

# Algorithms and Data Structures

*Generics, Functional Interfaces and Recursion for Supermarket Statistics*

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## Assignment-2 ADDITIONAL INFORMATION

Version: October 12<sup>th</sup>, 2021

This document provides some corrections and additional information in response to questions asked by several students. These do not change the requirements of the assignment but may help you to overcome possible issues with your implementation of the solution.



1. The specification of the format of the string representations of Product and Purchase was missing:  
Products shall be displayed with format: barcode/title/price(2 decimals)  
Purchases shall be displayed with format: barcode/product.title/count/revenue.
2. Questions have been asked whether it is allowed that methods in `OrderedArrayList` re-sort automatically as and when appropriate:  
No, `OrderedArrayList` methods themselves may never re-sort automatically because then the client application could lose track of any index positions it is remembering. `OrderedArrayList` should adhere to the sequence specifications of the parent `ArrayList` class. E.g.
  - a) `indexOf(item)` returns the index position of a given object but does not change the sequence
  - b) `add(item)` adds an object at the end at position `size()-1`
  - c) `add(index,item)` inserts an item at the given index position and shifts all existing items from the index position onwards one position up.