

```

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).