

```

1 // foj/7/bank/class Month
2 //
3 //
4 // Copyright 2003 Bill Campbell and Ethan Bolker
5
6 import java.io.*;
7 import java.util.Calendar;
8
9 /**
10  * The Month class implements an object that keeps
11  * track of the month of the year.
12  *
13  * @version 7
14  */
15
16 public class Month
17 {
18     private static final String[] monthName =
19         {"Jan", "Feb", "Mar", "Apr", "May", "Jun",
20          "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"};
21
22     private int month;
23     private int year;
24
25     /**
26      * Month constructor constructs a Month object
27      * initialized to the current month and year.
28      */
29
30     public Month()
31     {
32         Calendar rightNow = Calendar.getInstance();
33         month = rightNow.get( Calendar.MONTH );
34         year = rightNow.get( Calendar.YEAR );
35     }
36
37     /**
38      * Advance to next month.
39      */
40
41     public void next()
42     {
43         month = (month + 1) % 12;
44         if (month == 0) {
45             year++;
46         }
47     }
48
49     /**
50      * How a Month is displayed as a String -
51      * for example, "Jan, 2003".
52      *
53      * @return String representation of the month.
54      */
55     public String toString()

```

```

57     {
58         return monthName[month] + ", " + year;
59     }
60
61     /**
62      * For unit testing.
63      */
64
65     public static void main( String[] args )
66     {
67         Month m = new Month();
68         for (int i=0; i < 14; i++, m.next()) {
69             System.out.println(m);
70         }
71         for (int i=0; i < 35; i++, m.next()) { // no loop body
72             System.out.println( "three years later: " + m );
73             for (int i=0; i < 120; i++, m.next()) { // no loop body
74                 System.out.println( "ten years later: " + m );
75             }
76         }

```