

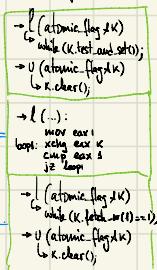
3. Memoria

Conceptos (hardware) Primitive with $m:x$
Cannot be used $m:x:i$

- Primitivas Hardware
 - 2 test-and-set
TWS Reg Address + Reg = m [address]
m [address] = j
 - 2 Swap
XCHG reg Address + target - m [Address]
m [Address] ← reg
reg ← target
 - ... Comparar e intercambiar
fetch - fault
LOCK ADD reg mem
mem ← m [mem]
m [mem] ← reg
 - Comparar e intercambiar
LOCK CMPXCHG mem reg + if mem <= reg:
implied eax
if reg == eax:
mem ← reg

- LL/SC (almac. condicional)
 - LL r, x + r ← x
+ ch. r ← x
 - SC r, x + m[x] ← r Si m[x] ≠ r antes
m[x] ← r
r ← r } esp.
- R, M, W atomic operations

Mecanismo
centro (mutex)



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