

```
23  private class ReadLock implements Lock {
24      public void lock() {
25          lock.lock();
26          try {
27              while (writer)
28                  condition.await();
29              readAcquires++;
30          } finally {
31              lock.unlock();
32          }
33      }
34      public void unlock() {
35          lock.lock();
36          try {
37              readReleases++;
38              if (readAcquires == readReleases)
39                  condition.signalAll();
40          } finally {
41              lock.unlock();
42          }
43      }
44  }
45  private class WriteLock implements Lock {
46      public void lock() {
47          lock.lock();
48          try {
49              while (writer)
50                  condition.await();
51              writer = true;
52              while (readAcquires != readReleases)
53                  condition.await();
54          } finally {
55              lock.unlock();
56          }
57      }
58      public void unlock() {
59          lock.lock();
60          try {
61              writer = false;
62              condition.signalAll();
63          } finally {
64              lock.unlock();
65          }
66      }
67  }
```

FIGURE 8.10 The FifoReadWriteLock class: inner read and write lock classes.