

```

1  public class SynchronousQueue<T> {
2      T item = null;
3      boolean enqueueing;
4      Lock lock;
5      Condition condition;
6      ...
7      public void enq(T value) {
8          lock.lock();
9          try {
10             while (enqueueing)
11                 condition.await();
12             enqueueing = true;
13             item = value;
14             condition.signalAll();
15             while (item != null)
16                 condition.await();
17             enqueueing = false;
18             condition.signalAll();
19         } finally {
20             lock.unlock();
21         }
22     }
23     public T deq() {
24         lock.lock();
25         try {
26             while (item == null)
27                 condition.await();
28             T t = item;
29             item = null;
30             condition.signalAll();
31             return t;
32         } finally {
33             lock.unlock();
34         }
35     }
36 }

```

FIGURE 10.18 The SynchronousQueue<T> class.