

## Lab 10 exercise 03

Each of the two threads manage a single bank account.

For each bank account it is specified:

- the owner thread
- the current balance
- a semaphore to lock the balance value management

Each thread reads its balance. To ensure the balance is not going to change while its value is managed the corresponding mutex is locked.

After retrieving the balance, the thread sleeps for a random amount of time before locking the other mutex and performing the transaction (and unlocking all the mutexes).

There is a possibility of deadlock because a thread may try to lock the other one's mutex after the other thread locked its own mutex to read the balance.

In this scenario, each thread is waiting for the other one to perform the transaction.