Lec-53

Unknown Lecture

Bit-Masking

Bit-Masking → Magic → Invisible

01/5

53 → Logical and
|| → Logical or
! → || not

& → Bitwise and
|→ | or
~ → || not
^ → XOR
<< → Left Shift
>> → Right Shift

^ → XOR

a	b	a&b	a|b	a^b
1	1	1	1	0
0	1	0	1	1
0	0	0	0	0
1	0	0	1	1

~(1) = 0
~(0) = 1

a^a = a^
a^5 = 5 | 101 / 000 / 101
a^a = 0

5^5 = 0
101 / 101 / 000

a^b^a = a^a^b = 0^b = b

a^b^c = a^b^c^a^a = a^a^b^c^a = (a^a)^b^c^a = (0^b)^c^a

111 / 101 / 010 / 1083 / 1015

Left-Shift <<

① Right Shift

① a = 5

bytes = a = 5 (32) a << 2 ✓ a << 1 ✓

a<<b

a>>b

00000101 → 00001010 → 00010100 → 00101000 → 00101000 → 00101000