

Bitwise Operators

Monday, February 16, 2026 2:49 PM

Computers Thinks in **bits** and **bytes**.

== Address bar --- we are typing == colab.google == Input ==

Input == Process == Output -- that's how all the machines works.

U need it.

Machines doesn't makes mistakes.

Peoples are dumb that's why machines are learning.

1 Cr == 2 Cr == ye mera target march end me.

A bit is the smallest unit of digital information, it can either be 0 or 1.

A byte is a collection of 8 bits, it can represent values from 0 to 255.

Operator	Description	Syntax
&	BITWISE AND	x & y
	BITWISE OR	x y
~	BITWISE NOT	~x
^	BITWISE XOR	x ^ y
>>	BITWISE right shift	x>>
<<	BITWISE left shift	x<<

**Google.com == name == Domain Name System ==
2404:6800:4002:807::200e:**

Domain Flipping ==

BINARY digits == 0,1 ==>

-10, -7, -8, —hum ispe kaam nahi krte h.

Top 1% -- wali skills.

68 --- decimal number (floats) == 68.0

Now the task is to convert this in binary...

68

2		0
2	54	0
2	17	1
2	8	0
2	4	0
2	2	0
2	1	1

30

$\frac{0,1}{2} \quad \text{Quotient}$

$(\frac{68}{2}) \quad \text{Quotient}$

$\frac{68}{2} \quad \text{Quotient}$

$0 \quad \text{Remainder}$

$$68 = 1 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0$$

2 2 2 2 2 2 2

$$= 2^6 + 1 + 0 + 0$$

by + y

= 68

Logic Gates ==

$$8 \text{ & } 72 = 8$$

