Objective

The objective of this workshop is to implement a simple text file database

Setup

a. Create a branch from day 1 workshop (shopping cart)

Workshop

Extend day 1 workshop to perform the following. The > is the prompt

```
Welcome to your shopping cart
> login fred
fred, your cart is empty
> add apple
apple added to cart
> add orange, pear
orange added to cart
pear added to cart
> list
1. apple
2. orange
3. pear
> save
Your cart has been saved
> login barney
barney, your cart contains the following items
1. coffee
2. sugar
3. biscuits
> add apple
apple added to cart
> list
1. coffee
2. sugar
3. biscuits
4. apple
> save
Your cart has been saved
> users
The following users are registered
1. fred
2. barney
```

Task 1

Add an option to specify a directory to be used to store user's shopping cart eg.

```
java shoppingcart.jar cartdb
```

where `cartdb` is a directory to be used to store user's cart. If the program is started without specifying the cart database directory, then the program will default to use a directory called `db`. If this directory does not exist, create it.

Task 2

Implement the following additional commands (in addition to those from day 1 workshop)

- `login` - load the specified user's database file from the shopping cart directory. If the database file does not exist, create the file. Eg

  ```
  login fred
  ```

  will load the file `cartdb/fred.db` where `cartdb` is the shopping cart directory

- `save` - save the contents of the cart to the user's shopping cart file eg `cartdb/fred.db`. If you try to save without first login a particular user, you should print a message reminding the user to first login as a particular user.
  The save format will be described below.

- `users` - list all users; this is the listing all the filenames under the shopping cart directory

Create a class called `ShoppingCartDB` to manage the database; the class should contain methods like load a shopping cart, save a shopping cart, etc.

Task 3

You should save the contents of a shopping cart as text file. Assuming that fred has the following items in his cart: apple, orange, pear then his cart will be stored as follows

```
cartdb/fred.db
apple
orange
```

`pear`

Task 4

Write test for `ShoppingCartDB`.

Submission

When you have completed your program, merge the feature branch to the master. Commit and push the master branch to the remote repository.