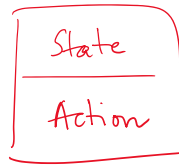


- OS tasks
- ① multiplexing
 - ② isolation

Two building blocks

- modes of execution
- interrupts

The two boxes expⁿ

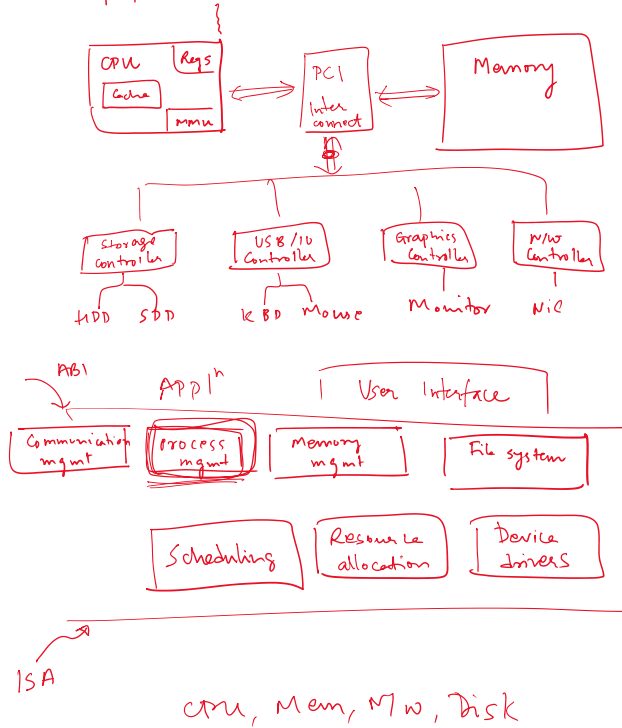


process, files, file
execution context, locks,
sockets,

terminate
schedule
context sw

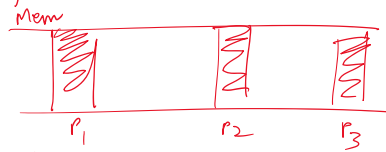
create a
file
allocate/free
memory

The computer architecture.
simplified



Process

- instance of a program
- program loaded in memory & setup for execution.



Process state

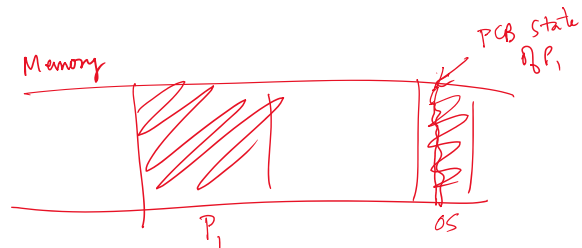
- pt. of execution
- start loc. of program in memory & size
- list of all open files & states
- priority, nice
- creation time,

- execution context | save & restore
 - regs.
 - PC
 - stack ptr.
 - text segment
 - data segment
 - heap
- process context

list of files
signals
locks
...

PCB: process control block

task_struct in linux



fork & exec

CPU

fetch - decode - execute

von Neumann model

IP: instruction pointer } who
PC: program counter } regs.

