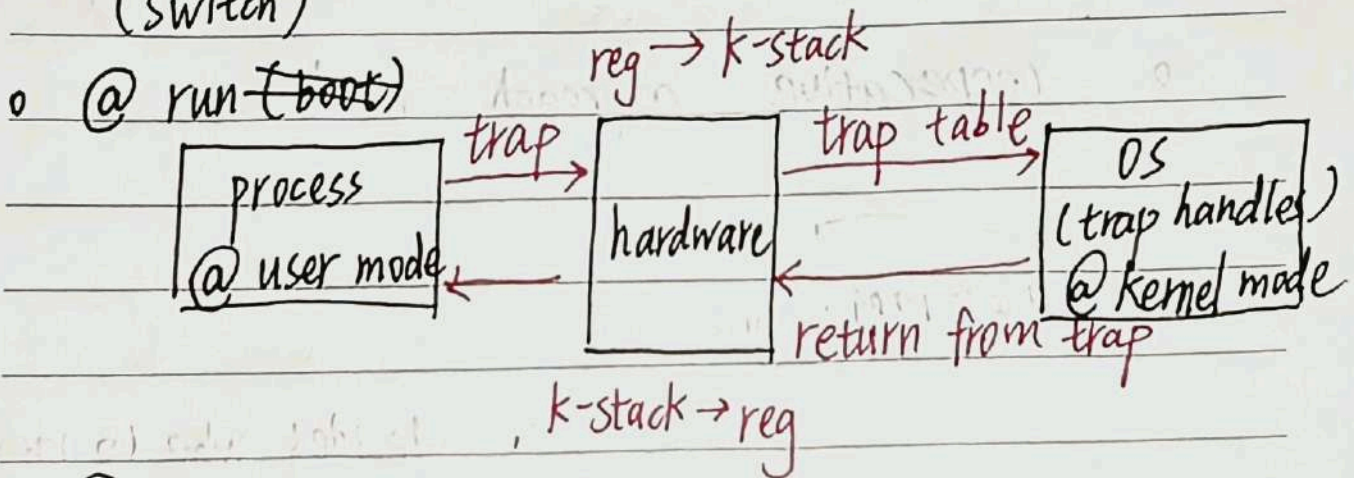


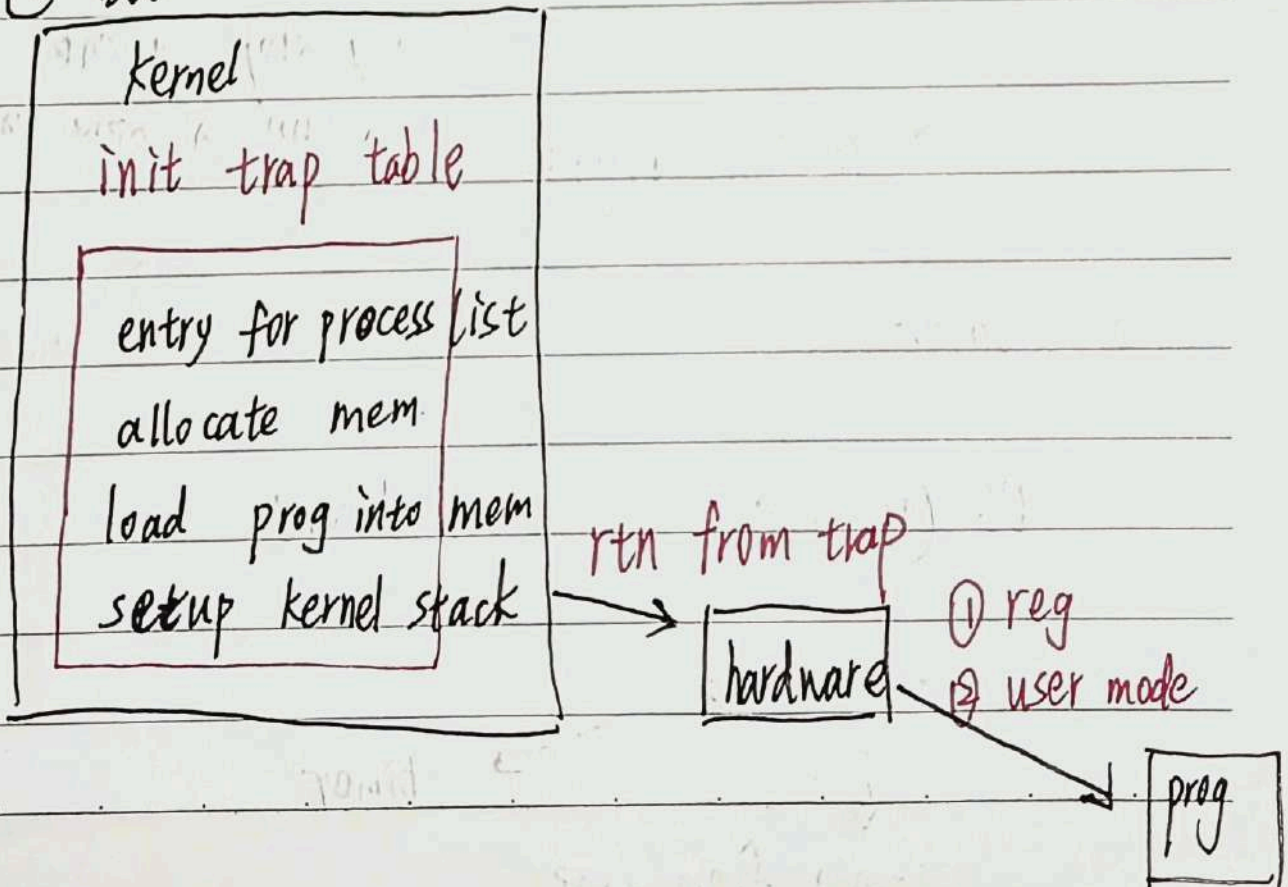
§ 6 Limited Direct Execution

control hardware
• 6.1 ~ 6.2 ↓ ↓
OS performance

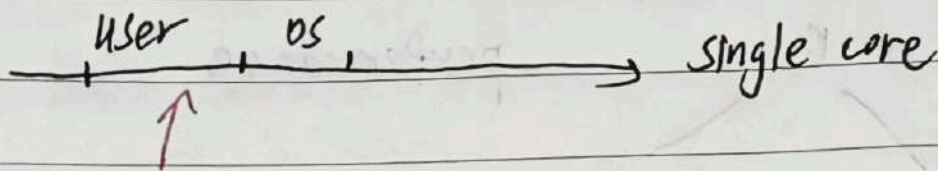
time share (Switch) - restricted ops.



o @ boot

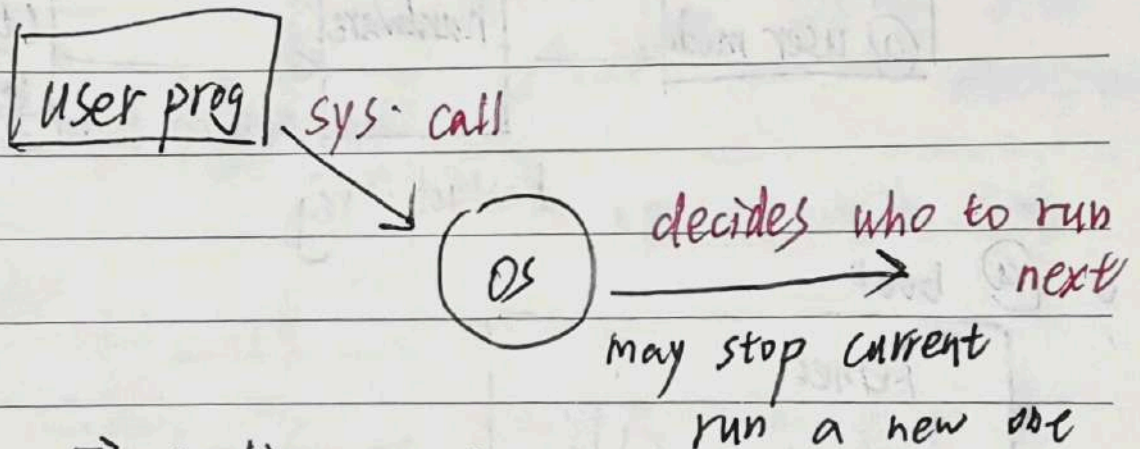


• 6.3 Switch between Processes.



OS cannot run when user prog running

• cooperative approach (early)



⇒ malice progs

• timer

OS @ boot

hardware

start timer

↓
return from trap

↘ timer

o context switch

△ implicit

OS

hardware
timer out

user prog A

reg(A) saved to kernel stack (A)

△ when cpu decides to run another

jump to trap handler

k-stack (A) to Proc Struct (A) (save)

Proc Struct (B) to k-stack (B) (restore)

return from trap

k-stack (B) to reg (B)

jump to PC (B)

run prog B.