

```
1  public class Month {
2      private int name;
3      private int days;
4
5      public Month(int name){
6          setMonth(name);
7      }
8
9      public int getName(){
10         return (name);
11     }
12
13     public int getDays(){
14         return (days);
15     }
16
17     public void setMonth(int name){
18         this.name = name;
19         if (name == 9 || name == 4 || name == 6 || name == 11)
20             days = 30;
21         else if(name == 2)
22             days = 28;
23         else
24             days = 31;
25     }
26
27     public String toString(){
28         return(this.convertToString() + " has " + days + " days in it.");
29     }
30
31     private String convertToString(){
32         switch (name) {
33             case 1: return "January";
34             case 2: return "February";
35             case 3: return "March";
36             case 4: return "April";
37             case 5: return "May";
38             case 6: return "June";
39             case 7: return "July";
40             case 8: return "August";
41             case 9: return "September";
42             case 10: return "October";
43             case 11: return "November";
44             case 12: return "December";
45
46             default: return "Invalid month";
47         }
48     }
49 }
```

```
50 public class SchoolMonth extends Month {
51     private boolean holidays; //are there any holidays in this month?
52     private char semester; //'F'all, 'S'pring, s'U'mmer
53
54     public SchoolMonth(int name){
55         super(name);
56         setSemester();
57         setHolidays();
58     }
59
60     public boolean containsHolidays(){
61         return holidays;
62     }
63
64     public void setSemester(){
65         if (getName() > 7) // Aug - Dec
66             semester = 'F';
67         else if (getName() > 4) // May - July
68             semester = 'U';
69         else
70             semester = 'S'; // Jan - April
71     }
72
73     public void setHolidays(){
74         if (getName() != 3 && getName() !=4 && getName() != 6 && getName() !=8)
75             holidays = true;
76     }
77
78     public String toString(){
79         return (super.toString() + " It is in the " + semester + "
80             semester.");
81     }
82
83 }
```