Documents in this folder:

* Solutions
  + GenericTest.java
  + Person.java
  + BetterPerson.java
  + GenericPerson.java
  + Stringable.java
* Scaffold
  + GenericTest.java
  + Person.java
  + Stringable.java

Demonstration:

This week is all about generics; the lab tasks are a pretty good summary of ArrayList, so we’re going to look some other ways to use generics. The files for this week are in two parts: the Scaffold directory contains the (mostly empty) template, and the Solutions directory is the completed code.

To start with, GenericTest.java just uses a generic method to print a bunch of arrays. The problem is that Person does not implement toString, so we get some weird output; implement toString, and then we’re going to improve it.

A better approach is to force the method to only accept classes that are known to have toString (or equivalent in our case). Implement the second version of the printArray method, with the generic type parameter extending Stringable (provided for you). Then implement the BetterPerson class, extending Stringable, and showing how our new print method works with BetterPerson, but not Person.

Finally, we’ll show to make generic classes. Implement the GenericPerson class, or modify the BetterPerson class to have a generic attribute. Make sure to highlight the fact that the attribute can be any type, but we’re assuming it has a toString method. Create some examples with different data types in main, and we’re done.

Workshop Notes:

Nothing to report.