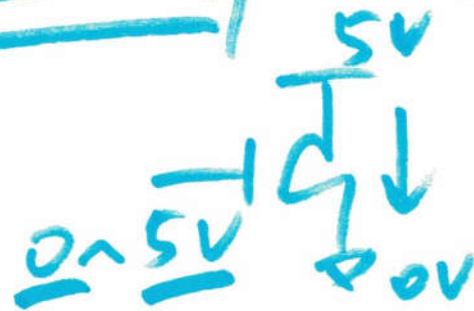


Fundamental of Logic

True False
1 0

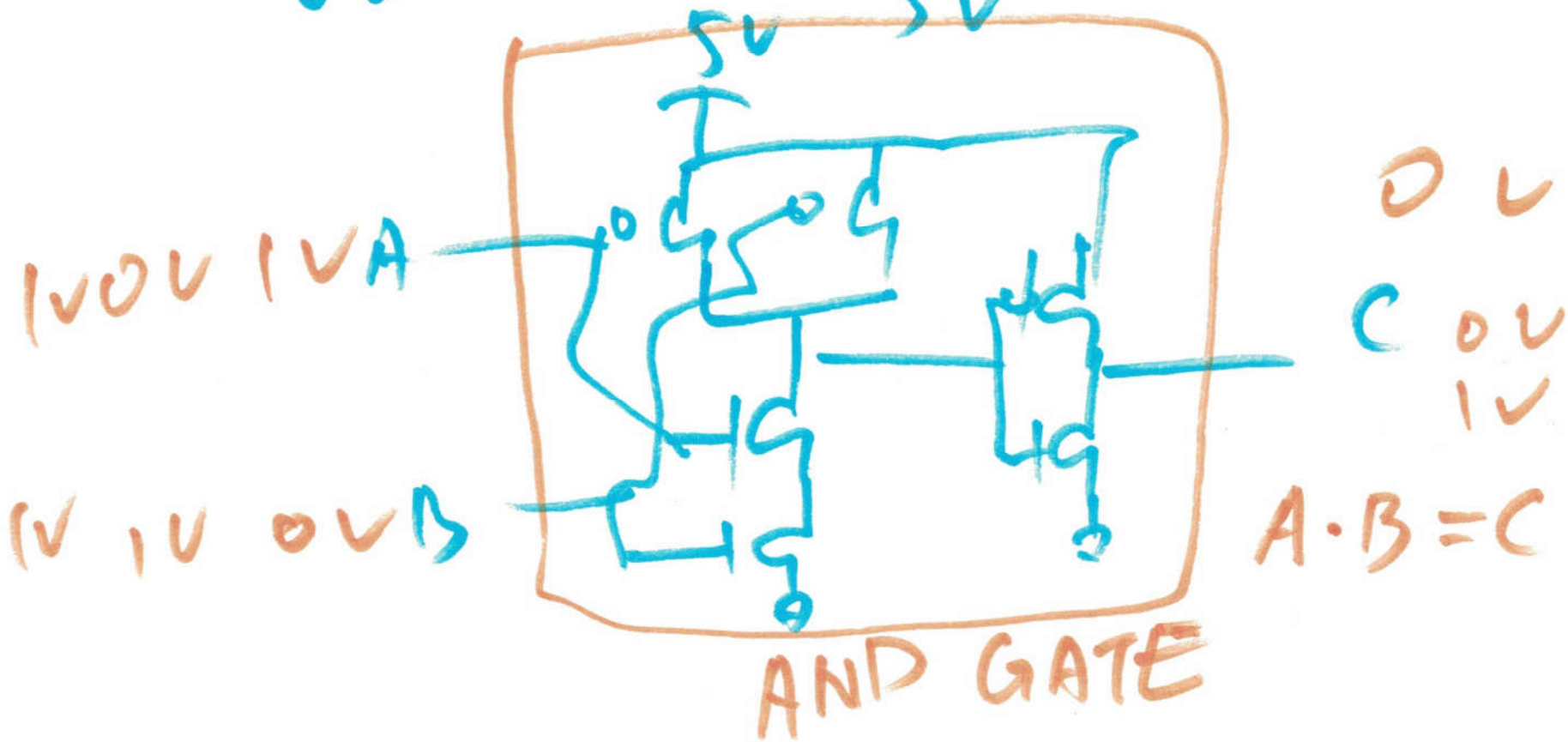
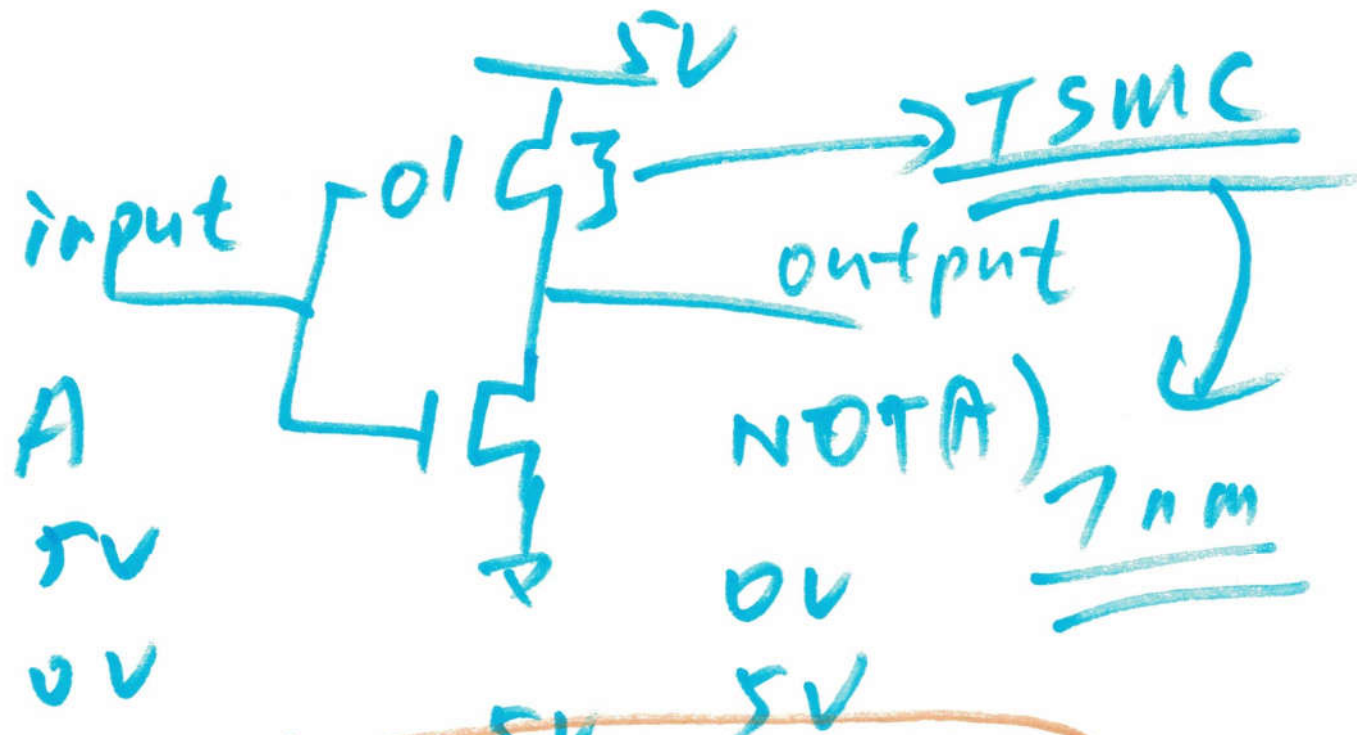
Computer is a binary / 2-digit machine

Exclusive OR



billions of transistors

A	B	AND	OR	NOT(A)	XOR
0	0	0	0	1	0
0	1	0	1	1	1
1	0	0	1	0	1
1	1	1	1	0	0



②

$$\Rightarrow A = [1 \ 2 \ 3 \ 4 \ 5]$$

$$\Rightarrow \del{A} A > 2$$

0 0 1 1 1

→ logic vector .

$$\Rightarrow A(A > 2)$$

3 4 5

$$\Rightarrow A(0 \ 0 \ 1 \ 1 \ 1) \quad \times \text{ won't work}$$

$$\Rightarrow A([0 \ 0 \ 1 \ 1 \ 1]) \quad \times \text{ won't work}$$

$$\Rightarrow A(\text{logical}([0 \ 0 \ 1 \ 1 \ 1]))$$

3)

$\Rightarrow A < 2$

1 0 0 0 0

logical numbers

$\Rightarrow A \geq 3$

0 0 1 1 1

The 'find ()' function

\Rightarrow find (A) % locations of elements in A that are non-zero numbers

1 2 3 4 5

$\Rightarrow A = [8 \ 9 \ 3 \ 4 \ 0]$

\Rightarrow find (A)

1 2 3 4

Ⓢ

→ find (A > 0)

1 2 3 4

→ A = [6 7 8 8 9]

→ find (A > 6)

2 3 4 5

→ A (find (A > 6))

7 8 8 9

5