```
 1: // $Id: monthcal.java,v 1.4 2013-03-28 16:52:19-07 - - $
 2: //
 3: // SYNOPSIS
 4: //    monthcal month year
 5: //
 6: // DESCRIPTION
 7: //    Prints out one month of the Gregorian calendar using the
 8: //    Julian changeover date of 1752-09-14 used by the British
 9: //    Empire and her colonies.
10: //
11: // NOTES
12: //    Month is represented inside GregorianCalendar zero-based,
13: //    meaning their numbers are 0..11, not 1..12 as is needed
14: //    for output.
15: //
16:
17: import java.util.GregorianCalendar;
18: import static java.lang.System.*;
19: import static java.util.Calendar.*;
20:
21: class monthcal {
22:    static final GregorianCalendar CHANGE_DATE
23:                 = new GregorianCalendar (1752, SEPTEMBER, 14);
24:
25:    //
26:    // main()
27:    // Create a Gregorian calendar with British Empire changeover.
28:    // Iterate over the month/year from args, printing the days of
29:    // the week.
30:    //
31:    public static void main (String[] args) {
32:       GregorianCalendar cal = new GregorianCalendar();
33:       cal.setGregorianChange (CHANGE_DATE.getTime());
34:
35:       int calmonth;
36:       int calyear;
37:       if (args.length > 0) {
38:          // Use the month specified and fix off-by-one problem.
39:          calmonth = Integer.parseInt (args[0]) - 1;
40:          calyear  = Integer.parseInt (args[1]);
41:       }else {
42:          // Use the current month.
43:          calmonth = cal.get (GregorianCalendar.MONTH);
44:          calyear  = cal.get (GregorianCalendar.YEAR);
45:       }
46:       cal.set (calyear, calmonth, 1);
47:
48:       while (calmonth == cal.get (GregorianCalendar.MONTH)) {
49:          int calday = cal.get (GregorianCalendar.DAY_OF_MONTH);
50:          int weekday = cal.get (GregorianCalendar.DAY_OF_WEEK);
51:          out.printf ("%04d/%02d/%02d is weekday %d.%n",
52:                      calyear, calmonth + 1, calday, weekday);
53:          cal.add (GregorianCalendar.DAY_OF_MONTH, 1);
54:       }
55:    }
56:
57: }
58:
```

```
59: //TEST// monthcal >monthcal.out
60: //TEST// mkpspdf monthcal.ps monthcal.java* monthcal.out
61:
```

```
1: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: starting monthcal.java
2: monthcal.java:
3:      $Id: monthcal.java,v 1.4 2013-03-28 16:52:19-07 - - $
4: javac -Xlint monthcal.java
5: jar cfm monthcal Manifest monthcal.class
6: chmod +x monthcal
7: rm -f monthcal.class
8: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: finished monthcal.java
```

```
  1: 2015/01/01 is weekday 5.
  2: 2015/01/02 is weekday 6.
  3: 2015/01/03 is weekday 7.
  4: 2015/01/04 is weekday 1.
  5: 2015/01/05 is weekday 2.
  6: 2015/01/06 is weekday 3.
  7: 2015/01/07 is weekday 4.
  8: 2015/01/08 is weekday 5.
  9: 2015/01/09 is weekday 6.
 10: 2015/01/10 is weekday 7.
 11: 2015/01/11 is weekday 1.
 12: 2015/01/12 is weekday 2.
 13: 2015/01/13 is weekday 3.
 14: 2015/01/14 is weekday 4.
 15: 2015/01/15 is weekday 5.
 16: 2015/01/16 is weekday 6.
 17: 2015/01/17 is weekday 7.
 18: 2015/01/18 is weekday 1.
 19: 2015/01/19 is weekday 2.
 20: 2015/01/20 is weekday 3.
 21: 2015/01/21 is weekday 4.
 22: 2015/01/22 is weekday 5.
 23: 2015/01/23 is weekday 6.
 24: 2015/01/24 is weekday 7.
 25: 2015/01/25 is weekday 1.
 26: 2015/01/26 is weekday 2.
 27: 2015/01/27 is weekday 3.
 28: 2015/01/28 is weekday 4.
 29: 2015/01/29 is weekday 5.
 30: 2015/01/30 is weekday 6.
 31: 2015/01/31 is weekday 7.
```