

(c) Where would you put the lock to prevent concurrency problems?

Solution:

Put a lock around each method because each method will either read or write from the water stack.

(d) Due to budget cuts, we also share one singular cup now, and having learned our lesson from last time, we decide put a new lock every time someone tries to access this cup. What problems could this cause?

Solution:

Deadlock (if we synchronize both the cup and the jug)