Announcements

- PS 8 will be ready soon
- Try to get some help from me and tutors
- Reading assignment for this slide set: my notes

Comparing objects, Sorting, and Searching

The **Object** class in Java

- See `java.lang.Object` on the Java Documentation website, the following two methods in particular
  - `toString` method
  - `equals` method
- Any Java class we create inherits **Object** as its parent class
  - `toString` and `equals` are inherited among other methods
  - If we don’t create our own `toString` in our class, the class inherits `toString` in **Object**; similarly for `equals`.
- See `Loan.java` and `UseLoan.java`

Equality testing on objects

- Two ways
  - Using `==`
  - Using `equals` method
- See `Student.java` and `Equality.java`
Comparing objects for . . .

- Comparing objects for greater than, less than, or is equal to test
- Use a compareTo method
- See Building.java and UseBuilding.java

Sorting and searching

- Sorting is one of the most frequently used algorithms in computing
- We will see two sorting algorithms
  - Selection sort
  - Insertion sort
- Sorting an array of integers using these algorithms
  - See Sort.java
- Sorting an array of objects using these algorithms
  - See SortObjects.java

What next?

- Inheritance