DRAM — volatile — slower — $

SRAM — volatile — fast — $

fastest — $$$

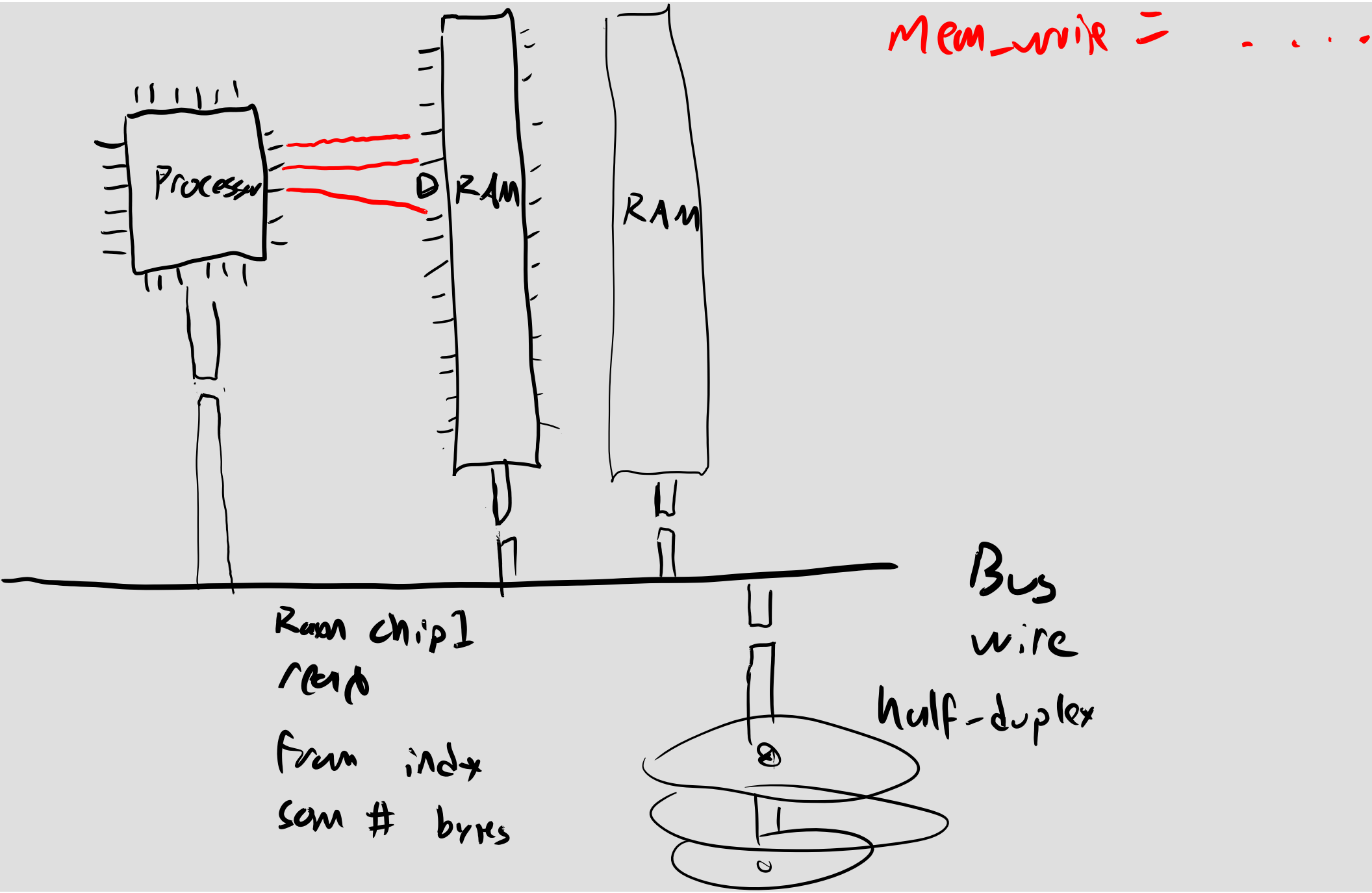
RAM = random access memory

Flash — storage — fast — $$$

Mag. disk — slower — $

files

ROM
read-only-memory


Mem_wire = . . .
Processor
DRAM
RAM
Bus
wire
half-duplex
Ram chip]
read
from index
som # bytes

$Reg(3) = Reg(5)\ T2$

$Mem[\overbrace{\qquad\qquad}^{34\ bits}]$

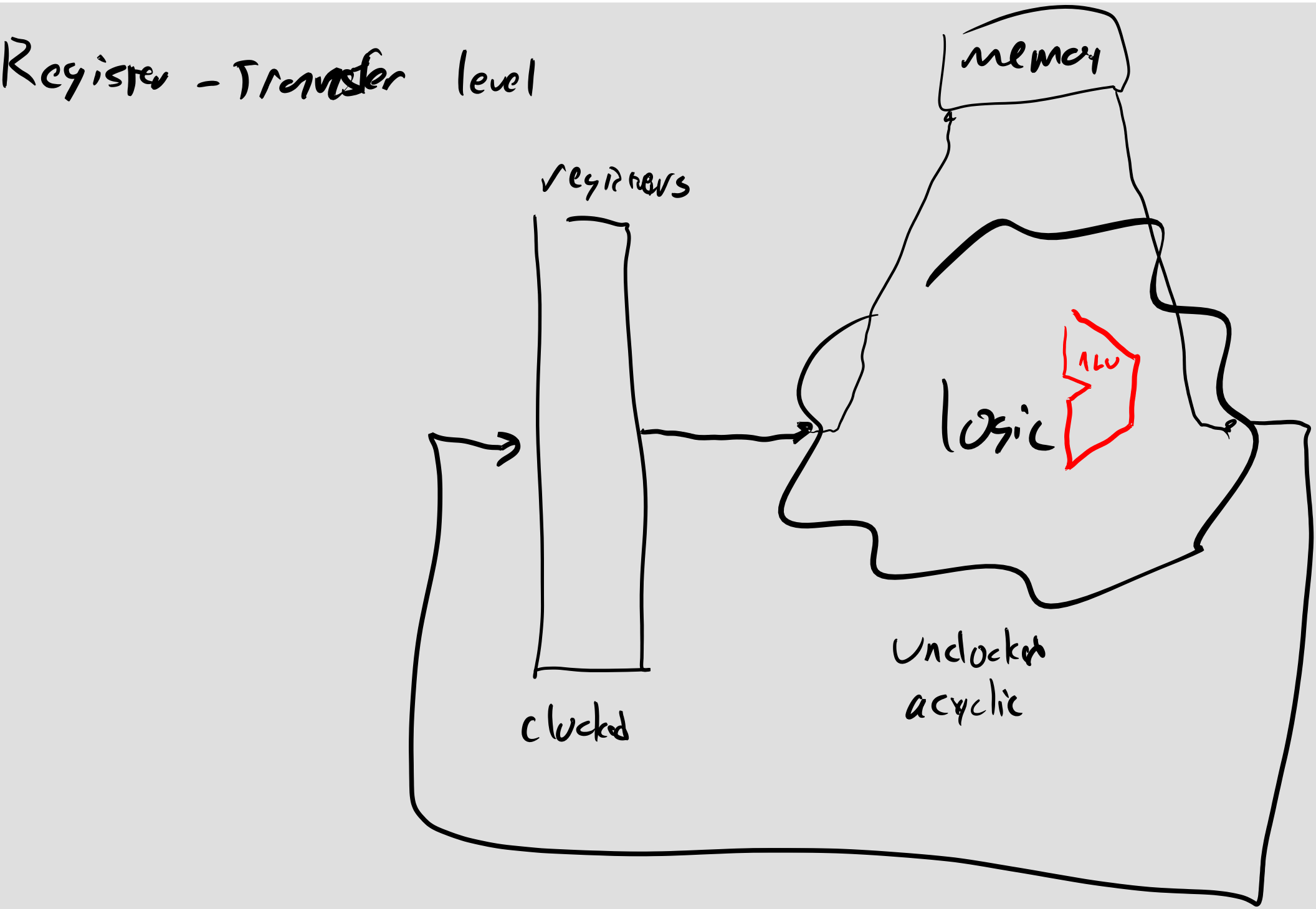
166B

2^{34}

Moore

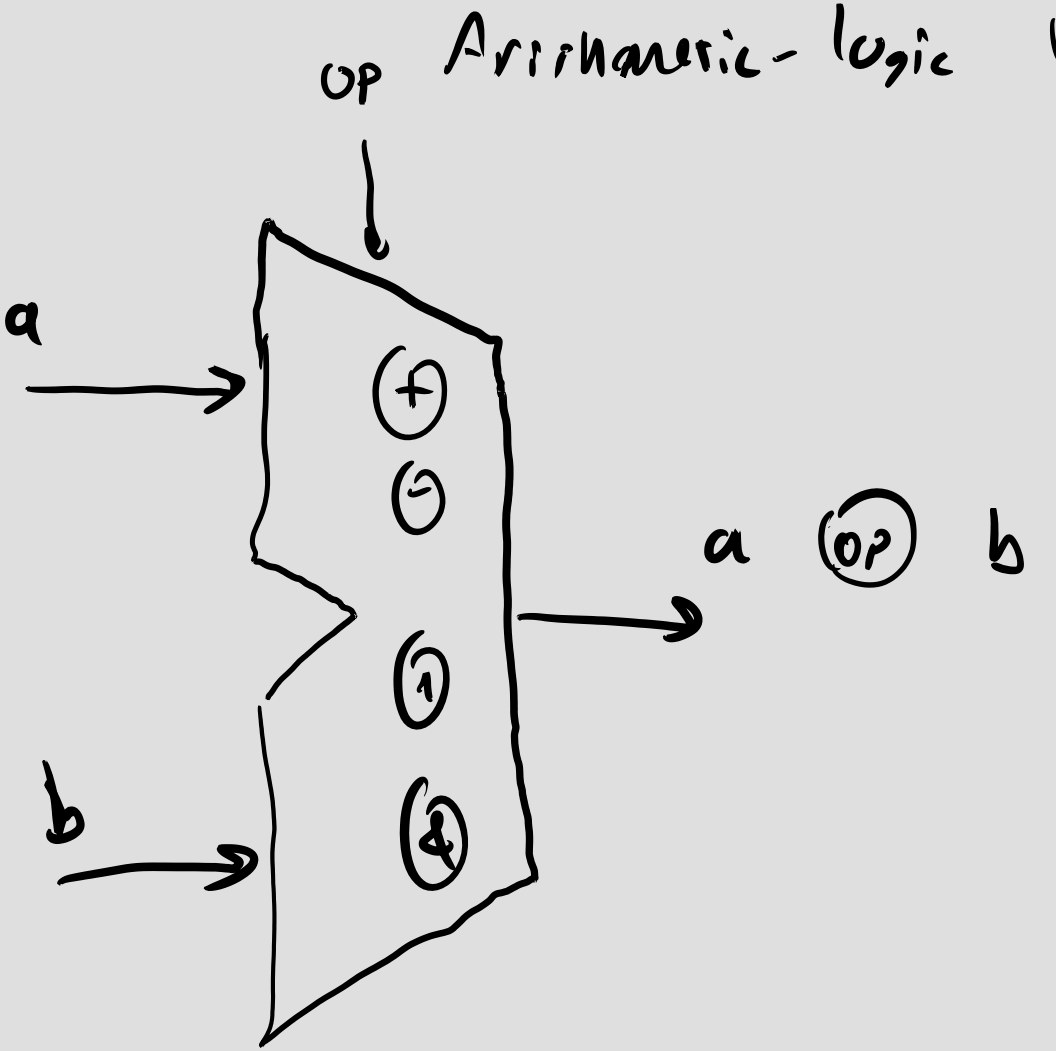
18 months CPU 2x fast

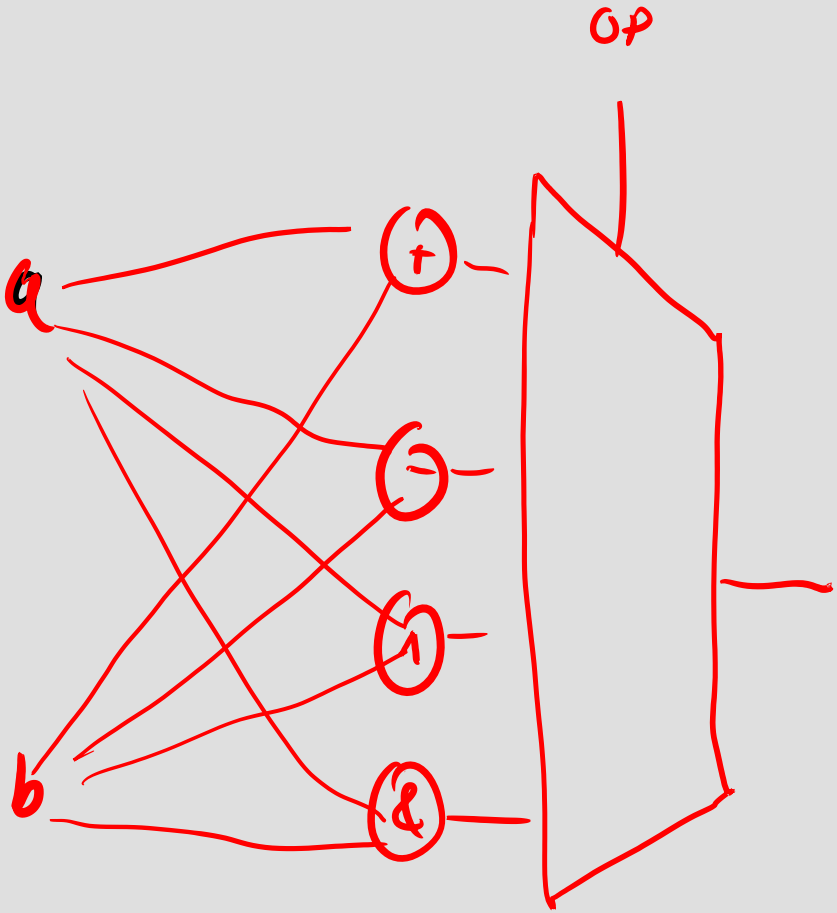
Register - Transfer level

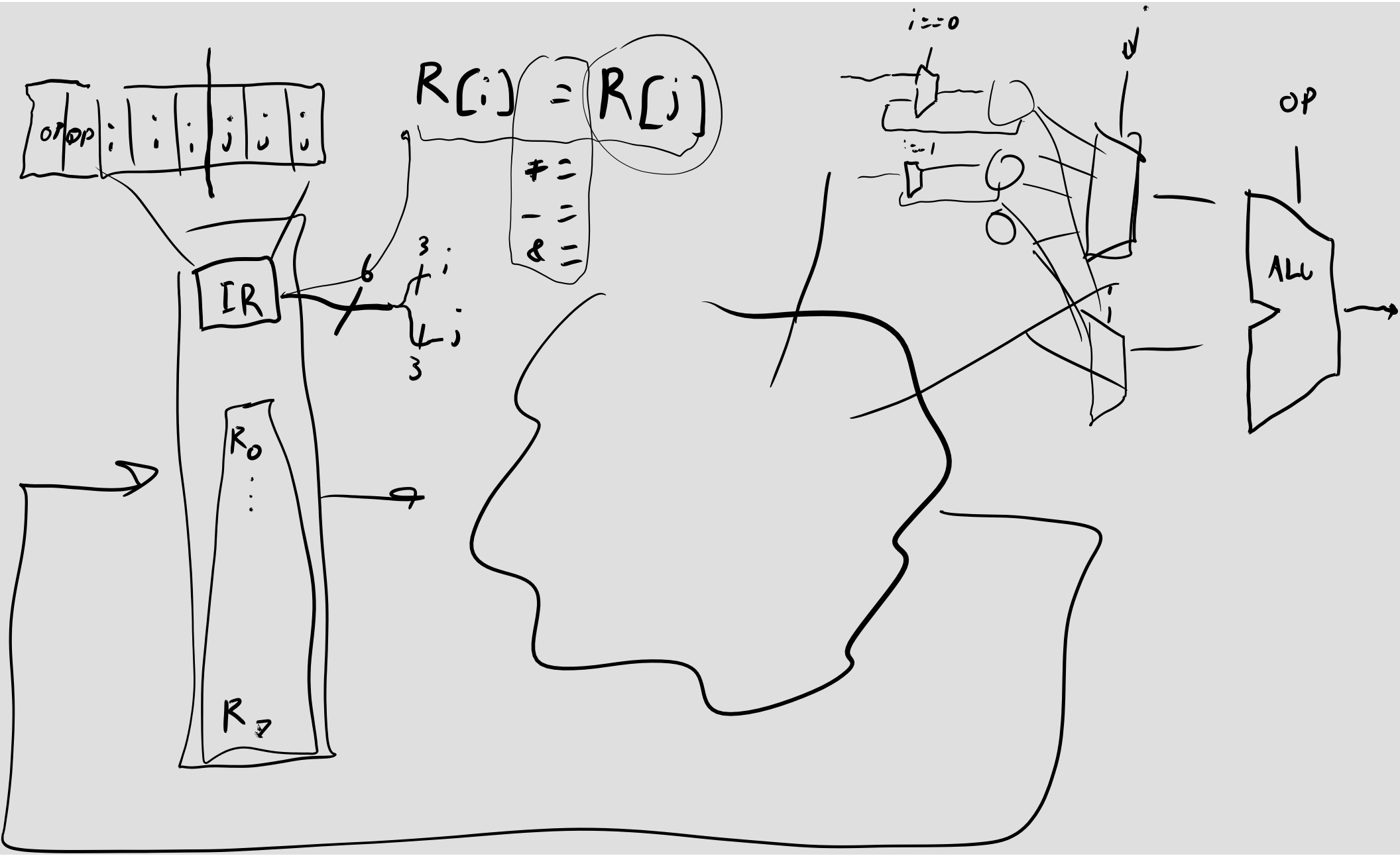


ALU

Arithmetic-logic Unit






op
op
i
i
i
j
j
j
R[i] = R[j]
+ =
- =
& =
IR
6
3
i
j
3
R0
R7
i=0
i=1
i
j
OP
ALU