```
1    class Peterson implements Lock {
2      private boolean[] flag = new boolean[2];
3      private int victim;
4      public void lock() {
5        int i = ThreadID.get(); // either 0 or 1
6        int j = 1-i;
7        flag[i] = true;
8        victim = i;
9        while (flag[j] && victim == i) {}; // spin
10     }
11   }
```

FIGURE 7.1 The Peterson class (Chapter 2): the order of reads and writes in lines 7–9 is crucial to providing mutual exclusion.