

Display 6.4 Class with Private Members (part 2 of 3)

```
13      //Postcondition: The date is set to the first day of the given month.

14      int getMonthNumber( ); //Returns 1 for January, 2 for February, etc.
15      int getDay( );
16  private:
17      int month;
18      int day;
19  };

20  int main( )
21  {
22      DayOfYear today, bachBirthday;
23      cout << "Enter today's date:\n";
24      today.input( );
25      cout << "Today's date is ";
26      today.output( );
27      cout << endl;

28      bachBirthday.set(3, 21);
29      cout << "J. S. Bach's birthday is ";
30      bachBirthday.output( );
31      cout << endl;
32      if ( today.getMonthNumber( ) == bachBirthday.getMonthNumber( ) &&
33          today.getDay( ) == bachBirthday.getDay( ) )
34          cout << "Happy Birthday Johann Sebastian!\n";
35      else
36          cout << "Happy Unbirthday Johann Sebastian!\n";
37
38      return 0;
39  }

40  //Uses iostream and cstdlib:
41  void DayOfYear::set(int newMonth, int newDay)
42  {
43      if ((newMonth >= 1) && (newMonth <= 12))
44          month = newMonth;
45      else
46      {
47          cout << "Illegal month value! Program aborted.\n";
48          exit(1);
49      }
50      if ((newDay >= 1) && (newDay <= 31))
51          day = newDay;
52      else
53      {
54          cout << "Illegal day value! Program aborted.\n";
55          exit(1);
56      }
57  }
```

Private members

Note that the function name set is overloaded. You can overload a member function just like you can overload any other function.

Mutator function