Write an object-oriented Java program (without using global variables, that is, class variables) that reads an integer number entered in the command line:

> java  program_name  input_number

and depending on the value of this number does the following:

1) If the number entered is positive, the program shall solve (running in a loop) as many quadratic equations of the following form, as input_number tells:
   \[ a \times x^2 + b \times x + c = 0 \]
   where coefficients \(a\), \(b\) and \(c\) are double values, entered from the keyboard as per Requirement #3.

2) If the input number entered in the command line is not positive, the program shall print the following message to the screen and exit:

   A positive value shall be entered in the command line.

3) The values of coefficients \(a\), \(b\) and \(c\), as listed in Requirement #1, shall be read from the keyboard and returned by a separate method named \texttt{readCoeff()}\), such that the operator shall be prompted by the program with the following message on the screen, each time a new coefficient is needed:

   Please enter coefficient of a quadratic equation:

4) When the program solves the quadratic equation (calculates the roots), as per Requirement #1, the following output shall be displayed on the screen by a separate method named \texttt{outResults()}:

   Quadratic equation with the following coefficients:
   \[ a: \text{<value>} ; b: \text{<value>} ; c: \text{<value>} \]
   has the following roots: \text{<root1>} and \text{<root2>}

5) In case the quadratic equation for given coefficients does not have roots, the program shall use method \texttt{outResults()} to print the following message, and continue operation for the next set of coefficients:

   Quadratic equation with the following coefficients:
   \[ a: \text{<value>} ; b: \text{<value>} ; c: \text{<value>} \]
   does not have roots.

- **Form of submission:** email an attachment (unzipped) with the source code to zalewski@fgcu.edu
- **Deadline:** October 1 (Thursday), Midnight
- **Grade:** Max 10 pts (tardiness: 2 pts per day)