

## § 4. PROCESS

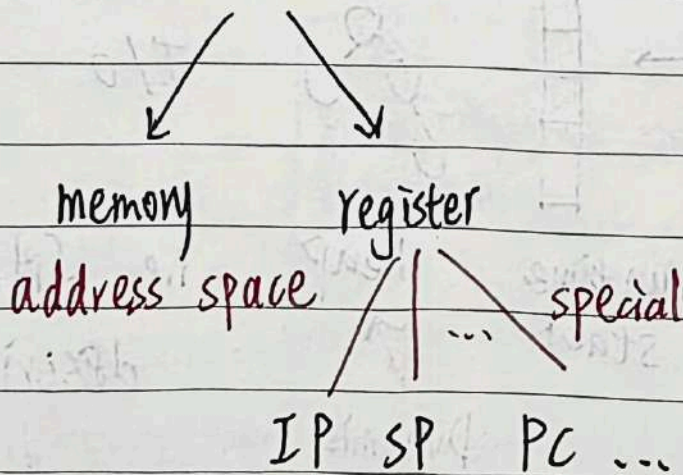
program <sup>running</sup> abstract to process

virtualizing time sharing illusion of many CPUs

"which" policies high lvl - scheduling

"how" mechanisms low level / time share  
context switch

### • 4.1 machine state



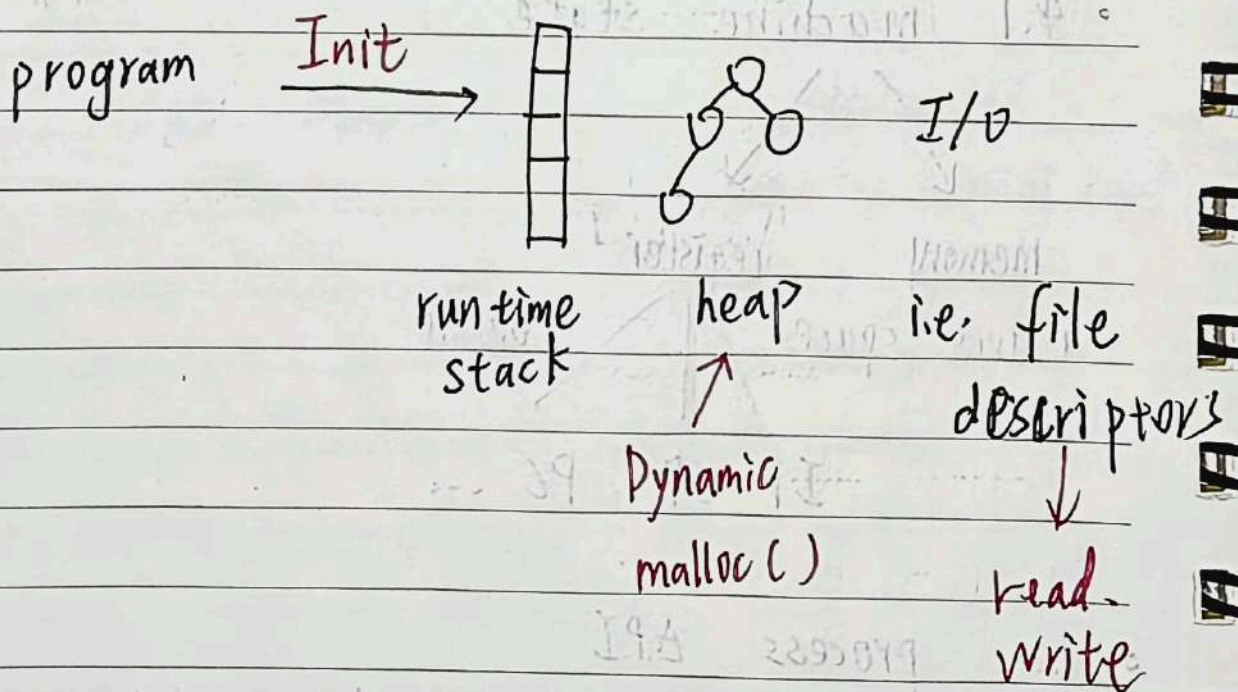
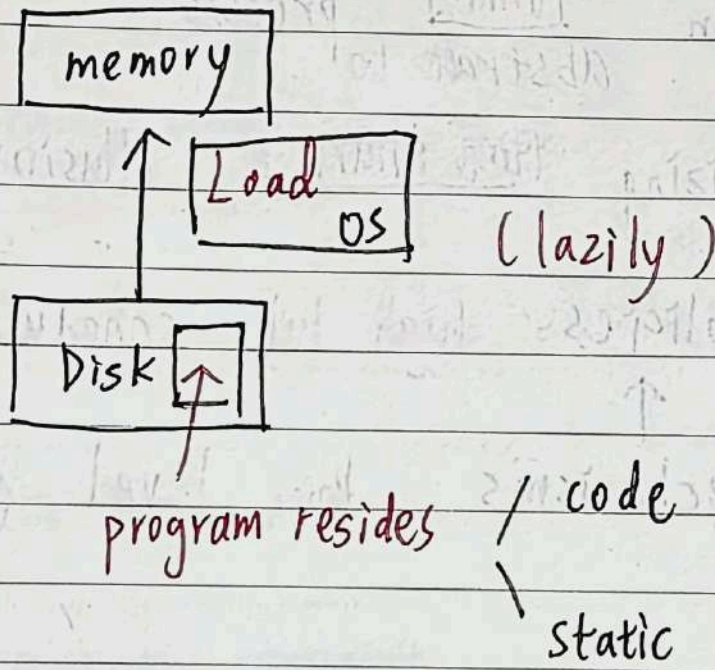
### • 4.2 process API

create ( ) ↔ destroy ( )

wait ( ) ↔ status ( )

suspend ( ) ↔ resume ( )

0 4.3 create() in detail.

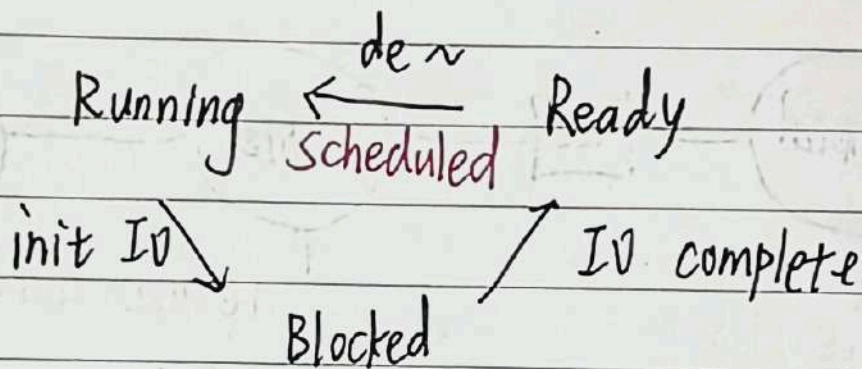


→ start from main()

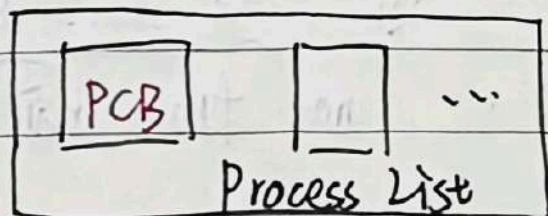
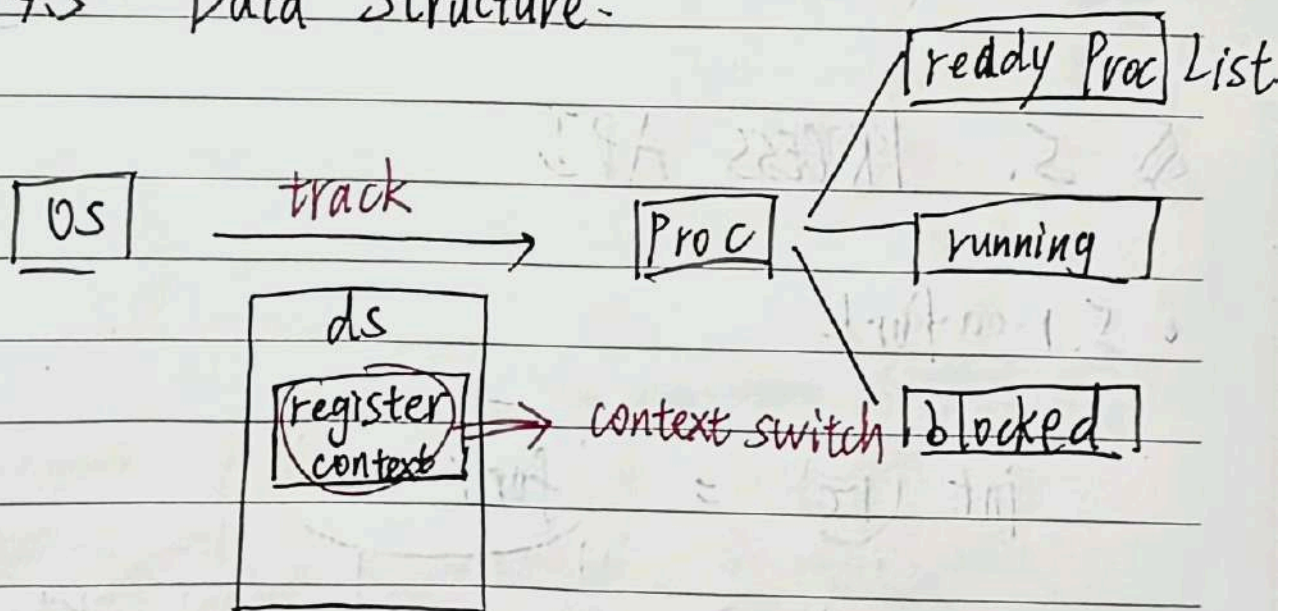
→ begin execution



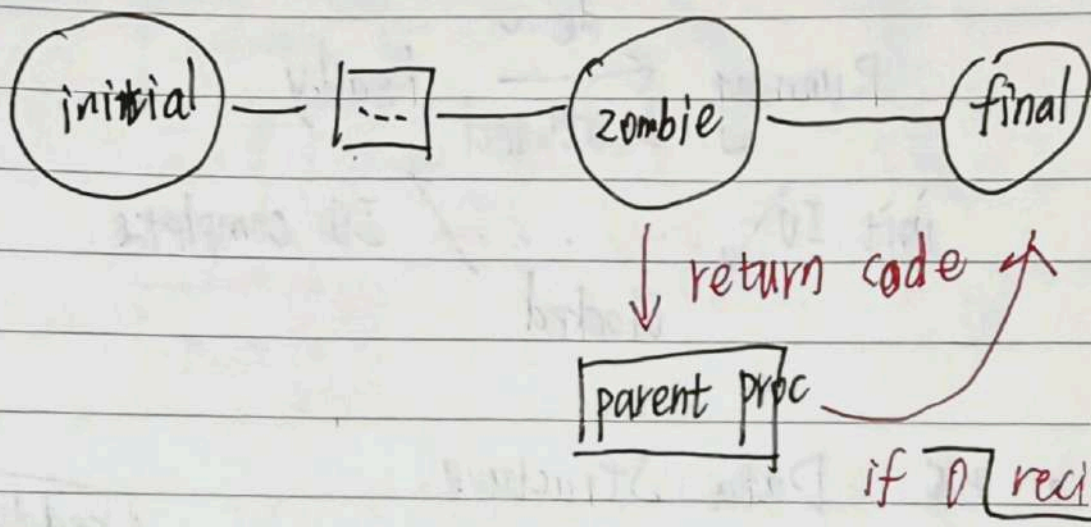
#### • 4.4 Process States



#### • 4.5 Data Structure

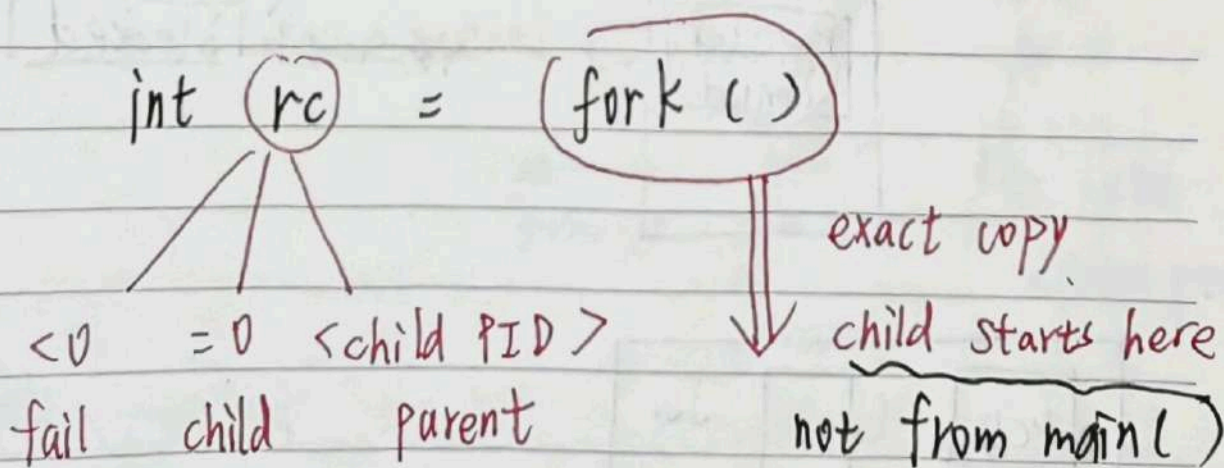


\* 4.45 . Xv6 process states



## § 5. PROCESS API

### • 5.1 fork



CPU scheduler is complex

→ non determinism order → wait()