Section Handout 5

Problem One: Selection Sort

Write a program that reads a list of integers from the user, then prints them out in sorted order. The user should be able to enter values until they enter a sentinel value (say, -1), at which point the program prints the numbers back in sorted order.

To sort the numbers, you should use the selection sort algorithm, which works as follows:

- Find the smallest number in the list.
- Remove that number from the list and display it.
- Repeat until no numbers remain.

Here is a sample run of the program:
Problem Two: Method Testing
Below are a series of method signatures, along with a brief description of what the method should do. For each method, describe what specific tests you could run to confirm that the methods work correctly.

```java
/**
 * Returns the largest value from a list of numbers. If the list is empty, returns -1 as a sentinel.
 * @param list The list in question.
 * @return The maximum value, or -1 if the list is empty.
 */
private int maxValue(ArrayList<Integer> list)

/**
 * Given a list of strings, returns whether all of those strings are distinct (i.e. no two strings are the same).
 * @param list The list in question.
 * @return Whether all of the strings are distinct.
 */
private boolean areAllDistinct(ArrayList<String> list)
```