CPAN 222 Lab 9

## Goals

To learn how to use the Java collections.

## Description

A retailer wants to keep track of the products purchased by its customers. For each customer it wants to know what items the customer purchased and how many of each item. Since the tracking will be done every time anything is purchased at any of the sales terminals within the store, it is important that the time taken for the tracking be kept to a minimum so that the overall response time for the sales terminals is not adversely impacted.

Whenever something needs to be accessed quickly, the map is one of the most obvious solutions. In this case, you will rapidly need to find the items purchased by a customer and then rapidly find a specific item and update the count of the purchases of that item. We can assume that customers will have a customer card with a unique identifying number on it. We can also assume that every item purchased will have a unique item number on it, as well as a short description.

Write a program which tracks sales of customers using the fastest techniques possible. The input data will be of the format:

Cust\_id cust\_first\_lastName item\_id num\_purchased item\_description

And an example would look like:

1147 John Smith 9032 1 green wool gloves

The final like of input will have a customer number of zero and a first name of “end”. After all of the data has been read, the program should print out a list of the customers, the items they purchased and the number of items purchased.

## Deliverables

When finished, show the program to your instructor and demonstrate that it works.