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**Introduction**

The program consists of the following two classes:

1. **Calculator** represents the application itself. Its purpose is to encapsulate the instantiation of the JOptionPane objects and the calculation of the greatest double number entered by the user.
   1. A select widget is used to display valid double numbers from 0.01 to 100.00 (formatting to two decimal places is achieved using a DecimalFormat object). The numbers are produced by looping from 1 to 10,000 and dividing each number by 100.
   2. The double numbers are stored in an ArrayList data structure. Initially I intended to use a straightforward array data structure, but a bug in the *getGreatestInputValue* method led to the change (I needed a way to get the number of non-empty elements in the data structure, as opposed to its actual size of 2).
   3. A wrapper class could have been included around the entered double numbers (for instance, User) but I removed it during debugging the aforementioned bug. Ultimately it feels more natural to me that the Calculator object owns the data structure.
   4. Using recursion in the *getInputFromUser* method along with the null/*isEmpty* check required returning a String value from the method, and later converting the String values into double value parameters for the *setInputValue* method calls.
2. **Main** runs the program by creating an instance of the Calculator class and calling the *run* method.