

Processes

- why?
- How? → structure, ctxt

Scheduling ★ switching

- next lecture

Why?

- Abstraction, API
+ events + memory
+ execution
- Machine Abstraction

Machine Abstraction

- Memory

+ virtual memory

- Processor

+ time slicing

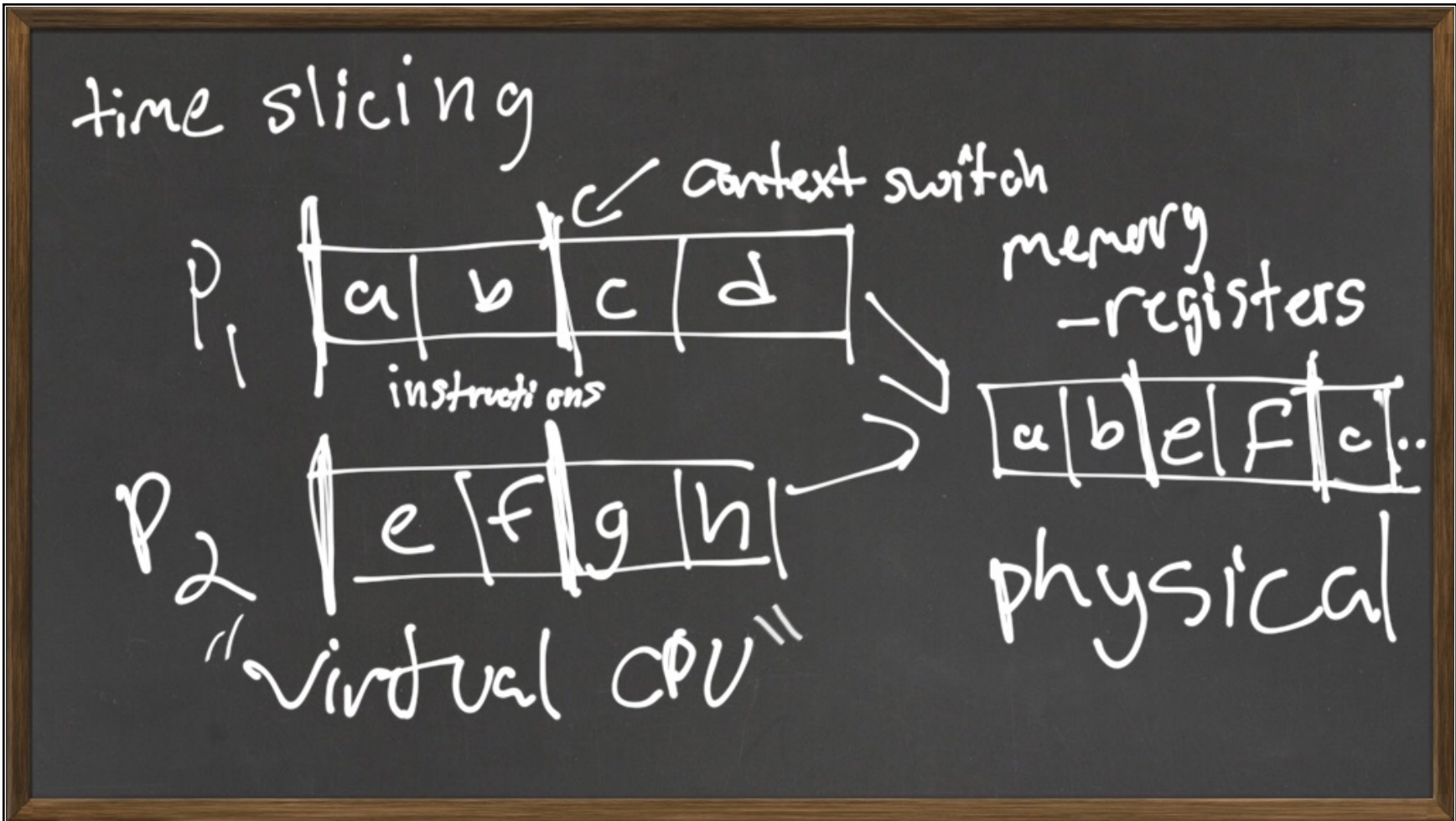
- Disk (global (share))

- Isolated Machine



physical

+ Network



Disk (FS)

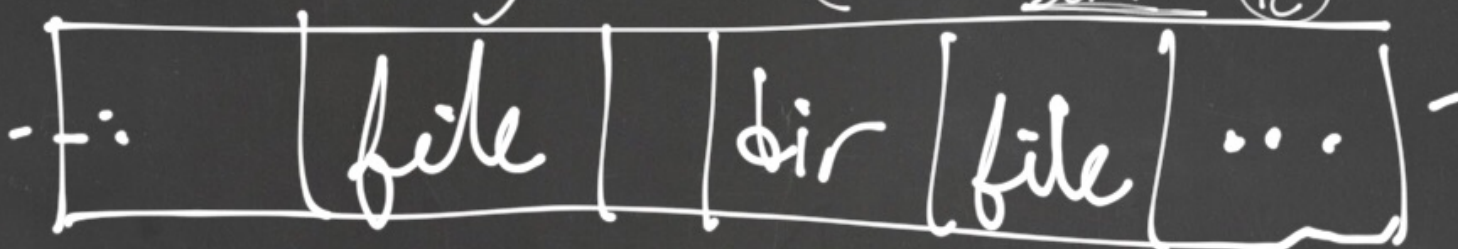
- File Descriptors

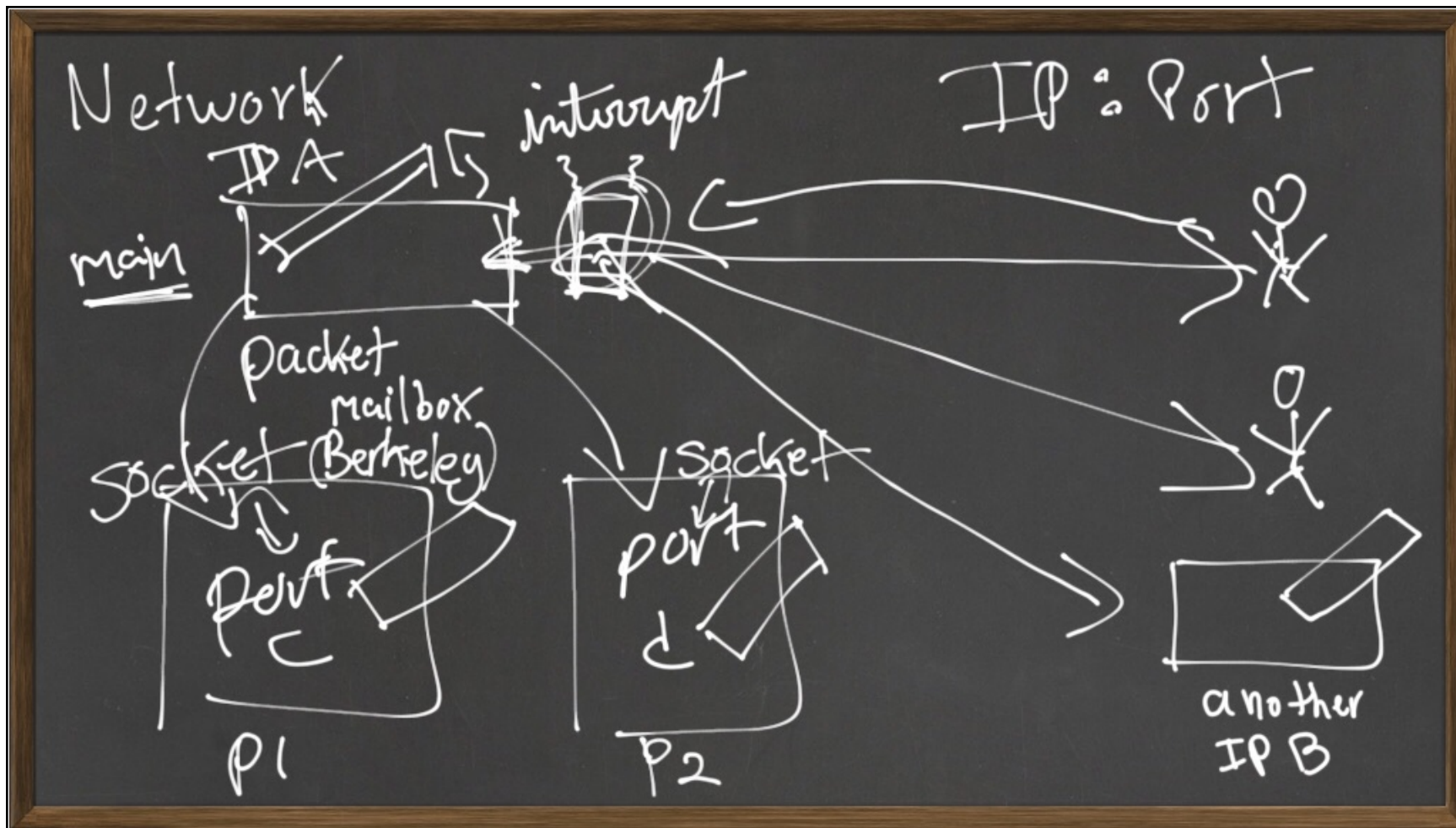
- # (index) → file table
(per process)

- Identity / User (uid)

fd	file	cursor (offset)
0	stdin	—
1	stdout	—
2	stderr	—
3	/a/b.txt	14
⋮	⋮	⋮

Setuid (i)





Why?

- throughput
- Security
- privacy
- 1 process does little... - nice?
- many do a lot, together
- Isolation (fault protection)
- latency
- lots of writing for external
- + security