

```
1 class Livelock implements Lock {
2     // thread-local index, 0 or 1
3     private boolean[] flag = new boolean[2];
4     public void lock() {
5         int i = ThreadID.get();
6         int j = 1 - i;
7         flag[i] = true;
8         while (flag[j]) {
9             flag[i] = false;
10            while (flag[j]) {}           // wait
11            flag[i] = true;
12        }
13    }
14    public void unlock() {
15        int i = ThreadID.get();
16        flag[i] = false;
17    }
18 }
```

FIGURE 2.7 Pseudocode for a lock algorithm that may livelock.