

# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

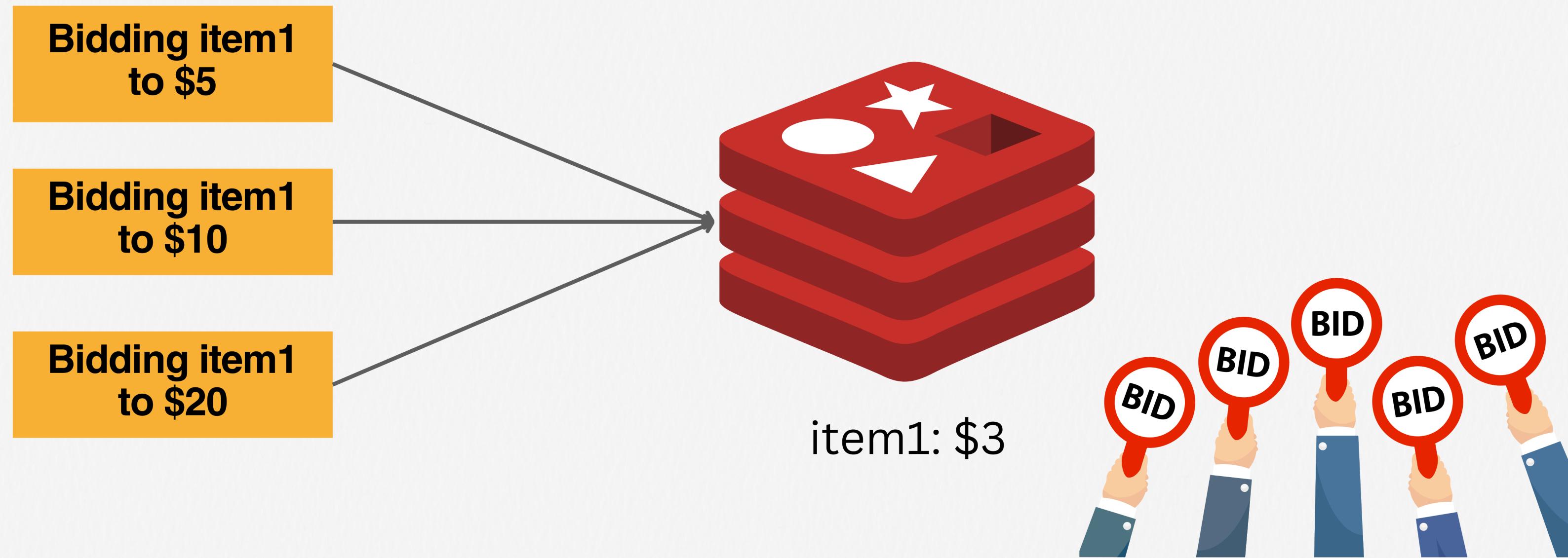
- In Redis, you can solve concurrency problems with locks by **using the SET command with the NX (not exist) option** to set a lock key only if it doesn't already exist.
- This operation is **atomic**, meaning it will succeed only if the lock key doesn't exist at the moment of setting it.



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

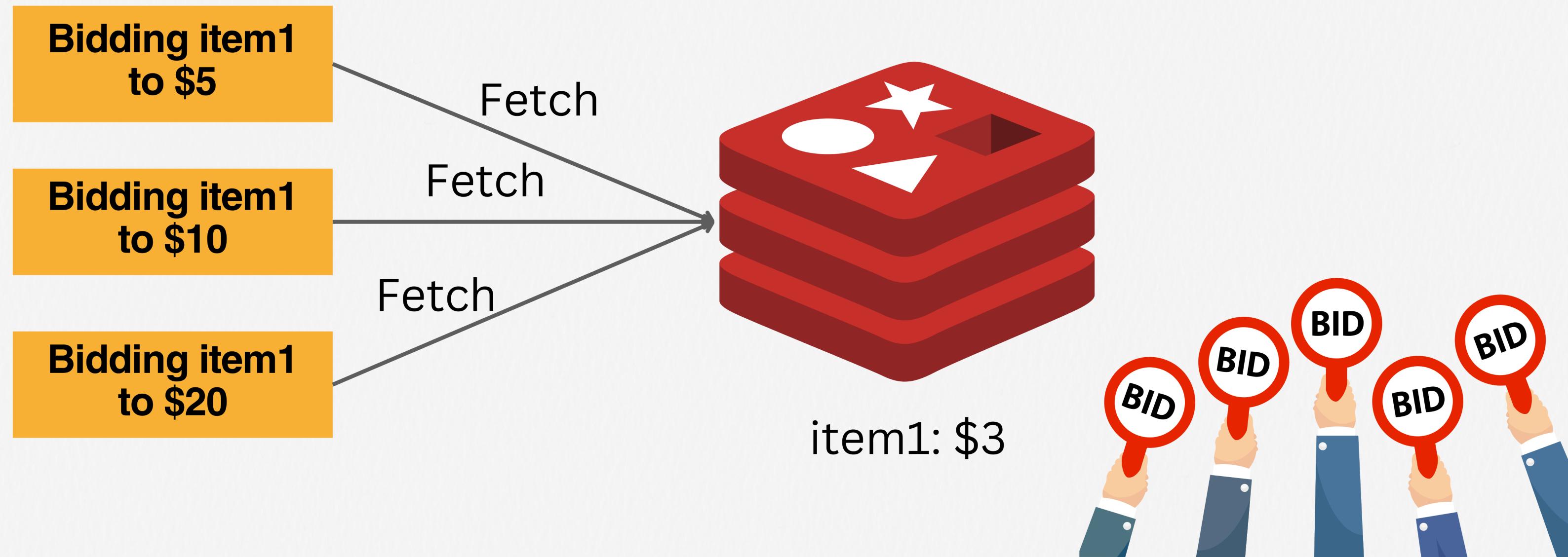
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

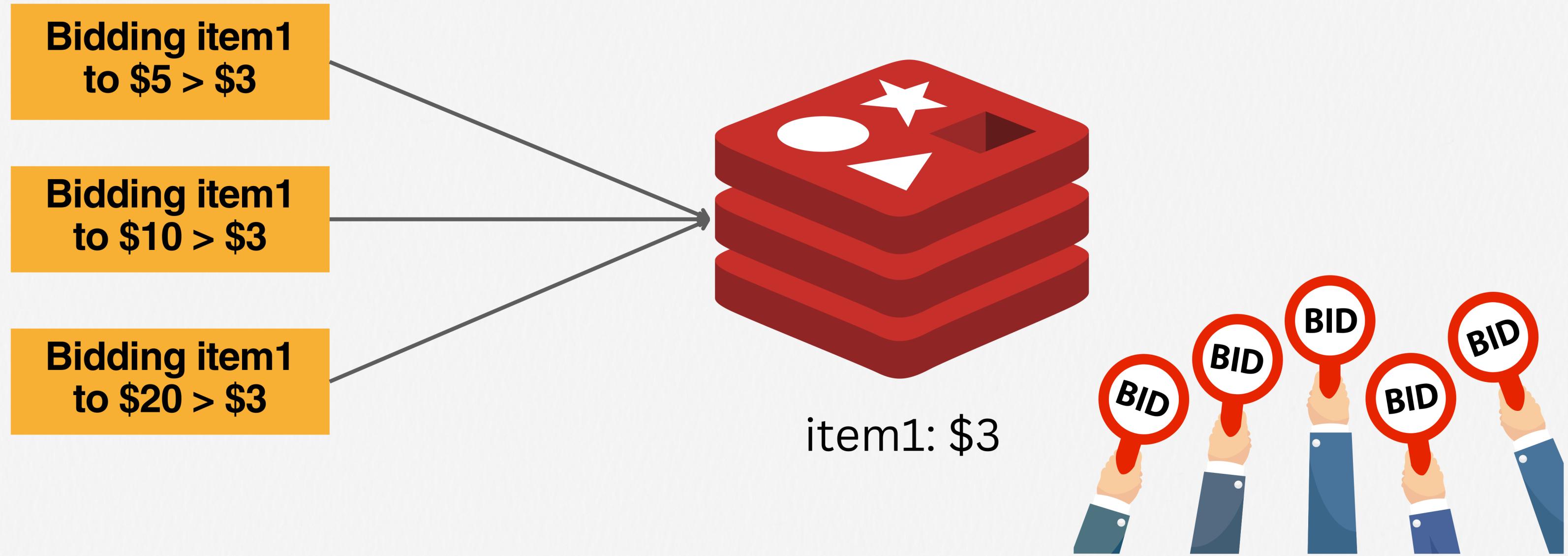
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

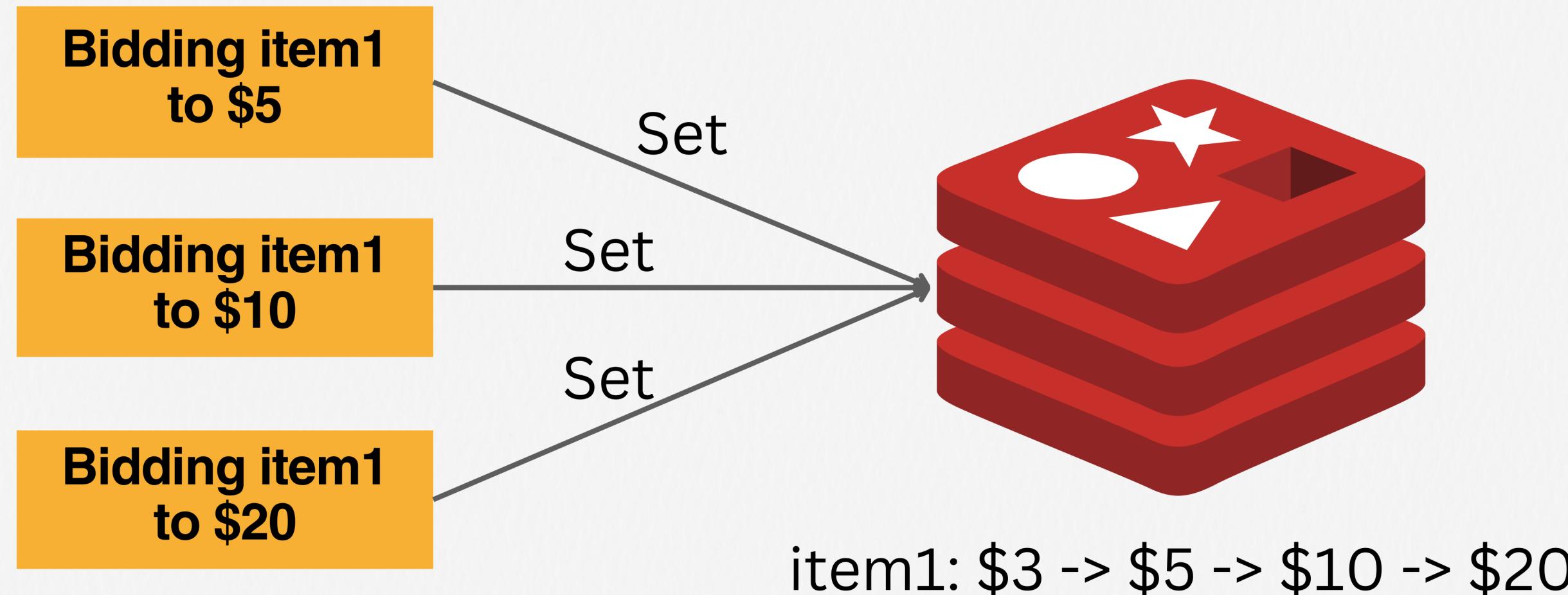
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

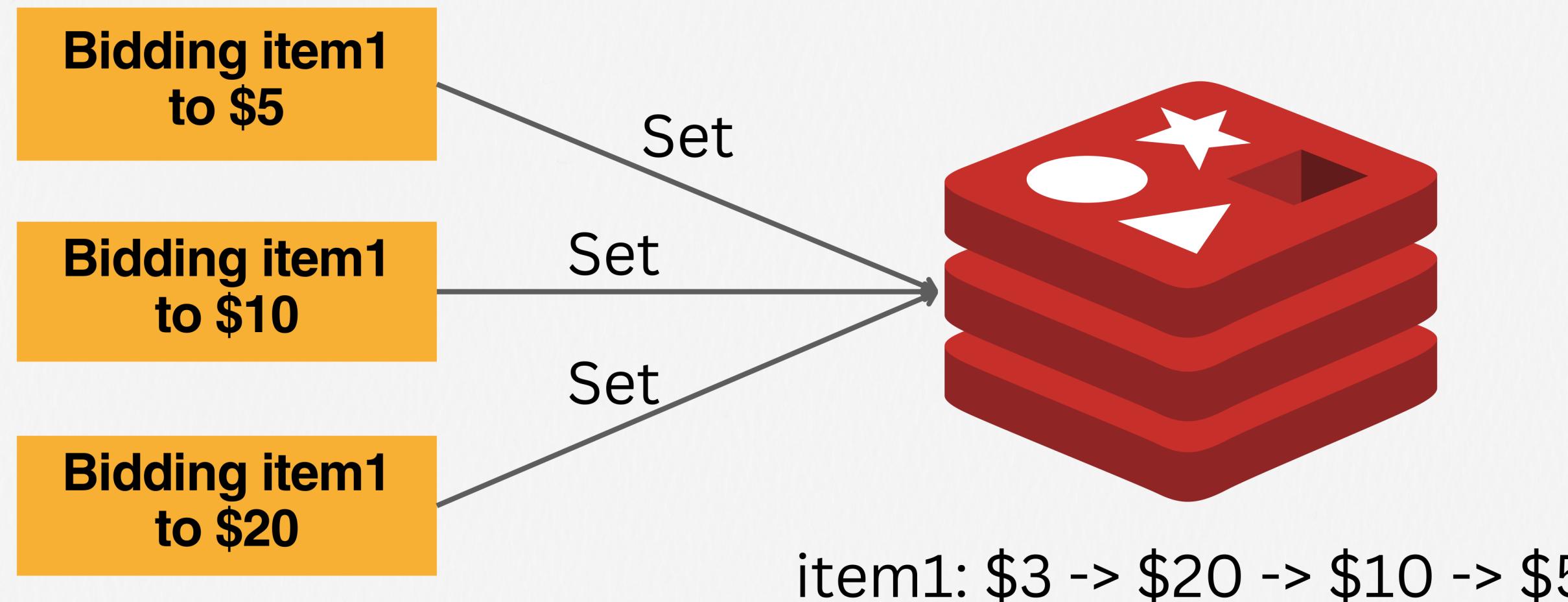
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

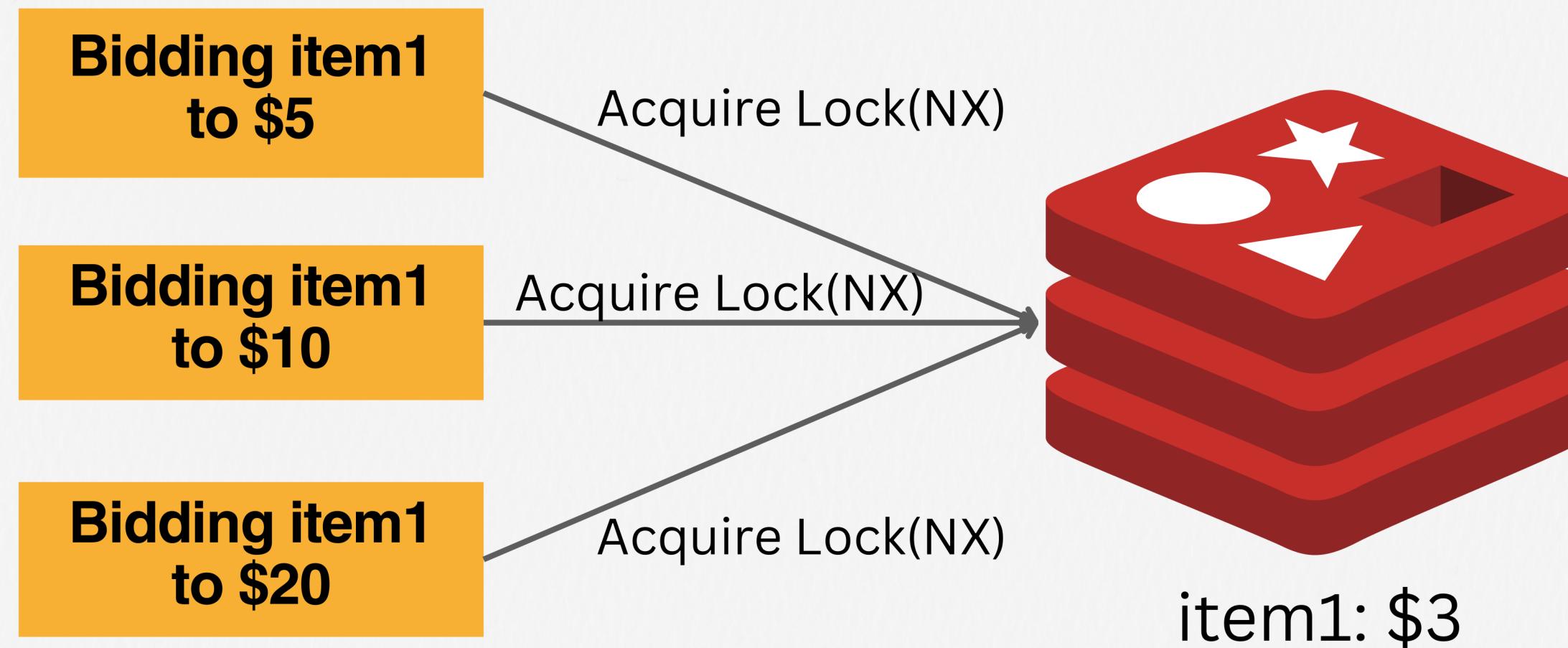
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

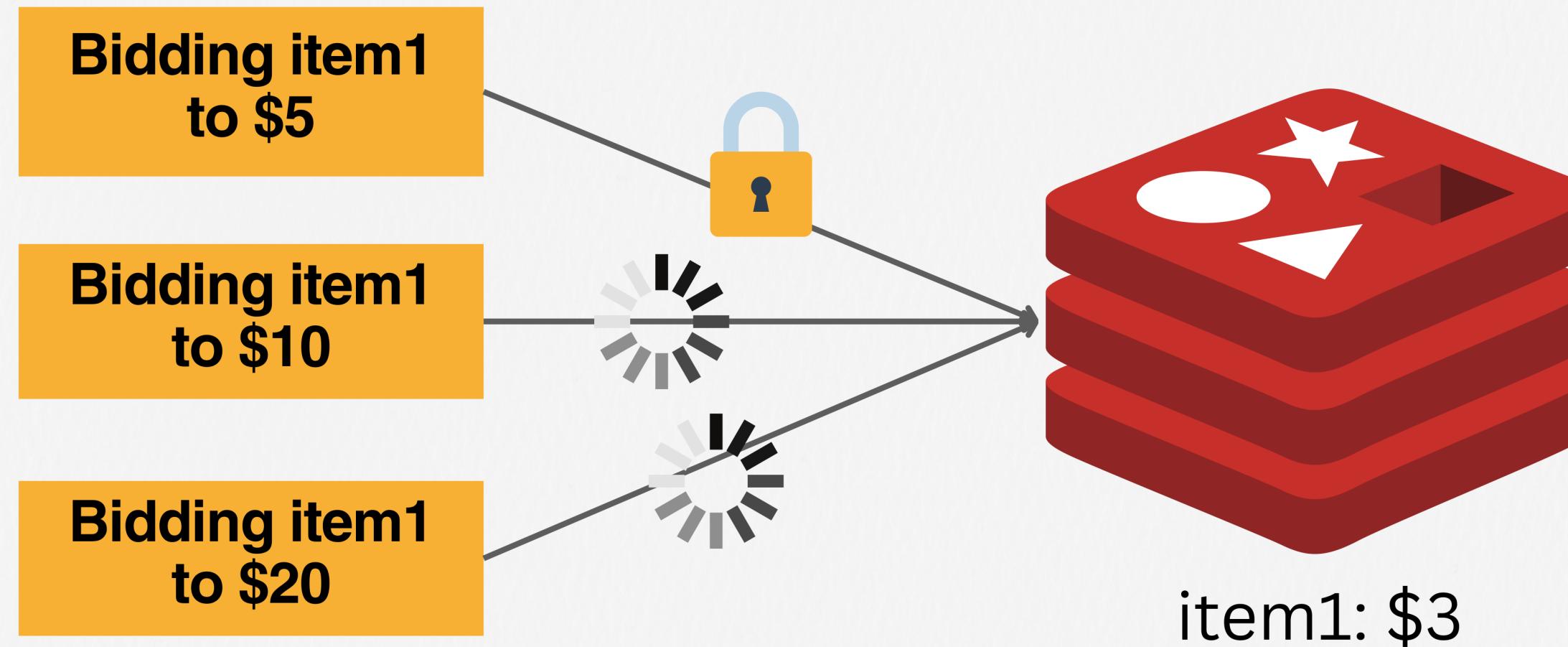
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

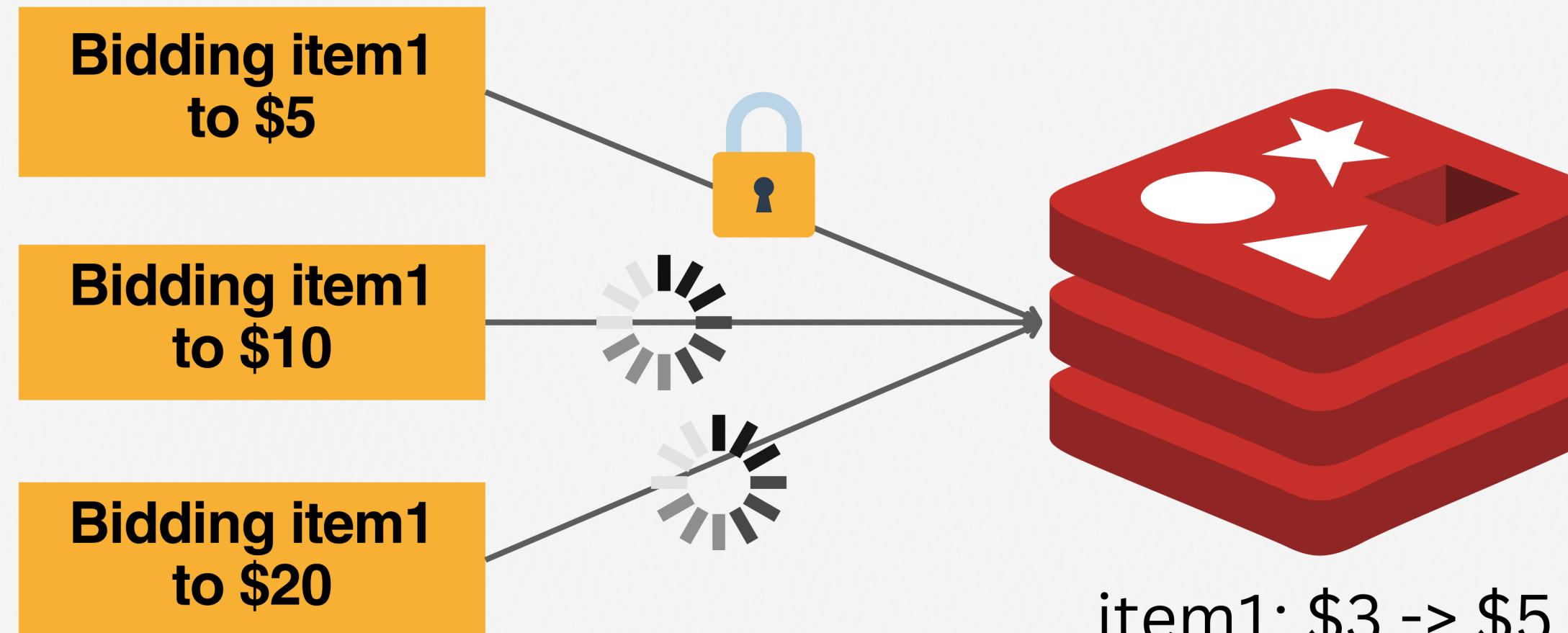
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

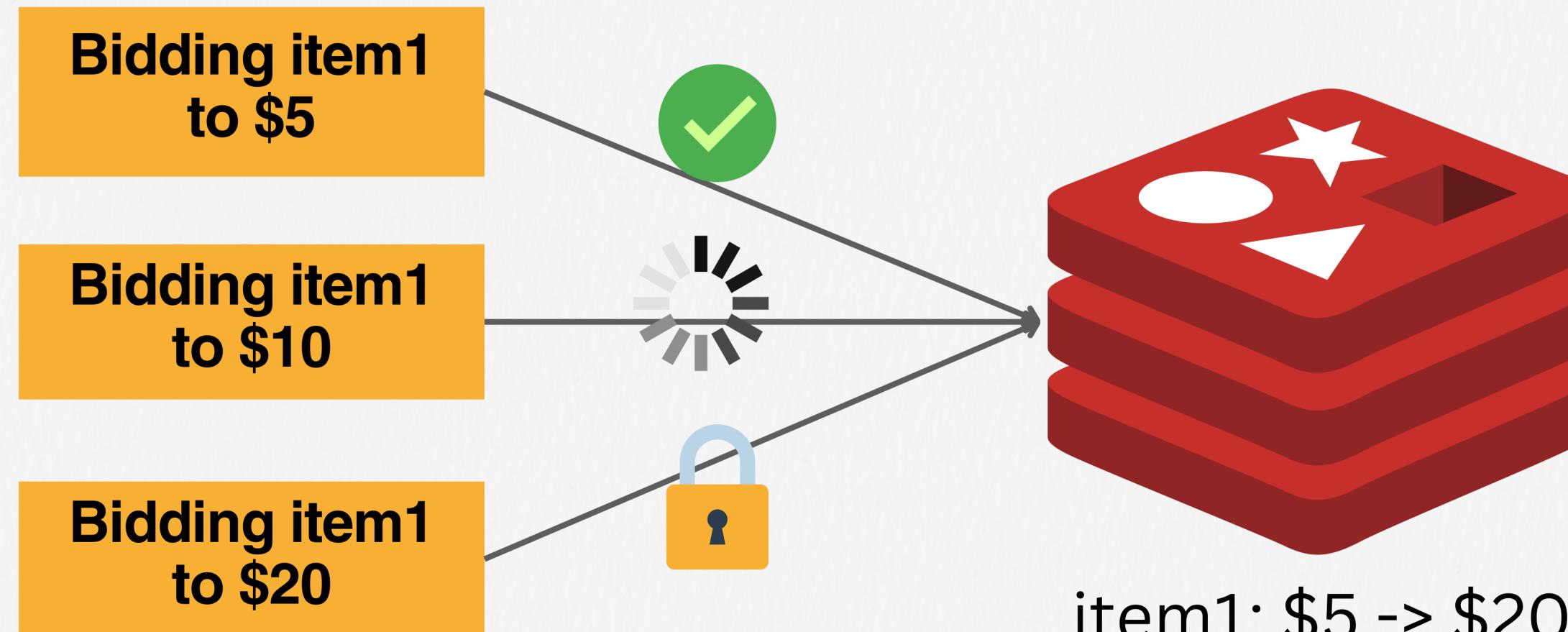
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

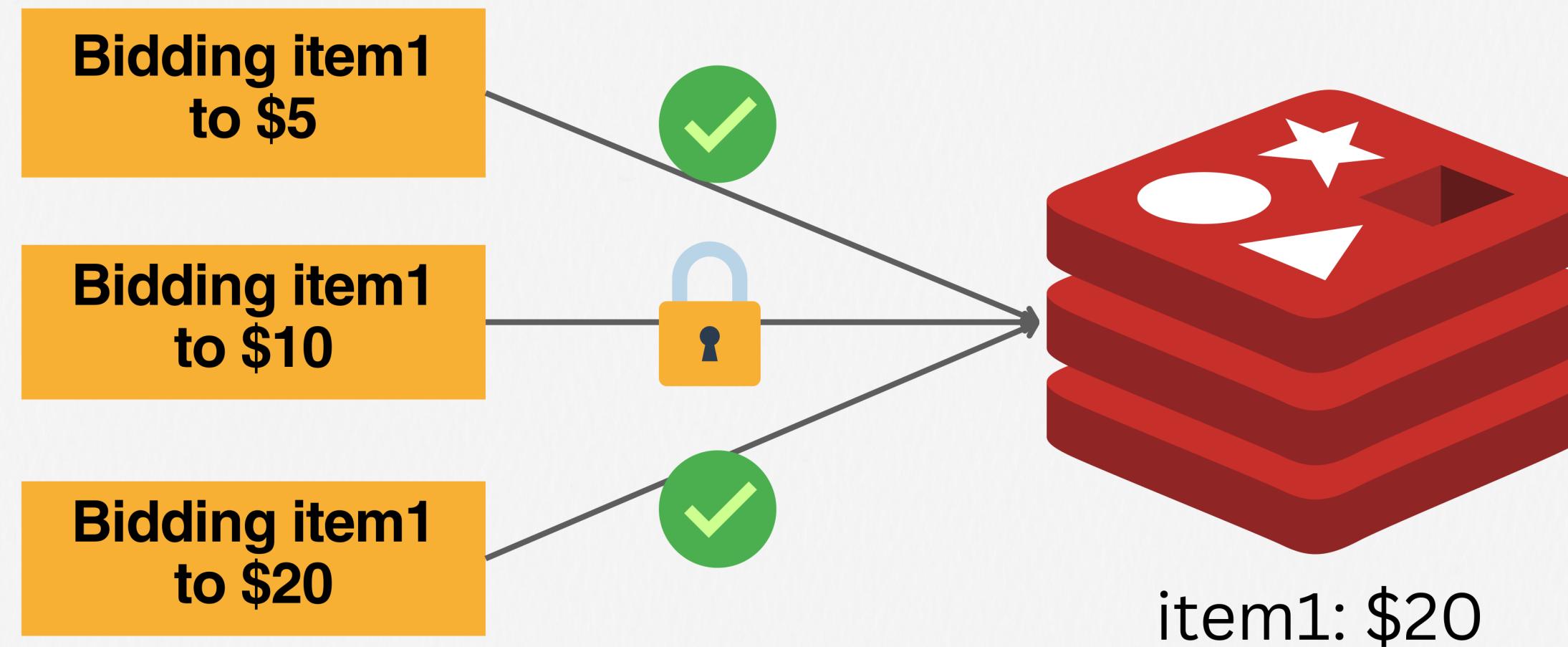
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

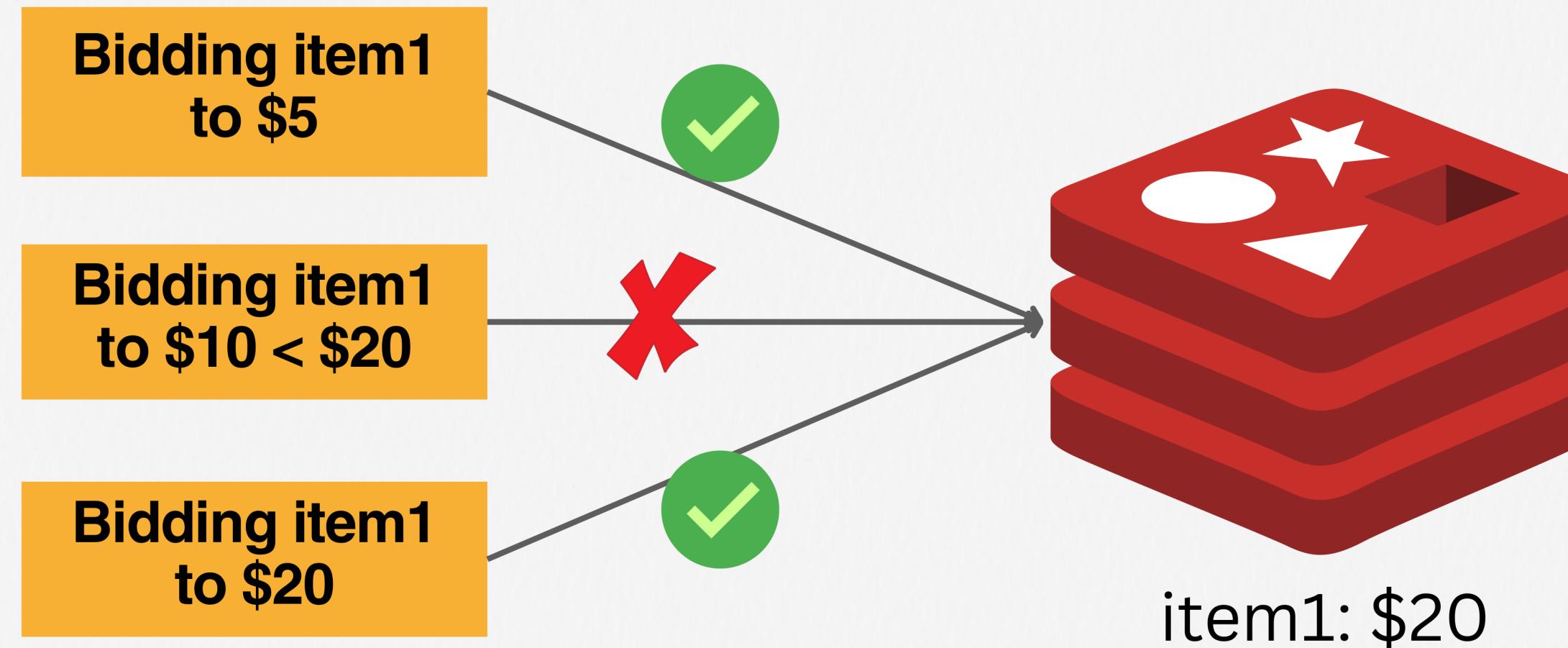
- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

- Let's say we are trying to build bidding item service. The bidding **only works if the new bid price is greater than current bid price**



# Solving concurrency problem with lock

SILICON VALLEY ENGINEER

- Distributed Lock: <https://redis.io/docs/manual/patterns/distributed-locks/>