Topics for Test 2

Inheritance and Polymorphism

* Parent/super and derived/sub classes
* How Inheritance works; what is inherited
* Why get and set are necessary for data members of super classes
* How polymorphism works; how syntax is set up

Wrapper classes

InstanceOf

Abstract classes

* Abstract Keyword
* What is an abstract method
* What is an abstract class? What does it mean?

Interface

* IS-A connector
* Difference between Inheritance and Interface
* Keyword interface
* Similar to multiple inheritance
* What does interface do?

Lists

* ArrayList vs LinkedList
* Important methods, .add, .get, .remove, .set, etc.
* Syntax for using these, ex: ArrayList <Computers> inventory;
* Which is better for which tasks and why

Maps

* What are maps?
* Key and value
* How do you use maps in a class? What is the syntax
* Important methods, .get, .put, .remove, etc.
* Using Iterator and how Iterator works
* HashMap vs LinkedHashMap vs TreeMap

Input and Output

* File Directories
* 3 types of file streams: text, data (binary), and object
  + Know objects needed for each
* Serializable and using it correctly

Recursion

* What is recursion?
* What does it require? Base Case and Recursion case
* Know how to identify an infinite loop
* Know how a recursion case works

Searching and Sorting

* NOT ON THIS TEST