

```
1 void tle_increment_two(int *i1, std::mutex *m1, int *i2, std::mutex *m2) {
2     int* ptrs[] = ((uintptr_t)i1) > ((uintptr_t)i2) ? {i2, i1} : {i1, i2};
3     std::mutex* locks[] = ((uintptr_t)i1) > ((uintptr_t)i2) ? {m2, m1} : {m1, m2};
4
5     tle_acquire(locks[0]);
6     if (locks[0] != locks[1])
7         tle_acquire(locks[1]);
8     *ptrs[0]++;
9     *ptrs[1]++;
10    tle_release(locks[0]);
11    if (locks[0] != locks[1])
12        tle_release(locks[1]);
13 }
14 void tm_increment_two(int *i1, int *i2) {
15     tm {
16         *i1++;
17         *i2++;
18     }
19 }
```

FIGURE 20.8 Code to atomically increment two counters with TLE (top) and TM (bottom).