Homework Assignment 7

You are to continue work on a frequent itemset code. You have been given a driver program as well as interfaces for `Basket` and `Itemset`.

The `Basket` class is similar to what you have had before.

The `Itemset` class should be a wrapper for two `ArrayList`s, one for the list of items in the itemset, and one for the list of baskets that contain that itemset.

You are to write these classes as well as an `ItemsetMaster` class that will control the computation.

I have provided a sample output for you. The naive version proceeds by simply running loops (two loops for sets of size 2, three for size 3, and so forth).

Your code will use a `TreeMap` to keep track of things. Note that the one great advantage of a `TreeMap` is that you can set up a key, perhaps for itemsets of size three with

```
String.format("%5d %5d %5d",item1, item2, item3);
```

and then use the key to store an instance of `Itemset`.

Your initial `TreeMap` should store the itemsets of size 2.

Then in the `generateNextItemsets` method, you should create a new `TreeMap` for the next larger itemsets, and eventually copy the new on top of the old before finishing.