

```
1 /**
2  * Natural Number Calculator application.
3  *
4  * This is a very simple "RPN" (Reverse Polish Notation) calculator. There are
5  * two operands, both of which always have natural number values. Direct entry
6  * of a number is always to the bottom operand in the display. The "Clear"
7  * button sets the bottom operand to 0. The "Swap" button exchanges the values
8  * of the two operands. The "Enter" button copies the value of the bottom
9  * operand to the top operand. Each operator button operates on the two operands
10 * in their natural order as displayed in the interface (e.g., "-" subtracts the
11 * bottom operand from the top operand), and each replaces the bottom operand
12 * with the result of the operator and the top operand with 0; except that
13 * division replaces the bottom operand with the quotient and the top operand
14 * with the remainder.
15 *
16 * @author Bruce W. Weide
17 *
18 */
19 public final class NaturalNumberCalculator {
20
21     /**
22      * No argument private constructor so this utility class cannot be
23      * instantiated.
24      */
25     private NaturalNumberCalculator() {
26     }
27
28     /**
29      * Main program that sets up main application window and starts user
30      * interaction.
31      *
32      * @param args
33      *         command-line arguments; not used
34      */
35     public static void main(String[] args) {
36         /**
37          * Create instances of the model, view, and controller objects;
38          * controller needs to know about model and view, and view needs to know
39          * about controller
40          */
41         NNCalcModel model = new NNCalcModel1();
42         NNCalcView view = new NNCalcView1();
43         NNCalcController controller = new NNCalcController1(model, view);
44
45         view.registerObserver(controller);
46     }
47
48 }
49
```