

Second approach: Timestamp Ordering

- Assign each transaction an id
- Transaction id determines its position in **serialization order**
- Ensure that for a transaction T, both are true:
 1. T's **write** to object O allowed only if **transactions that have read or written O had lower ids than T.**
 2. T's **read** to object O is allowed only if **O was last written by a transaction with a lower id than T.**
- Implemented by maintaining read and write timestamps for the object
- If rule violated, abort!
 - Can we do better?