

(No. of 1 Bits)



11

$$(1 \leq n \leq 2^3 - 1)$$

Pattern

↳ forcefully

0000001101

Binary =

B.T's

Rough logic

100 + 0
5

5000

6 bits

001101

Binary ☒

1

Count = 0
↑

{ Pta kar denge 1 hai ya nhi
↳ or agr 1 hoga toh Count ++; }

001011

need X

ye 1 hai;

count++;

>> → Right Shift

000101

Same

Loop

Padd → '0'

→ (negative no
compiler depend)

count++;

>>

000010

→ '0' →

~~count++~~

>>

000001

→ count++

>>

000000

Loop →

(n != 0)

(n > 1)

(Rough
logic)

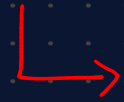
Ruk jao

11 →

0001101

convert?
check?

00011010
00000001



11 & 1

Bitwise

convert x

00000010
→ true
→ false

true = 1

if ()

{

count ++;

}

0001 ✓

2 value

0 → count x

(1 → count ++)

0001 ✓

00010 ✓

Binary

2 bits

0

1

✓

4 value \Rightarrow

00
01
10
11

Decimal

10 bit \rightarrow (0 to 9)

Number
System

✓

(computer
used)

Binary \rightarrow Decimal

int

$$(-2^{32-1} \leq n \leq 2^{31} - 1)$$

↓
Range

i/p

0 1 0

o/p

2

Convert ?

Breakdown

010 \rightarrow 2

00010 \rightarrow 2

$010 \rightarrow \text{Binary}$
 Somehow
 (2) related

X not consider
 $010 \rightarrow 2$
 $000010 \rightarrow 2$

$$(0 \times 2^2 + 1 \times 2^1 + 0 \times 2^0)$$

Rough logic

Palak

$$0 \times 4 + 1 \times 2 + 0 \times 1$$

$$\Rightarrow 0 + 2 + 0 \Rightarrow 2$$

O/P

Given Bin \rightarrow

$$(0 \times 2^2 + 1 \times 2^1 + 0 \times 2^0)$$

$B \rightarrow D$
 $D \rightarrow B$

1 2 3

(Product-Sum)

Bahan

Bahan



n = 010



Deci = 0

$((\text{last digit} \times 2)) + \text{Deci}$

Deci =

$$010 \div 10 \Rightarrow 0 \rightarrow \text{Store}$$

$$010 \div 10 \Rightarrow 01$$

And

(c = 0)

01

same

(Loop)

(n! = 0) ✓

main()

(code)

00
0

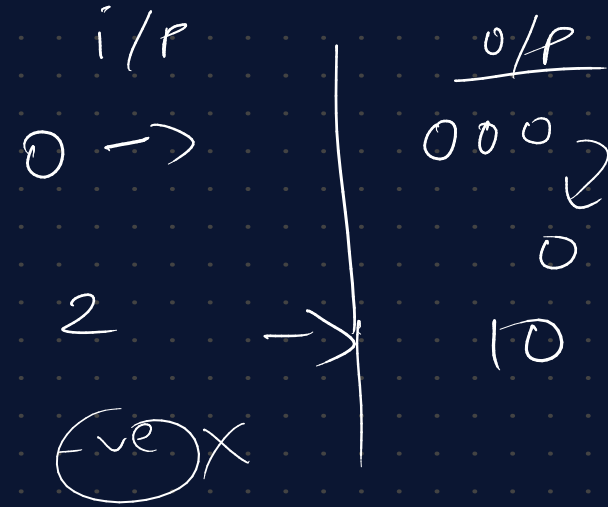
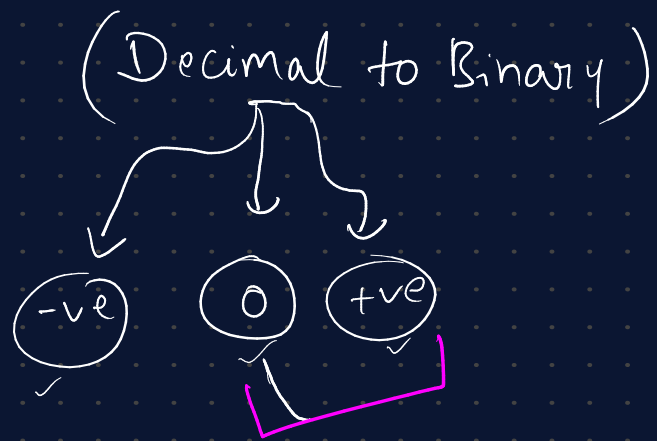
pow(2, i)
10, 2 → 10²

$$D \Rightarrow 0 \times 2^0 \Rightarrow 0 \checkmark$$

$$D \Rightarrow 1 \times 2^1 \Rightarrow 2 \checkmark + D$$

$$D \Rightarrow 0 \times 2^2 \Rightarrow 0 \checkmark$$

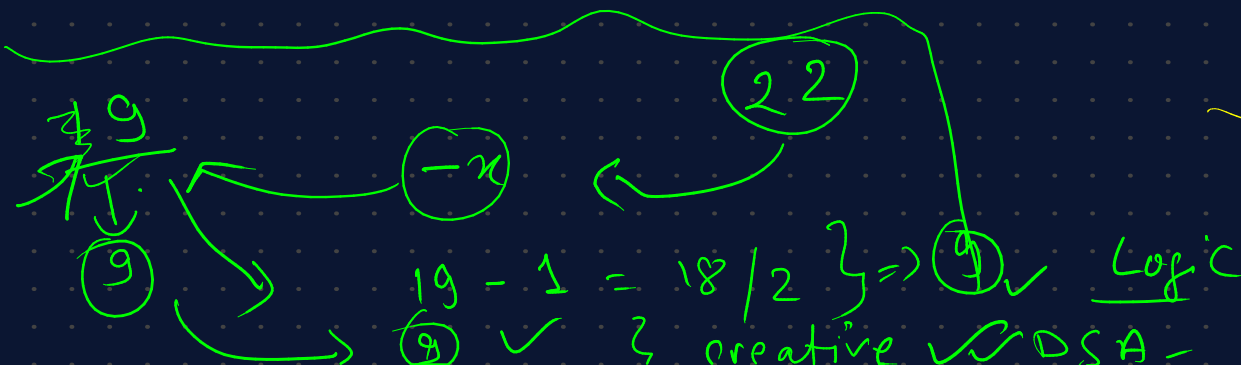
Breakdown



(D → B)

2 → 10

0001
 ↳ 1 × 2⁰
 Iga ke delete hai? (guen)



$$0 \times 10^1 + 2 \times 10^0$$

$$0 + 2 \Rightarrow 2$$

② → Binary

oo
n

Dusra Dimag

$0 \times 10^1 + 2 \times 10^0 \Rightarrow$ ②

② → bit → 000010

bit
Base Logic
8
1
kuch chances
try

2 2 1

000010
8 6 6 6 6 1
000000

Hamming bits

Logic

(2nd Logic → yourself)

(2) → 0010 / 10

{ 6 bit }

2 % 10 ⇒ (2)
~~(0)~~

000010

000010 8 10
1 hai
ya 0?

↳ 0 hai

Store karlo
right shift ✓

000001

1 hai ya 0?
right shift

↳ 1 hai

store

00...10

8
00 → 0
10 → 0
01 → 0

11 → (1)

Same

00001 0
(2)

8 (1)

Store
0

000010

(2)

Binary

8, >>

(n != 0)

formula :- ?

2356798 ✓ long long
↳ Bada IV
(integer)

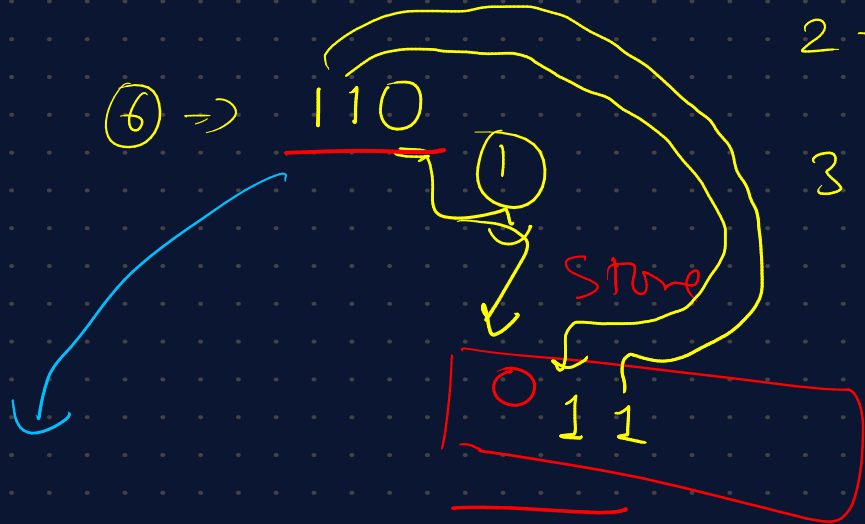
0010
change

mil

1 → '0'

2 → '1'

3 → '0'



110101

(reverse)

101011

110101

110 ≠ 011

formula

↓ rev
110 ✓

1 2 3 $\xrightarrow{\text{as it is}}$ (123)

2 2
• °

$\xrightarrow{\text{Reverse}}$ (321)

$n = 123 \Rightarrow$

Output = 0

$$(1 \times 10^2 + 2 \times 10^1 + 3 \times 10^0) + \text{old value}$$

\hookrightarrow yad aa rhai?

$$\text{Output} = (\text{last digit} \times 10^i) + \text{Output}$$

Logic

$\begin{pmatrix} > \\ < \\ - \end{pmatrix}$



Memory value store?

H.W

$\begin{pmatrix} + \\ \infty \end{pmatrix}$

$\begin{pmatrix} - \\ \infty \end{pmatrix}$

$\begin{pmatrix} 2 \\ 5 \end{pmatrix}$

(formula)

use

code



$2^{\sim} + (-) = \boxed{}$

$x = y$

memory store

mr $\begin{pmatrix} x \end{pmatrix}$

Investigate

