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1 // Example 2.1 WhileDemo.java
2 //
3 //
4 // Copyright 2003 Bill Campbell and Ethan Bolker
5
6 // A class for illustrating the while-statement. A typical run:
7 //
8 // %> java WhileDemo
9 // Enter integer (a negative to stop): 4
10 // 4 is non-negative.
11 // Enter integer (a negative to stop): -3
12 //
13 // Enter integer (a negative to stop): 5
14 // 5 is non-negative.
15 // Enter integer (a negative to stop): -2
16 // Finally, enter integer you want to count to: 12
17 // Count 1 to 12: 1 2 3 4 5 6 7 8 9 10 11 12
18
19 public class WhileDemo
20 {
21     public static void main( String[] args )
22     {
23         Terminal terminal = new Terminal(); // for input and output
24
25         // while tests a condition
26         int n = terminal.readInt("Enter integer (a negative to stop): ");
27         while ( n >= 0 ) {
28             terminal.println( n + " is non-negative." );
29             n = terminal.readInt("Enter integer (a negative to stop): ");
30         }
31         terminal.println();
32
33         // while tests a boolean variable
34         boolean more = true;
35         while ( more ) {
36             n = terminal.readInt("Enter integer (a negative to stop): ");
37             if ( n >= 0 ) {
38                 terminal.println( n + " is non-negative." );
39             }
40             else {
41                 more = false;
42             }
43         }
44
45         // while used for counting
46         n = terminal.
47         readInt("Finally, enter integer you want to count to: ");
48         int i = 1;
49         terminal.print( "Count 1 to " + n + ":\n" );
50         while ( i <= n ) {
51             terminal.print( " " + i );
52             i++; // same as i = i + 1
53         }
54         terminal.println();
55     }
56 }
```