

Musab Mehadi

[mmehadi@jacobs-university.de](mailto:mmehadi@jacobs-university.de)

1.

Case 1 is faster than the other cases and Case 2 is faster than Case 3.

In case 1 there is only one lock and unlock. I.e not included in any of the for loops.

In case 2 the lock and unlock is only embedded in the outer for loop.

In case 3 the lock and unlock is embedded in both outer and inner loops.

From this we can observe that locking and unlocking mutexes takes a lot of execution time.

There was something wrong with my timer function and it is displaying all 0.000 ms for all cases. But visually we can see that Case 1 is printed for swiftly than the other cases and Case 2 is also fast to a lesser extent. While case 3 takes the longest time.