List of Topics 2

Before Objects
Two dimensional arrays
Sorting algorithms

Basic Object Concepts
Class
Object
instantiation
Constructor
  Default no-arg constructor
  Use of ‘this’ (in two ways actually)
Instance variables and their scope
Static variables (also called class variables) and static method
Visibility: public, protected, default (package), private
Reference variables for objects (declaring an object versus creating an object)
Arrays of objects
Dot operator for invoking an object's method
immutable objects and classes
Wrapper classes

Advanced Concepts
Inheritance
Polymorphism – dynamic binding
Exceptions
  Throwing an exception
  Try/catch/finally blocks to handle exceptions
defining your own exception
Abstract classes and methods
Interfaces – defining, implementing, using
Shallow vs. Deep copy
Use of ArrayLists