

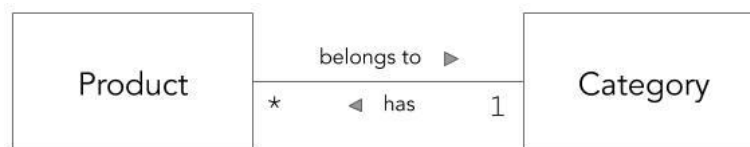
Programs/classes must:

- Include a comment in each class to identify yourself (name / student number)
- Use meaningful variable and method names

Caution: Do not use

- the `break` statement to exit from a loop,
- the `continue` statement to bypass remaining code in a loop,
- arrays.

This assignment requires you to develop 2 classes: Product and Category organized as



The Product class has fields `id`, `name`, `quantity on hand`, and `category`. It must have getters and setters for each field, and a `toString` method.

The Category class has two fields: a category name and a product list. It must have getters and setters, a `toString` method, and a method so a product can be added to the product list.

Develop a third class Search that is used to test your class implementations. There are 3 things Search must do:

1. Create 8 category instances (see below) and keep these in an array list.
2. Create each product instance indicated in Readme.txt. Each product has an `id`, `name`, `quantity on hand`, and a category it belongs to. As each product is created it must be added to the product list for the appropriate category.

When reading Readme.txt we recommend that you read a line

```
String line = f.nextLine();
```

and then with another scanner, get each field e.g.

```
Scanner s = new Scanner(line).useDelimiter(",");
```

```
String category = s.next();
```

3. Prompt the user for a category name, and then display the products (`id`, `name`, `quantity on hand`) for that product. Keep prompting and displaying until the user enters END.

Categories

Beverages

Condiments

Confections

Dairy Products

Grains/Cereals

Meat/Poultry

Produce

Seafood

Copy the following into your Readme.txt file

Beverages,1,Chai,39
Beverages,2,Chang,17
Condiments,3,Aniseed Syrup,13
Condiments,4,Chef Anton's Cajun Seasoning,53
Condiments,5,Chef Anton's Gumbo Mix,0
Condiments,6,Grandma's Boysenberry Spread,120
Produce,7,Uncle Bob's Organic Dried Pears,15
Condiments,8,Northwoods Cranberry Sauce,6
Meat/Poultry,9,Mishi Kobe Niku,29
Seafood,10,Ikura,31
Dairy Products,11,Queso Cabrales,22
Dairy Products,12,Queso Manchego La Pastora,86
Seafood,13,Konbu,24
Produce,14,Tofu,35
Condiments,15,Genen Shouyu,39
Confections,16,Pavlova,29
Meat/Poultry,17,Alice Mutton,0
Seafood,18,Carnarvon Tigers,42
Confections,19,Teatime Chocolate Biscuits,25
Confections,20,Sir Rodney's Marmalade,40
Confections,21,Sir Rodney's Scones,3
Grains/Cereals,22,Gustaf's Knäckebröd,104
Grains/Cereals,23,Tunnbröd,61
Beverages,24,Guaraná Fantástica,20
Confections,25,NuNuCa Nuß-Nougat-Creme,76
Confections,26,Gumbär Gummibärchen,15
Confections,27,Schoggi Schokolade,49
Produce,28,Rössle Sauerkraut,26
Meat/Poultry,29,Thüringer Rostbratwurst,0
Seafood,30,Nord-Ost Matjeshering,10
Dairy Products,31,Gorgonzola Telino,0
Dairy Products,32,Mascarpone Fabioli,9
Dairy Products,33,Geitost,112
Beverages,34,Sasquatch Ale,111
Beverages,35,Steeleye Stout,20
Seafood,36,Inlagd Sill,112
Seafood,37,Gravad lax,11
Beverages,38,Côte de Blaye,17
Beverages,39,Chartreuse verte,69
Seafood,40,Boston Crab Meat,123
Seafood,41,Jack's New England Clam Chowder,85
Grains/Cereals,42,Singaporean Hokkien Fried Mee,26
Beverages,43,Ipoh Coffee,17
Condiments,44,Gula Malacca,27
Seafood,45,Rogede sild,5
Seafood,46,Spegesild,95

Confections,47,Zaanse koeken,36
Confections,48,Chocolade,15
Confections,49,Maxilaku,10
Confections,50,Valkoinen suklaa,65
Produce,51,Manjimup Dried Apples,20
Grains/Cereals,52,Filo Mix,38
Meat/Poultry,53,Perth Pasties,0
Meat/Poultry,54,Tourtière,21
Meat/Poultry,55,Pâté chinois,115
Grains/Cereals,56,Gnocchi di nonna Alice,21
Grains/Cereals,57,Ravioli Angelo,36
Seafood,58,Escargots de Bourgogne,62
Dairy Products,59,Raclette Courdavault,79
Dairy Products,60,Camembert Pierrot,19
Condiments,61,Sirop d'érable,113
Confections,62,Tarte au sucre,17
Condiments,63,Vegie-spread,24
Grains/Cereals,64,Wimmers gute Semmelknödel,22
Condiments,65,Louisiana Fiery Hot Pepper Sauce,76
Condiments,66,Louisiana Hot Spiced Okra,4
Beverages,67,Laughing Lumberjack Lager,52
Confections,68,Scottish Longbreads,6
Dairy Products,69,Gudbrandsdalsost,26
Beverages,70,Outback Lager,15
Dairy Products,71,Flotemysost,26
Dairy Products,72,Mozzarella di Giovanni,14
Seafood,73,Röd Kaviar,101
Produce,74,Longlife Tofu,4
Beverages,75,Rhönbräu Klosterbier,125
Beverages,76,Lakkalikööri,57
Condiments,77,Original Frankfurter grüne Soße,32