RouteOne Coding Test

Problem Statement

Write a small java program that will verify purchases from a computer store, totals the costs, and sorts the purchased items by amount. The store's inventory will be represented by a CSV file that should be referenced to determine prices. The solution should take in a list of items and then return a receipt object that includes the total cost of all the items that were passed in as well as a list of the items sorted in descending order by price. Duplicate items can be sent in the input and should appear multiple times and summed in the output. Feel free to handle invalid input as you feel is appropriate, but a Receipt object should not be returned when there's invalid input.

Use the provided StoreRegister class as a start for your program. You should finish implementing the checkoutOrder method to return a Receipt object that meets the requirements. Feel free to create as many classes as you feel appropriate.

The Receipt class consists of two methods. Calling getFormattedTotal should return the sum of all the items' prices that were sent as input and be in the format of $X,XXX.XX (max of two decimal places, comma as the thousands separator, and a prefix of $). Calling getOrderedItems should return a list of item names **in order of most expensive item to least. If items have an identical price, sort in alphabetical (A-Z) order.**

You may also modify StoreRegister however you like as long as it matches these requirements:

- has a checkoutOrder method that returns a Receipt and takes in List<String> as input.
- has a method named loadInventory that takes in a file that will represent the store's inventory.

Feel free to use any libraries you want for testing purposes, but the main code itself should not require any dependencies.

Data Format - CSV

This is only an example to show how the columns are laid out. An actual inventory file will not have a header row. The categories can also be anything, they are not limited to what is shown here.

Component name	Price	Category
PC1033	19.99	RAM
PC800	9.99	RAM
GenericProcessor	399.99	CPU
GenericMotherboard	500	MB
GenericMotherboardV2	250	MB
LCD	199	PERIPHERAL

Skeleton Code

Receipt.java

```
package com.routeone.interview;
import java.util.List;
public interface Receipt {
 /**
  * @return Currency formatted total ($X,XXX.XX) of all items
  */
 public String getFormattedTotal();

 /**
  * @return List of all items in descending order by amount
  */
 public List<String> getOrderedItems();
}
```

StoreRegister.java

```
package com.routeone.interview;
import java.util.List;
import java.io.File;
public class StoreRegister {

 public void loadInventory(File inventoryFile){
 }

 public Receipt checkoutOrder(List<String> items) {
  return null;
 }
}
```

Examples

Example Data:

```
PC1033,19.99,RAM
PC800,9.99,RAM
GenericProcessor,399.99,CPU
GenericMotherboard,500,MB
GenericMotherboardV2,250,MB
LCD,199,PERIPHERAL
Mouse,19.99,PERIPHERAL
```

Input:

{"PC1033","GenericMotherboard","Mouse","LCD"}

Output:

Receipt.getFormattedTotal() = $738.98

Receipt.getOrderedItems() = {"GenericMotherboard","LCD","Mouse","PC1033"}