

```

1  public boolean add(T item) {
2      int key = item.hashCode();
3      while (true) {
4          Node pred = head;
5          Node curr = pred.next;
6          while (curr.key < key) {
7              pred = curr; curr = curr.next;
8          }
9          pred.lock();
10         try {
11             curr.lock();
12             try {
13                 if (validate(pred, curr)) {
14                     if (curr.key == key) {
15                         return false;
16                     } else {
17                         Node node = new Node(item);
18                         node.next = curr;
19                         pred.next = node;
20                         return true;
21                     }
22                 }
23             } finally {
24                 curr.unlock();
25             }
26         } finally {
27             pred.unlock();
28         }
29     }
30 }

```

FIGURE 9.11 The OptimisticList class: the add() method traverses the list ignoring locks, acquires locks, and validates before adding the new node.