Thread 1 | **ThreadLock** | **Thread 2**

Synchronized (resource 1) {

   sleep (100)

   Sync (resource 2) {

   }

}

Sync (res 2) {

   sleep(100)

   Sync (res 1) {

   }

}

lock.

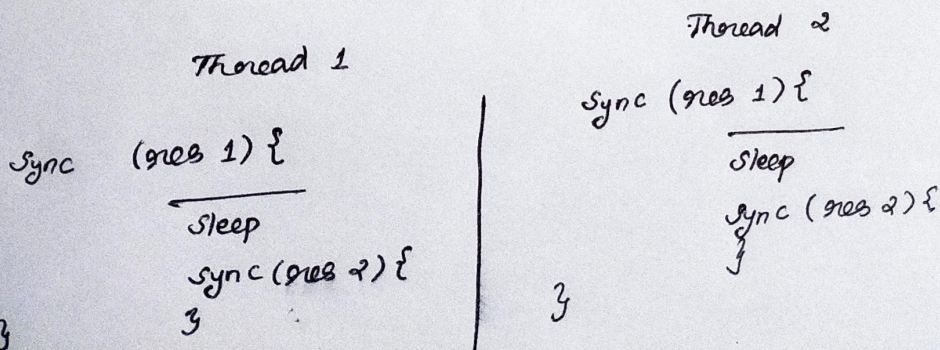**why?** ★ res 1 locked by Thread 1

↓

Thread 1 sleep

↓

Enter thread 2 (res 2 locked by Thread 2)

↓

sleep (return to Thread 1)

↓

resource 2 — lock aquired by thread 2
   (Thread 1 — dead end)

resource 1 — by thread 1
   (Thread 2 — dead end).

Solve:

Thread 1 | **Thread 2**

Sync (res 1) {

   sleep

   sync (res 2) {

   }

}

Sync (res 1) {

   sleep

   sync (res 2) {

   }

}

Now: Thread 1 acquires res 1

↓

Sleep

↓

Thread 2 — Can't acquire res 1

↓

Sleep 100m's over: Thread 1 acquires res 2

↓

Job done — unlock resources

↓

Thread 2 — acquires res 1

↓

Sleep

↓

Th 2 — acquires res 2

↓

Job done!