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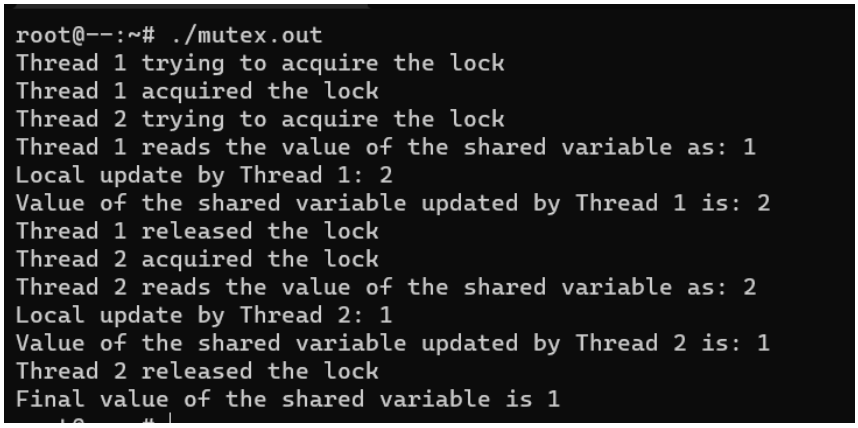
IUP CS B – Computer Networking

Activity 9.2 – Process Synchronization and Deadlock

Compile and run the code list above. Screenshot the result and answer the following questions.



a. What is the final value of the shared variable?
The final result of shared value is 1

b. Which thread obtains the lock first?
Thread 1 obtained the lock first and will increment it by 1 (1+1 = 2)

c. If the other thread first obtains the lock, what will be the final value of the shared variable?
In the case that thread 2 obtain the lock first and decrement it by 1 (1 – 1 = 0) the final result will still be the same. Since after the thread 2 released the lock and gave it to thread 1, the thread 1 will then read the initial value as 0 and increment it by 1 (0 + 1 = 1)