COP 2006 Assignment #5 – Fall 2015

Write a Java program to solve a sequence of quadratic equations of the form:

\[ a \times x^2 + b \times x + c = 0 \]

following requirements of Assignment #4 and all previous assignments, if applicable, with the following two additional requirements:

13) Add a function named `curves()`, with an array of roots passed as a parameter, which would draw a graph with two curves on it: one showing values of the first roots of all quadratic equations, and the second one showing values of the second roots of the equations.

- The roots should appear on the graph in the order the equations are solved.
- If the roots do not exist, the points for this equation should be still present on the curve but not marked, that is, if for example roots for equations 4 and 6 do exist, but do not exist for equation 5, then all points, 4, 5, 6, should be present on the abscissa (x-axis), but only values of roots for equations 4 and 6 should be present on the graph curve.
- The suggested method for drawing a graph is the usage of javagently library, as discussed in class. But if someone want to use a different graphical library, this is allowed as well.

14) All user methods, `readCoeffs()`, etc., including `curves()`, shall be stored in a class in the package named `myPKG`, which should be imported to the main program just like other libraries.

• Form of submission: email an attachment with two source code files (unzipped), one with main() and the other with the methods, to zalewski@fgcu.edu
• Deadline: November 14 (Saturday), Midnight
• Grade: Max 10 pts (tardiness: 2 pts per day)