerge (a file comparison tool) for this program. Open two files in Winmerge: the correct output and the student's output. If Winmerge says the two files are identical, the student gets the full 50 points.

Otherwise, you need to determine what portion of the student's output is wrong. Once Winmerge opens two files, and assuming they are NOT identical, Winmerge shows the # of lines that are different in the lower right corner. Additionally, there are 158,319 lines in the correct output (this includes two blank lines at the end). So if the # of lines different is 17,256, divide that number by 158,319 to get the % of lines different. 17,256/158,319= 10.9% different, or 89.1% the same. So award 89.1% of the 50 remaining execution points, which equates to 45 pts (round UP).

Note:
Unfortunately, this is NOT the best way to grade this program. For the purposes of awarding more points, the input file is divided into 4 days as follows:

1. Day 1 **only** adds items and then prints out the inventory. This simply checks the functionality of the KMProducts list.
   *Give 10 pts for correct output of Day 1.

2. Day 2 includes Sales. However, these sales do NOT result in items running out of stock. This means that the restocking list should never be touched. The purpose of Day 2 is to simply check adding to the KMSales list and printing the results of this list (the day summary).
   *Give 15 points for correct Day 2 output.

3. Day 3 includes Sales that now DO result in running out of stock, resulting in the usage of the restock linked list. Day 3 tests the usage of all three lists.
   *Give 15 pts for correct Day 3 output.

4. Day 4 is simply a randomized mixture of all commands, testing the overall functionality of the program.
   *Give 10 points for correct Day 4 output.

Use whichever method results in awarding the most execution points.

General Rule: BE NICE in giving Execution points!

If the program doesn't compile, do the following:

Try to fix it for 5 minutes. If you can get it to compile, take off points for the errors (you decide how many) and then grade the running program. If you can't, award at most 20 of the execution points by looking at the code.

Style Points (15 pts)
Header comment w/name, program, date – 4 pts
Appropriate variable names – 2 pts
Appropriate use of white space – 2 pts
Appropriate indenting – 2 pts
Comments in code – 5 pts

NOTES:

1. **If the program does not use linked lists, they get NO credit.**

2. If the program does not compile, spend, at most, five minutes to see if you can fix the complication errors. If you can fix them quickly, grade using the above criteria and then deduct 30 points from the grade. If you cannot fix the compilation errors within five minutes, award a maximum of 50 out of a 100, but adjust the score based on what you can tell was done in the code.

3. If the program does compile but crashes, award at most 70 points based on what you see in the code.