Assignment:
The goal of this assignment is to create a class to maintain a collection of your objects. Part A will be needed for future work in this class, so you are strongly encouraged to complete it. Part B can be skipped if you're planning on using other projects to earn your homework √s.

Part A:
Create a new class which will have as a field an ArrayList of the object you created in HW 1. (You can use any version of that class for this assignment.)
Requirements:

- The ArrayList field needs to be declared at the beginning of the class.
- The field needs to be initialized in a default constructor.
- There needs to be a method which can add an object to the collection.
- Add a method to list all the items in the collection.
- Write a method which will only display part of the collection – those that match some search parameter provided when the method is called.

Part B:
This part adds some more complex functionality to the class.

- A method which displays those members of the collection which match a search on two different properties.
- A method which will remove items from the collection – based again on one or more search parameters.

The nature of the search is up to you (*e.g.* for numeric fields you can use equality, less than, greater than or equal to, etc – for String fields you can use .equals() or .contains() or anything else that makes sense for your object).

Optionally, you should create a populate method which adds several anonymous objects to your collection. This will make it easier to test your other methods. The presence, absences, or correctness of this method will not affect your grade.

Related Learning Outcomes:

Write a class to manipulate a collection of objects of another class
C 4.1: Write statements to declare an ArrayList
C 4.2: Write statements to initialize an ArrayList
J 4.1: Write a for-each loop which processes each element of a collection
J 4.3: Write a for-each loop which processes some elements of a collection
J 4.4: Write an iterator that removes an item from a collection

Grading Rubric:

M – all items listed above are present. Making use of proper programming conventions (naming, dating, etc) could earn an E

Due Date/Time: as indicated on Canvas