

Worksheet: Use of trylock()

Rewrite the transferFunds() method below to use j.u.c. locks with calls to tryLock instead of synchronized.

Your goal is to write a correct implementation that never deadlocks, unlike the buggy version below (which can deadlock).

Assume that each Account object already contains a reference to a ReentrantLock object dedicated to that object e.g., from.lock() returns the lock for the from object. Sketch your answer using pseudocode.

```
1. public void transferFunds (Account from, Account to, int amount) {
2.     synchronized (from) {
3.         synchronized (to) {
4.             from.subtractFromBalance (amount);
5.             to.addToBalance (amount);
6.         }
7.     }
8. }
```

