CMSC 131 Quiz 6 Worksheet

The next quiz for the course will be on Mon, Nov 23. The following list provides additional information about the quiz.

- Do not post any solutions to this worksheet in Piazza. That represents an academic integrity violation.
- The quiz will be a written quiz (no computer).
- The quiz will be in lab session.
- Closed book, closed notes quiz.
- Answers must be neat and legible.
- Quiz instructions can be found at http://www.cs.umd.edu/~nelson/classes/utilities/examRules.html.
- Make sure you know your section number and your TA’s name.
- You must take your quiz in your assigned lab/discussion session and not show up to a random discussion session. We will not grade quizzes taken in the incorrect session.
- Do not discuss anything about the quiz in Piazza after you take the quiz (in particular the day of the quiz).

The following exercises cover the material to be included in this quiz. Solutions to these exercises will not be provided, but you are welcome to discuss your solutions with the TAs or instructor during office hours. It is recommended that you try these exercises on paper first (without using the computer).

Exercises

1. What is a wrapper class? Provide two examples.
2. What is a ragged array?
3. Name one advantage of an ArrayList over an array?
4. Define a method that returns the sum of the elements of a two dimensional array of integers.
5. Define a method that returns the first row of a two-dimensional array of strings that has a string with the name “John”.
6. Define a method call linearize that takes a two-dimensional array of strings and returns a one-dimensional array of strings with all the elements in the two-dimensional array.
7. What is an interface?
8. Define an interface named “Toy” that has two methods: play() and info(). Define a class that implements the interface. Feel free to associate any functionality with the play() and info() methods.