

Two's Complement

BIT

00000000

00000001

00000010

11111111

11111110

11111101



INTEGER

0

1

2

-1

-2

-3

VERY IMPORTANT

A NUMBER FORMAT

A system for representing signed integers in computers. Using x bits we could represent 2^x numbers.

For example, 32 bits represent 4294967296 numbers, 64 bits 18446744073709551616, and so on.

Two's Complement

operator

BIT	INTEGER
00000000	0
00000001	1
00000010	2
11111111	-1
11111110	-2
11111101	-3

^ inverts the bits

