Brush-up Project: Grocery List

(in groups of 2 students)

Write a class named <code>GroceryList</code> that represents a list of items to buy from the supermarket, and another class named <code>GroceryItem</code> that represents a particular item in a given quantity (example: four boxes of cookies). A <code>Product</code> class represents the product info.

The GroceryList class should use a list to store the grocery item orders. Question: What type of list should you choose? The GroceryList class should have an add method that will add a given grocery item to the list and a getTotalCost method that will return the total sum cost of all grocery items in the list.

The Product class should have a product name and a price per unit, a constructor with parameters for these properties plus relevant get and set methods.



A GroceryItem class should contain a Product and a quantity, plus a getCost method returning the total cost of the item in its given quantity.

Make a test class with a main method that instantiates the <code>GroceryList</code>, fills it with <code>GroceryItemOrder</code> objects, and prints it. Question: How should it be printed to the console? What class has that responsibility? Do you need <code>toString</code> methods in the classes?

Extra features:

- A) Read a product catalogue from a text file.
- B) Make a new version of GroceryList and change the implementation of the list. (an ArrayList instead of an array or vice versa).