```
34    public boolean add(T x) {
35      T y = null;
36      acquire(x);
37      int h0 = hash0(x) % capacity, h1 = hash1(x) % capacity;
38      int i = -1, h = -1;
39      boolean mustResize = false;
40      try {
41        if (present(x)) return false;
42        List<T> set0 = table[0][h0];
43        List<T> set1 = table[1][h1];
44        if (set0.size() < THRESHOLD) {
45          set0.add(x); return true;
46        } else if (set1.size() < THRESHOLD) {
47          set1.add(x); return true;
48        } else if (set0.size() < PROBE_SIZE) {
49          set0.add(x); i = 0; h = h0;
50        } else if (set1.size() < PROBE_SIZE) {
51          set1.add(x); i = 1; h = h1;
52        } else {
53          mustResize = true;
54        }
55      } finally {
56        release(x);
57      }
58      if (mustResize) {
59        resize(); add(x);
60      } else if (!relocate(i, h)) {
61        resize();
62      }
63      return true; // x must have been present
64    }
```

FIGURE 13.26 PhasedCuckooHashSet<T> class: the add() method.

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