

# Ordering Events in a Distributed System

- To order events across processes, trying to sync clocks is one approach
- What if we instead assigned timestamps to events that were not *absolute* time?
- As long as these timestamps obey *causality*, that would work

If an event A causally happens before another event B, then  $\text{timestamp}(A) < \text{timestamp}(B)$

Humans use causality all the time

E.g., I enter a house only after I unlock it

E.g., You receive a letter only after I send it