Assignment 1

# Purpose of Assignment

To help you to:

1. Understand the concepts cohesion, and how it is used to decompose problem definition into separate components (classes).
2. Understand the concept of coupling and coupling and how it is used to assemble the components (classes) into complete programs.

Consider the following scenario. The establishment called ABC Enterprise requires a Java program to keep record of its inventory of the products that it sells. Each product is identified by its manufacturer, its name, the quantity, and unit price. Note: a manufacturer is characterized by its company’s name and address

In addition to record of the information, the program must also be able to make updates to the quantity and the price as time goes on. That is, when a sale is made, the quantity of that product must be reduced; similarly, when a product is re-ordered, the quantity of that product must be increased. Also, when there is a change in the price of a product, the price must be changed. The change must be interpreted as a replacement of the value. New products may be added to the inventory at any time; also, a product may be removed from the inventory at any time. Maintain a separate list the products that have been deleted from the list of active products.

Your program must be able to produce three kinds of reports, namely:

1. Locate a single product and display its name, price and quantity alone.
2. The inventory report should be structured as follows:

Product Purchase Date Quantity Price Manufacturer State

Telephone 01/20/2013 10 254.99 Motorola FL

Computer 01/06/2013 15 756.99 CBS NY

: : : : : :

: : : : : :

1. A list of the deleted products should be structured as follows:

Product Date Manufacturer

Paper reams 01/20/2013 Morgan Jewelry

: : :

In your design, convince yourself that you need a minimum of four classes, not including the test class – Product, Manufacturer, Address, and Database. You may use the class called GetData.java, **Listing 1.6 (in the textbook)**, for inputting the data. Use a scrollable panes to display your output.