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// BC CS211 mid-term exam,  
// W.P. Iverson, instructor
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NAME: \_\_\_\_\_

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// Below is a working program. You should have sufficient experience  
// now to think like the computer, and know what output is produced:
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import java.util.*;  
  
public static void main(String[] args) {  
    Integer threes = new Integer(333);  
    Integer another = new Integer(333);  
  
    System.out.println(threes == another);           // 1.  
    System.out.println(threes.compareTo(42));        // 2.  
  
    System.out.println(threes.compareTo(another));    // 3.  
    System.out.println(another.compareTo(threes));    // 4.  
  
    // Attached is a method that works on ArrayLists  
    ArrayList<Integer> exam = new ArrayList<Integer>();  
    System.out.println(exam.size());                 // 5.  
    mystery42(exam);  
    System.out.println(exam.toString());             // 6.  
    exam.clear(); exam.add(11); exam.add(22); exam.add(22);  
    System.out.println(exam.size());                 // 7.  
    mystery42(exam);  
    System.out.println(exam);                       // 8.  
  
    // Next we'll show understanding of Set operations:  
    Set<Integer> object = new TreeSet<Integer>();  
    System.out.println(object.size());               // 9.  
    mystery43(object);  
    System.out.println(object);                     // 10.  
    object.clear(); object.add(11); object.add(22); object.add(22);  
    System.out.println(object.size());               // 11.  
    mystery43(object);  
    System.out.println(object);                     // 12.  
  
    // And some operations on a Map:  
    Map<Integer,String> thing = new TreeMap<Integer,String>();  
    System.out.println(thing.size());                // 13.  
    mystery44(thing);  
    System.out.println(thing);                      // 14.  
    thing.clear(); thing.put(11,"11"); thing.put(22,"22"); thing.put(22,"22");  
    System.out.println(thing.size());                // 15.  
    mystery44(thing);  
    System.out.println(thing);                      // 16.
```