

## Credit where credit is due:

These problems are adapted from Ilkka Kokkarinen's excellent "CCPS 209 Computer Science II Labs" problem set. Credit for these problems goes to him, and the full set of 99 can be found at his Github page:

<https://github.com/ikokkari>

## Extending An Existing Class

In the third lab, you get to practice using **class inheritance** to create your own custom subclass versions of existing classes in Java with new functionality that did not exist in the original superclass. Your task in this lab is to create a custom subclass `AccessCountArrayList<E>` that extends the good old workhorse `ArrayList<E>` from the Java Collection Framework. This subclass should maintain one data field **int count** to keep track of how many times the methods `get` and `set` have been called. (One counter keeps the simultaneous count for both of these methods together.)

You should override the inherited `get` and `set` methods so that both of these methods first increment the access counter, and only then call the superclass version of that same method (use the prefix `super` in the method call to make this happen), returning whatever result that superclass version returned. In addition to these overridden methods inherited from the superclass, your class should define the following two brand new methods:

**public int getAccessCount()**

Returns the count of how many times the `get` and `set` methods have been called for this object.

**public void resetCount()**

Resets the access count field of this object back to zero.