# Objective

Introduce Linked Lists and their implementation in Java.

# Instructions

Implement the necessary classes and methods to satisfy the following requirements.

The Inventory System shall read Sales Data from the supplied CSV (Comma Separated Values) file. The Products sold shall be deducted from the starting Inventory. The starting Inventory shall be read from the supplied CSV file.

The Inventory System shall output the following:

**Sales Data:**  A listing of all Products sold, the number of units sold for each Product, the total revenue received for each Product and the total revenue from the sales of all Products.

**Inventory:** A listing of the change in Inventory: starting number of units for each Product, units sold and the final count of units in the Inventory.

### Extra Credit

**Customer Sales:** A list of Customers in descending order based on the value of their purchases.

**Product Sales:** A list of Products in descending order based on total revenue.

Create the following for the application

1. Identify and document the requirements
2. Draw a UML diagram and develop pseudo-code as necessary for this application
3. Create Test Cases that will demonstrate the requirements
4. Implement the classes in Java. Use Linked Lists for lists of Products, Sales, etc.
5. Write a main program or test class that tests all of the methods created and demonstrates that they are working and meet the requirements.
6. Document your test results