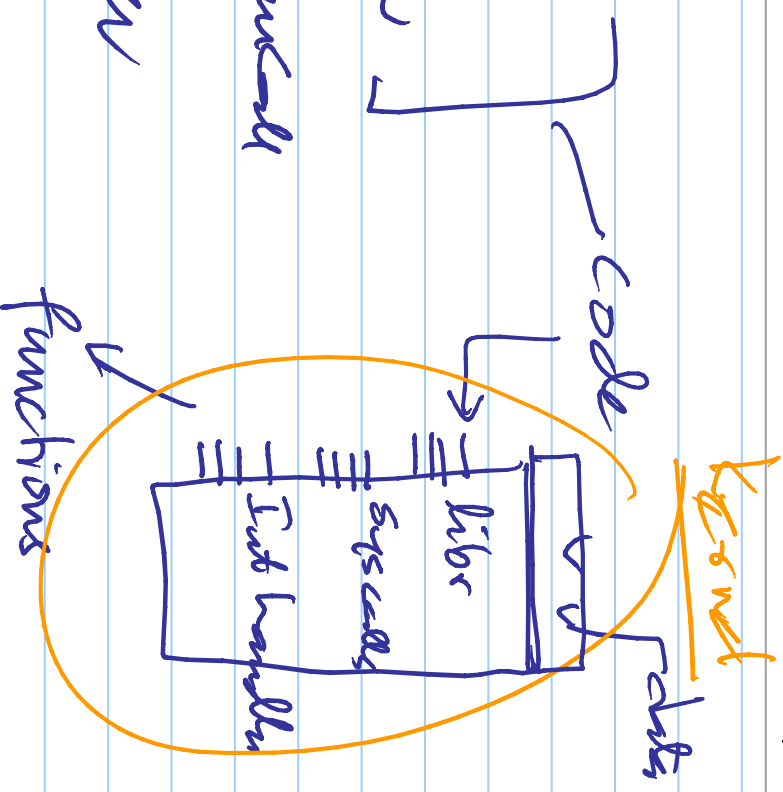
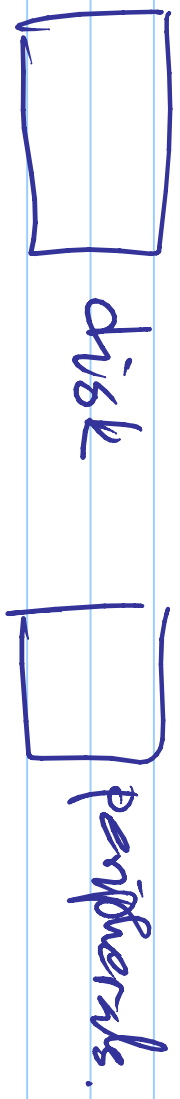
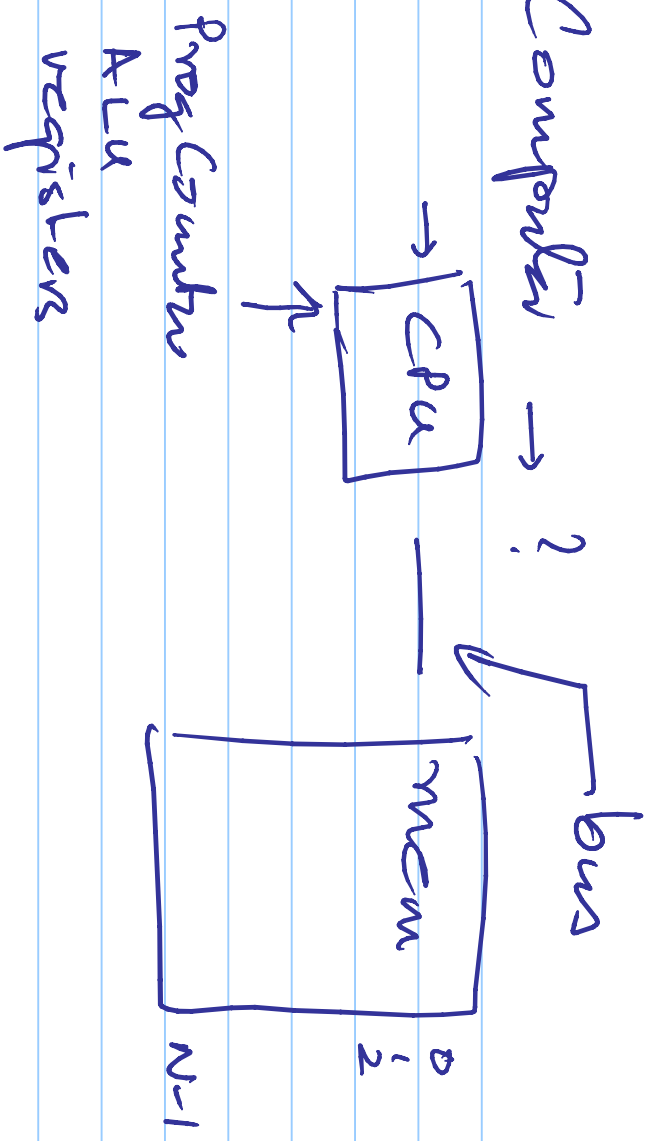


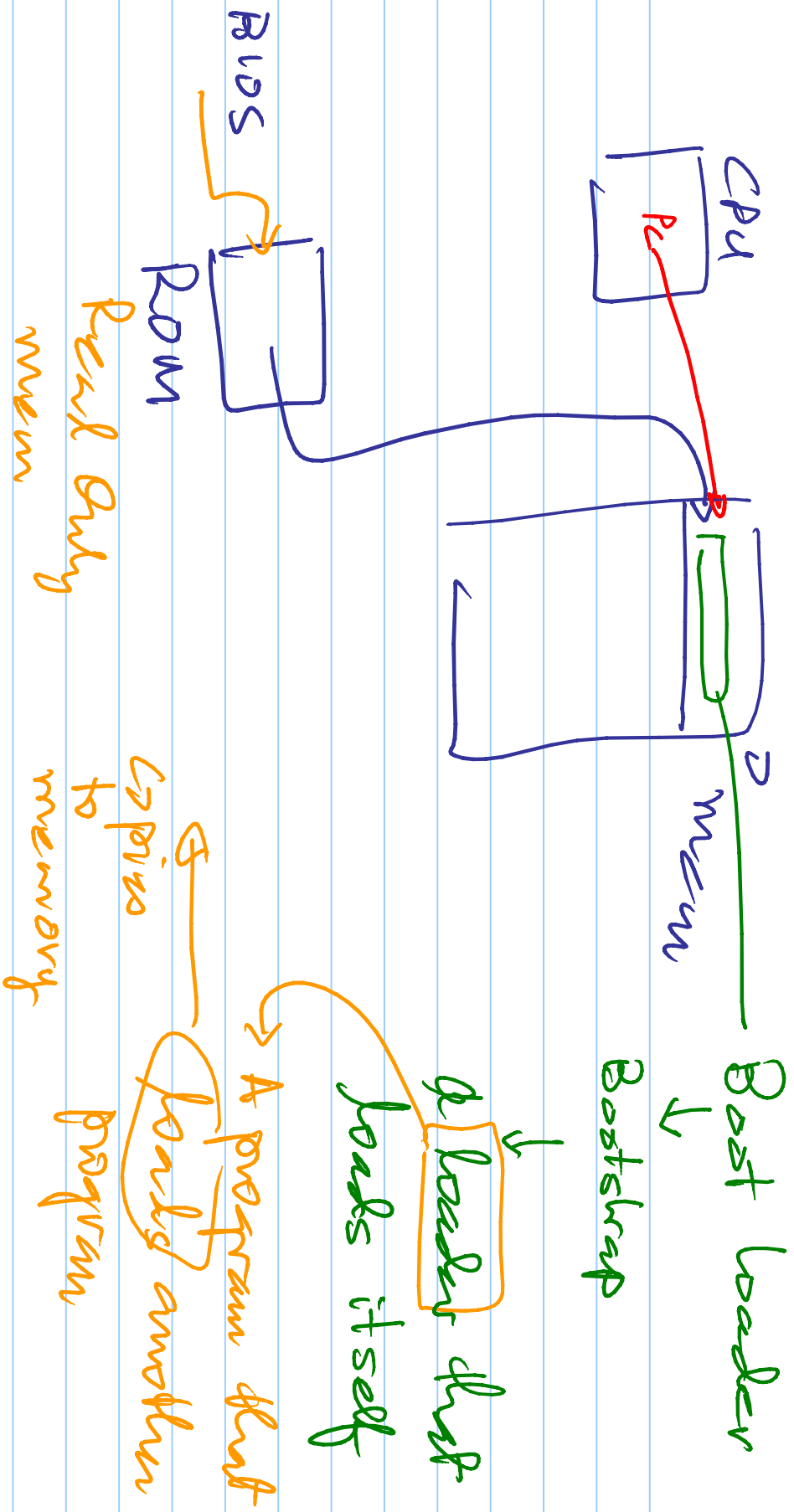
Operating systems

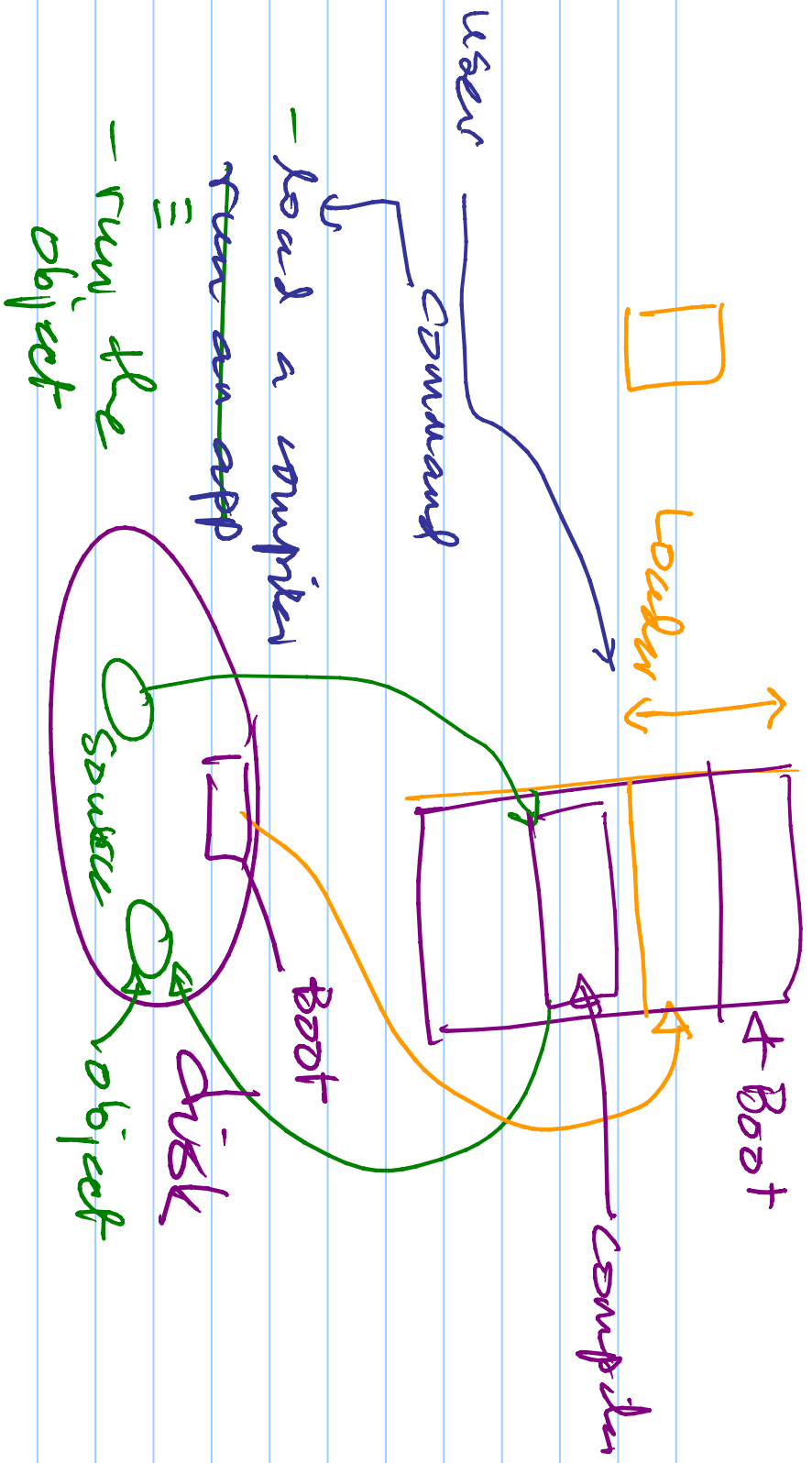
- low level software
- Resource manager
- Librarian, System call
- Interrupt handler

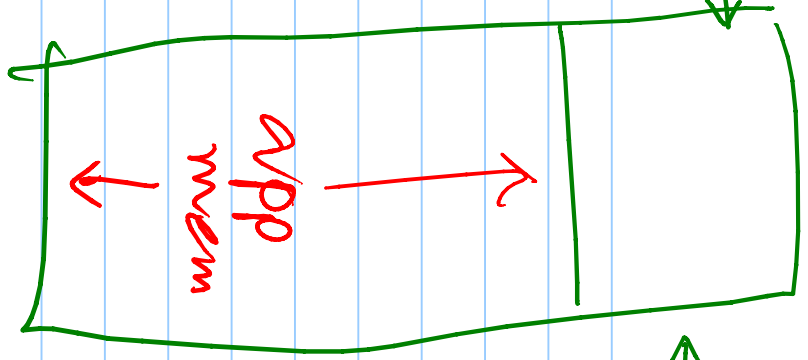
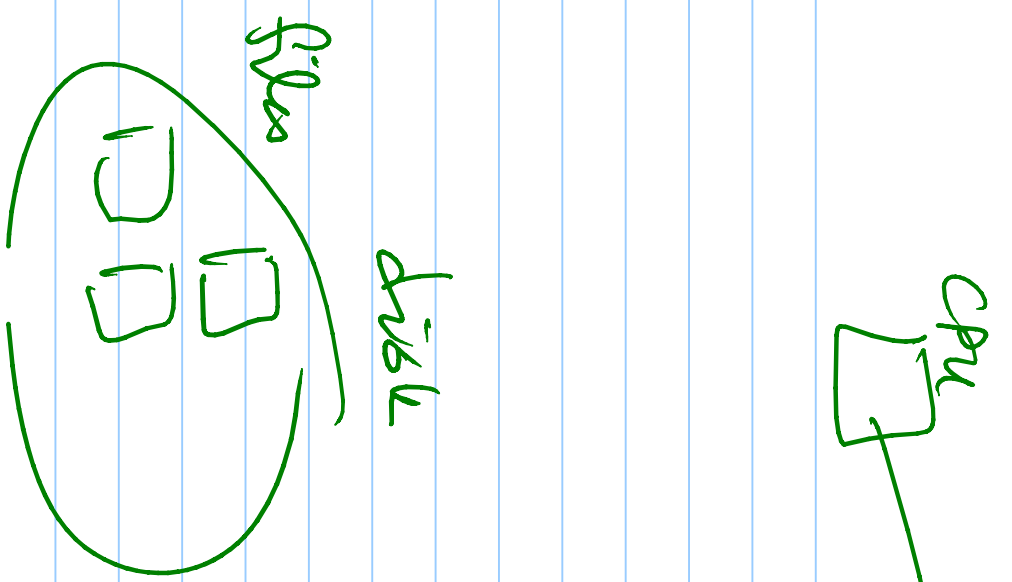


Computer → ?







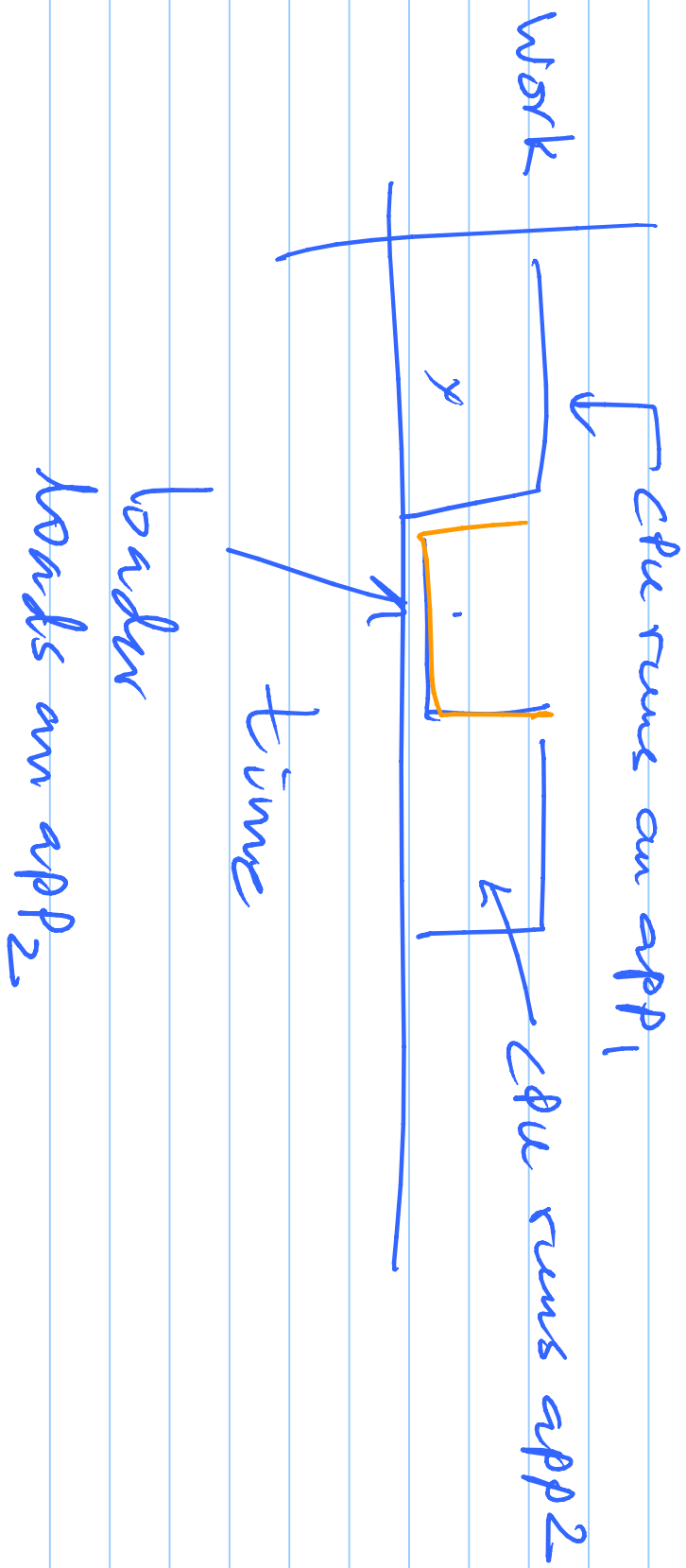


→ RESIDENT MONITOR

→ loader
+ ID library
+ shell

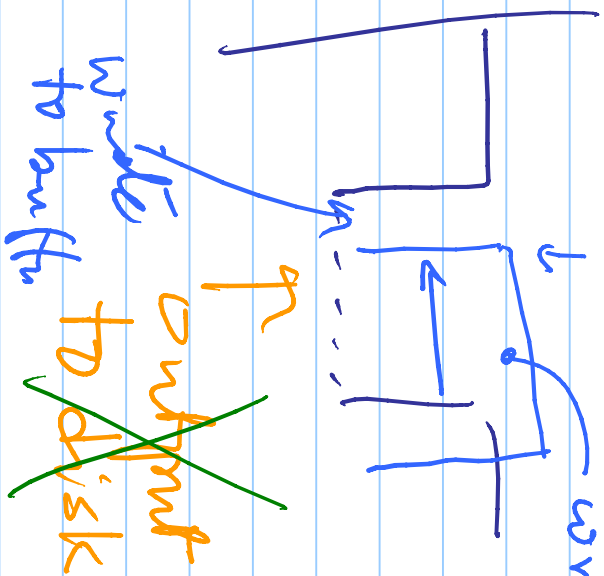
(need protection)

RTOS efficiency



Application I/O speedup

- Buffering & spooling

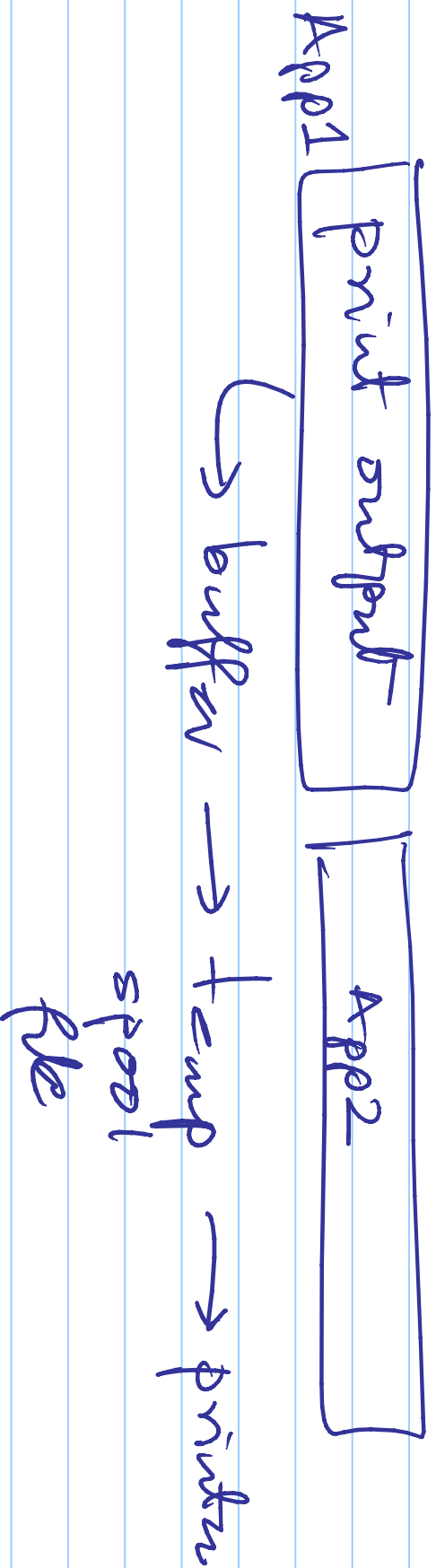


~~write to buffer~~
~~output to disk~~

→ write to free memory



Spooling → used for printing

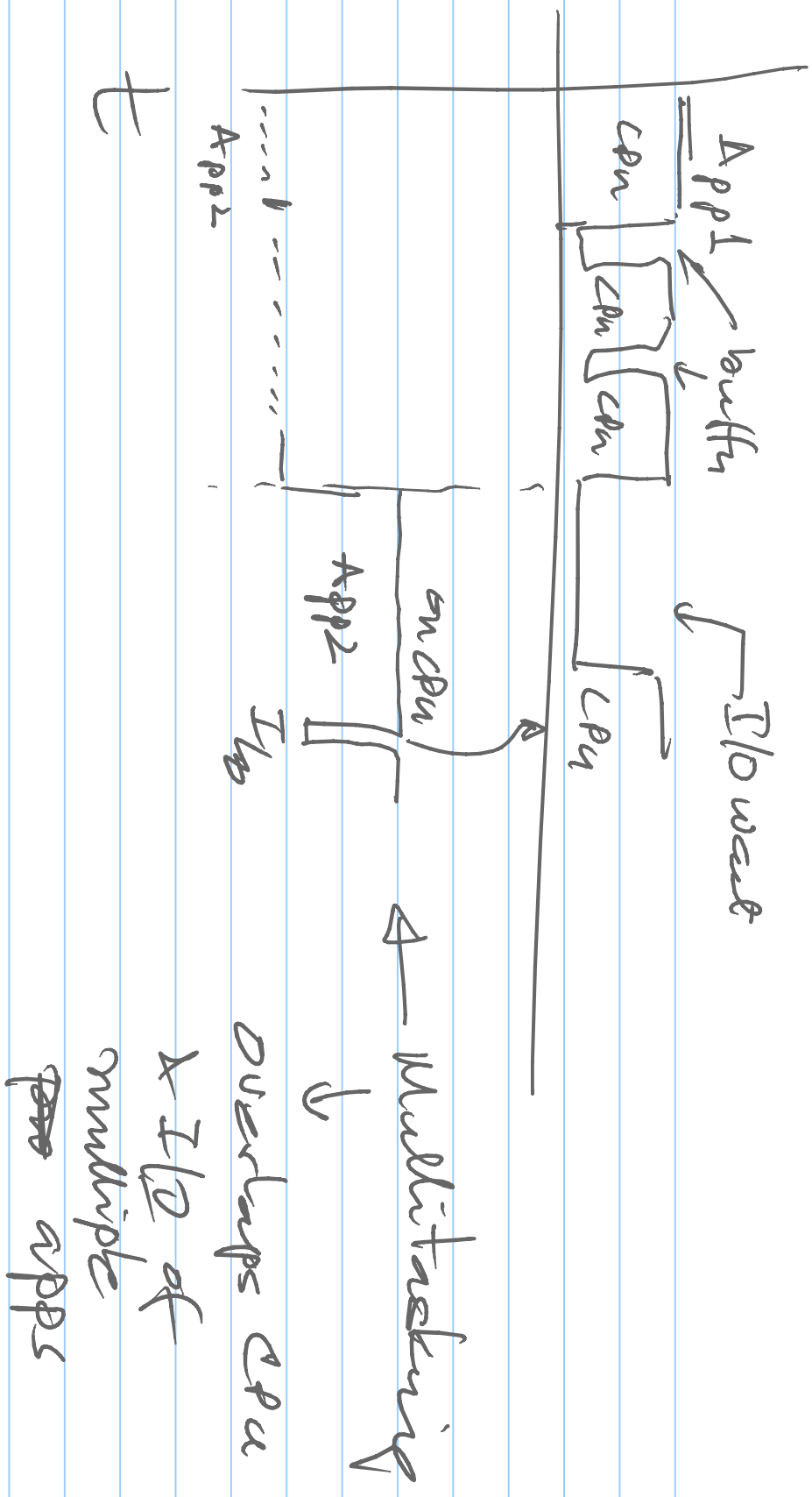


2 move problems

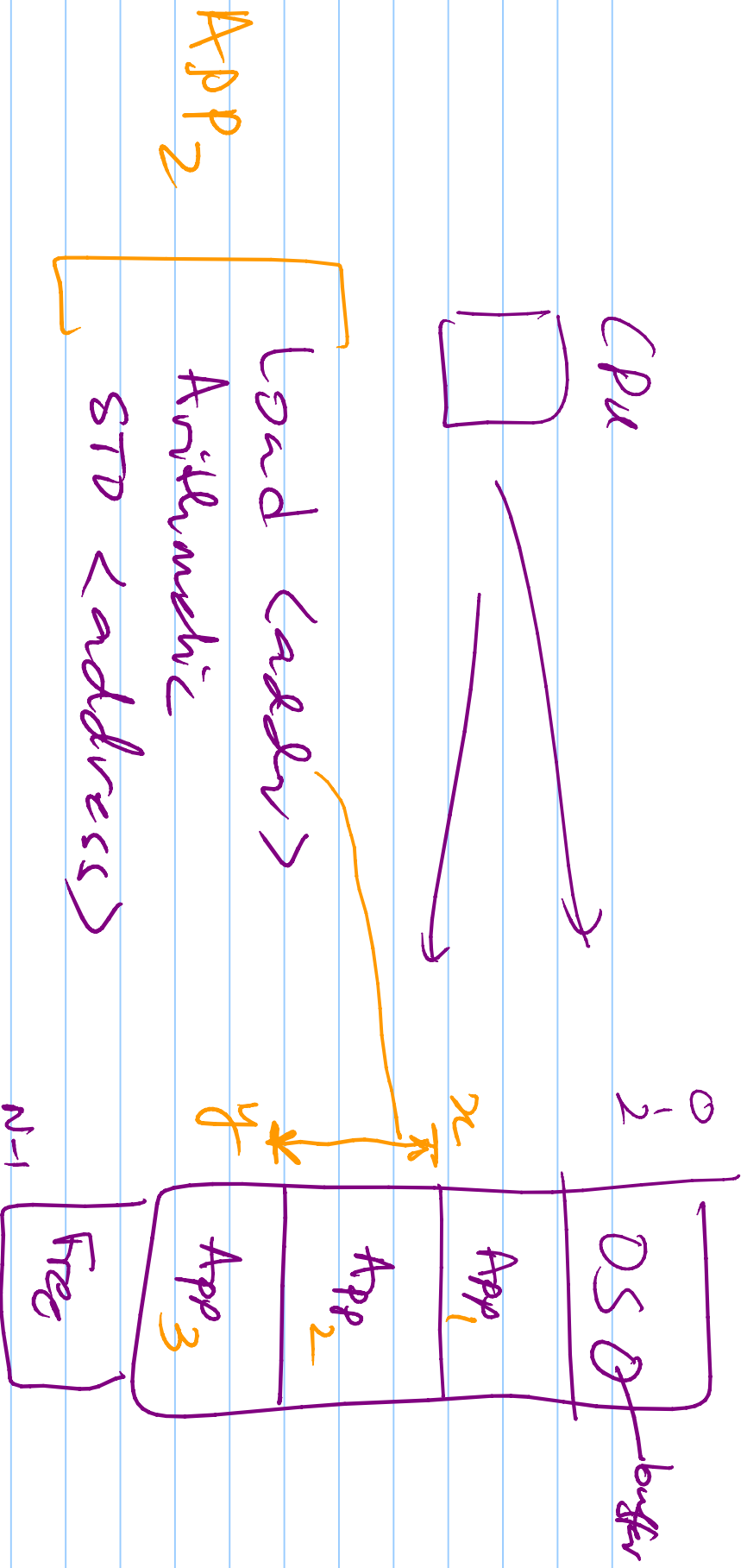
App 1 \rightarrow App 2

\leftarrow load time

- App 1 produces lots of output
- App 2 ' ' little output







APP 2

CPU

Load (address)

Arithmetic

STD (address)

0 1 2

OS

App 1

App 2

App 3

Free

N-1

buffer

x

y

y

