

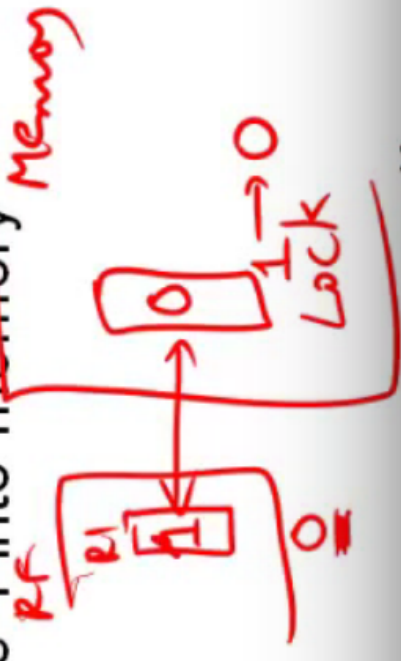
Synchronization

- The simplest hardware primitive that greatly facilitates synchronization implementations (locks, barriers, etc.) is an atomic read-modify-write



- Atomic exchange: swap contents of register and memory

- Special case of atomic exchange: test & set: transfer memory location into register and write 1 into memory



- lock: t&s register, location
bnz register, lock
CS
st location, #0