

CS 112 Assignment 10b

Submit your finished code to the Dropbox. You will need to pass off the assignments with the TA or tutor during their office hours (their information is in the CS 112 Course Information section of the Table of Contents), or the instructor in class. Follow the formatting guide which is also found in the CS 112 Course Information section.

Read the instructions carefully. Make sure your output matches the example run.

Objectives:

In this assignment you will learn how to do the following:

- Use the shelf to save and retrieve data to and from the hard drive

Program: Shopping List with Save and Load

For this assignment you will be adding two important functions to the shopping list you created in assignment 9b. You must use the shelf to accomplish this task.

Add the following functions to your shopping list:

saveList(): Accepts a shelfFile object and the shoppingList as arguments. Saves the shopping list to the shelf. This function does not need to return any value back to main().

loadList(): Accepts a shelfFile object and the shoppingList as arguments. If the shelfFile already has a shopping list saved to it, then REPLACE the existing shopping list with the one stored in the shelf. If the shelf file does not exist or has never had a shopping list saved to it, print a helpful message to the user but do not modify the existing shopping list. This function will return a shopping list back to main(). It will either be the list loaded from the shelf or the unmodified shopping list.

Example Run

```
1. Add Items
2. Delete Items
3. Show Items
4. Sort Items
5. Load List
6. Save List
7. Exit
Please enter a command: 1

Add an item to the list <item:amount>: oranges:5
"oranges:5" has been added to the list.

Add an item to the list <item:amount>: eggs:12
"eggs:12" has been added to the list.

Add an item to the list <item:amount>: apples:12
"apples:12" has been added to the list.

Add an item to the list <item:amount>:
3 items have been added to your Shopping List.

1. Add Items
2. Delete Items
3. Show Items
4. Sort Items
5. Load List
6. Save List
7. Exit
Please enter a command: 3

-----Shopping List-----
oranges..... 5
eggs..... 12
apples..... 12

1. Add Items
2. Delete Items
3. Show Items
4. Sort Items
5. Load List
6. Save List
7. Exit
Please enter a command: 5
Shopping List not found. Please save the list before trying to open it.

1. Add Items
2. Delete Items
3. Show Items
4. Sort Items
5. Load List
6. Save List
7. Exit
Please enter a command: 3

-----Shopping List-----
oranges..... 5
eggs..... 12
apples..... 12

1. Add Items
2. Delete Items
3. Show Items
```

4. Sort Items
5. Load List
6. Save List
7. Exit

Please enter a command: 6

List saved.

1. Add Items
2. Delete Items
3. Show Items
4. Sort Items
5. Load List
6. Save List
7. Exit

Please enter a command: 4

---Sorted Shopping List---

apples.....	12
eggs.....	12
oranges.....	5

1. Add Items
2. Delete Items
3. Show Items
4. Sort Items
5. Load List
6. Save List
7. Exit

Please enter a command: 5

List loaded.

1. Add Items
2. Delete Items
3. Show Items
4. Sort Items
5. Load List
6. Save List
7. Exit

Please enter a command: 3

-----Shopping List-----

oranges.....	5
eggs.....	12
apples.....	12

1. Add Items
2. Delete Items
3. Show Items
4. Sort Items
5. Load List
6. Save List
7. Exit

Please enter a command: 7

>>>