CSE 174 – Fall 2013
PROGRAM #1: 20 points – Due Sunday, September 1, by 11:59 p.m.

Outcomes:

- Write programs in a contemporary programming language.
- Read, understand, and communicate technical information.
- Write code and documentation that emphasizes readability and uses specified style guidelines.

Scoring:

At a bare minimum, the program you submit must have the assigned source code, and your source code must run without crashing.

- If you submit source code, but it does not run, your score for this assignment will be zero.

	Full credit	No credit or Partial credit
Create a picture of a "real world" object using Processing (10 points)	You created a scene that contains all of the required shapes, and multiple colors, and it resembles a real-world object	You entered the code, and it runs, but it contains errors or lacks some of the requirements (missing shapes, only 2 or 3 colors).
Format and comment source code (4 points)	You used Processing's Auto-Format tool to keep code indented. You used blank lines to separate your code into "paragraphs". You used programmer comments to explain what each part does.	You did not follow some or all of the formatting requirements as specified.
Learn something new (3 points, or more)	You used some shape or feature other than what appears in chapter 1, 2, or the "2D Primitives" section of the Processing reference page.	You did not go beyond the basic programming features
Submit journal entry (3 points)	You made the specified journal entry, answering all of the given questions.	You did not use the journal to answer all of the specified questions

Part 1: Get your environment set up

- **If you are working on your own computer...**The Wiki at the course website, https://my.csi.miamioh.edu has "How to" guides for setting up Processing.
- **If you are working in the lab in room 16 of Benton...**Processing is located under the Start Menu -> EAS Applications -> Programming Languages.

Part 2: Read chapters 1 and 2 of the text

Read your text and work through the included exercises. Get comfortable with the basics of the language. Be ready to answer questions as part of a short quiz in class on Wednesday, August 31.

Part 3: Get to know some other resources

- Explore the "Processing Reference" at http://processing.org/reference/.
- Read over the CSE department's style guidelines, from the link at http://mycse.miamioh.edu.

As you program, you may get stuck...something might go wrong. Use the online forum to ask a question. If you e-mail me your question, I am likely to say "good question...go post it on the forum so everyone can see your question."

Part 4: Make something

Think of some real world object or scene that you could model using arcs, ellipses, lines, points, quadrilaterals, rectangles, and triangles. Plan it on paper, and then create that object or scene in Processing.

- Use at least 5 of the 7 "2D Primitive" shapes on http://processing.org/reference
- Use at least 4 different colors.
- Use at least one other Processing command (something outside of the "2D Primitives" that is different from any that you've learned. The more different, the better...challenge yourself!

SAVE OFTEN. SAVE OFTEN. SAVE OFTEN. SAVE OFTEN. SAVE OFTEN. SAVE OFTEN.

Part 5: Make your code "highly readable"

Think in terms of paragraphs. Group code together that belongs together. Use a blank line to separate one paragraph from the next. Use brief comments to explain the main idea of each paragraph. Following standards from your reading regarding comments, blank lines, etc. as well as standards from the CSE department's style guidelines, clean up your code to make it very readable. Indentation, blank lines, and comments mean a lot in terms of readability. **Processing has a built-in "Auto Format" tool that will clean up your code for you. Take advantage of it!**

Part 6: Upload your code

Upload your final .pde file to the course website at http://my.csi.miamioh.edu (you can find directions on the course wiki).

If you decide to make changes later, you need to "Archive" your turn-in and then resubmit the new version (no need to change the filename...archiving puts the old one away).

Part 7: Use the online journal

Whenever you submit an assignment, you should document your work at the course website at https://my.csi.miamioh.edu. For this assignment, make an entry where you answer all of the following:

- Roughly how much time did you spend on this assignment?
- What were the most challenging parts of the assignment? What were the best parts?
- How are you feeling about CSE 174 so far?

Your instructor is your audience for this writing. An informal, conversational tone is fine, but please write complete thoughts and sentences.