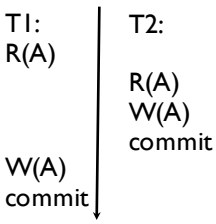
Examples of unserializable schedules (solution: strict 2PL)

☆ Lost update

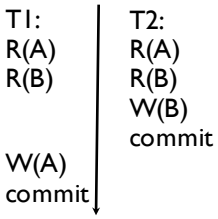
(e.g., two deposits on same account)



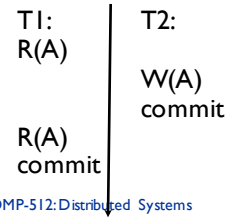
☆ Write Skew

(e.g., concurrent withdrawals from two accounts whose sum must be above 0$)

Check that sum is > 0 then withdraw From one



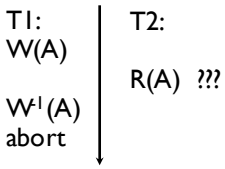
☆ Unrepeatable read



Problems with uncommitted writes (solution: long X-locks)

❑ Dirty read:

☆ what if the write aborts?



❑ Dirty write

☆ Usually, whenever a transactions updates an object, it logs its before image and reinstalls this before image when it aborts

☆ What if another transaction has already overwritten the object?