Bit Manipulation

Int size is 32 bits

First bit (left to right) is used to store sign of the number.

0 -> positive

1 -> negative

INT\_MAX : 231 -1

INT\_MIN : -231

Negative numbers are stored in 2’s com

**Converting number to binary**

Theory:

Number:7 Binary: 1 1 1 (1\*22 + 1\*21 + 1\*20)

Types of Operators

**Swap 2 numbers**

XOR (^)operation

5 ^ 5 = 0

1 0 1

1 0 1

0 0 0

Steps

a = a ^ b

b = a ^ b --> (a^b)^b = a

a = a ^ b --> (a^b)^(a) = b