

# Doubt Clearing Session - Part I

Foundation Course on Data Structures & Algorithm - III

→ Topics Pending

- ↳ Operator precedence
- ↳ Associativity

→ B / D

I

① Doubt Session

I

Operator Precedence  
 $\rightarrow$  int ans =  $2 * 3 + 5$   $\rightarrow$   $6 + 5 = 11$   
 $\boxed{11}$   
 $\rightarrow$  int ans =  $2 * \underline{\underline{3}} + 5$   $\rightarrow$   $0 + 5 = \boxed{5}$   
 $\rightarrow$   $\boxed{5}$

Ambiguity  $\rightarrow$   $(2 * 3) + 5$   
 $\rightarrow$   $(2 * 0) + 5$   $= 0 + 5 = \boxed{5}$

→

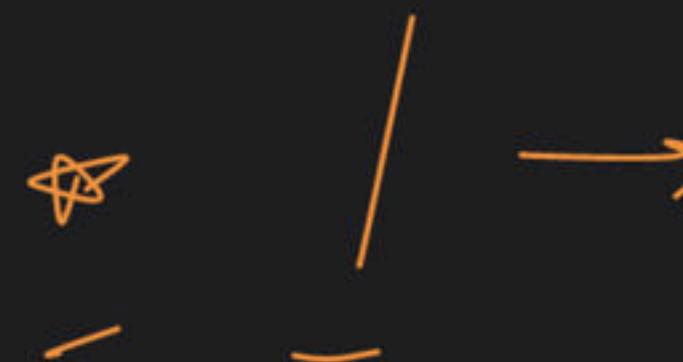
Associativity -

table yes ✗

confusion

→ Brackets

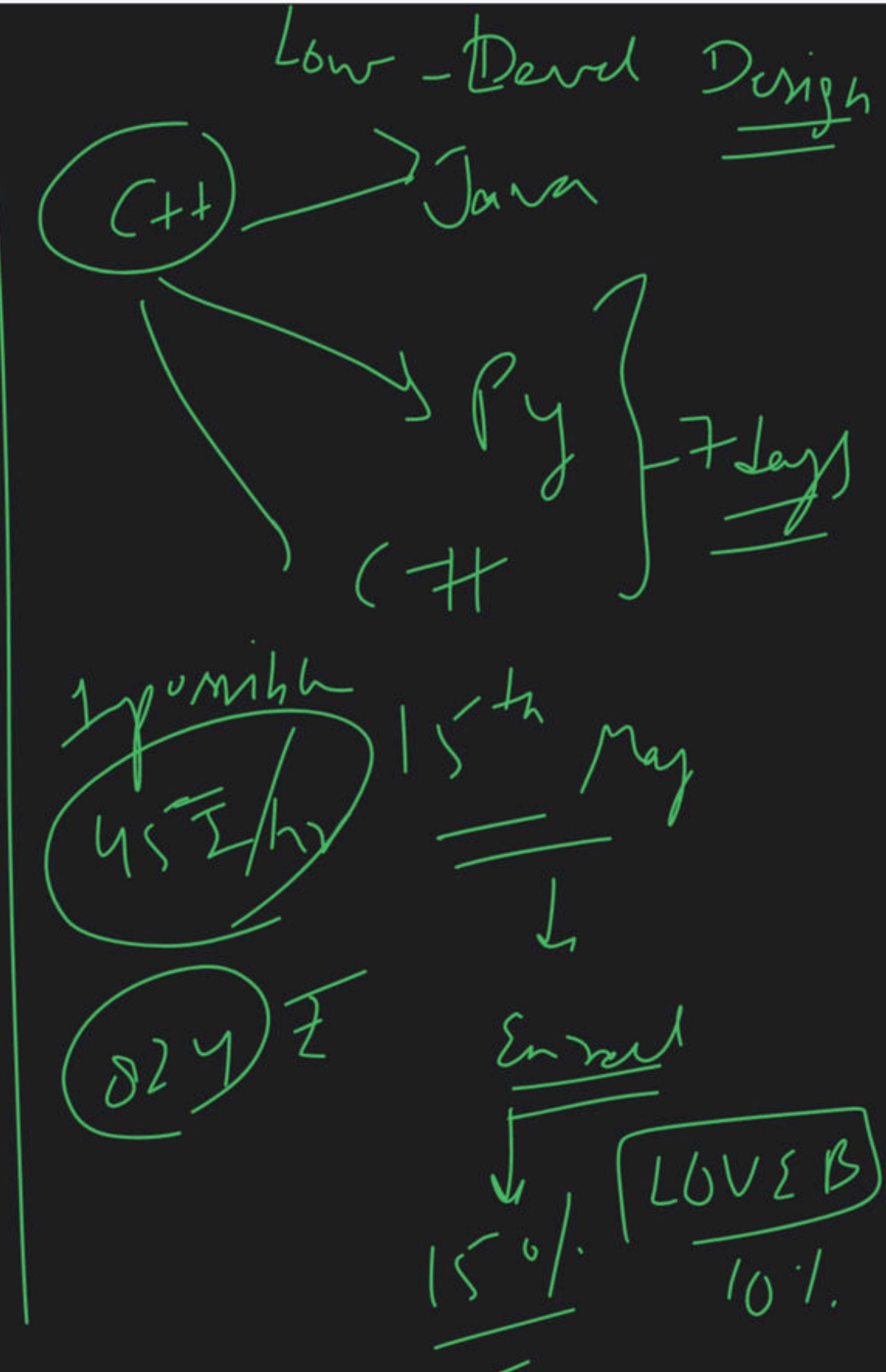
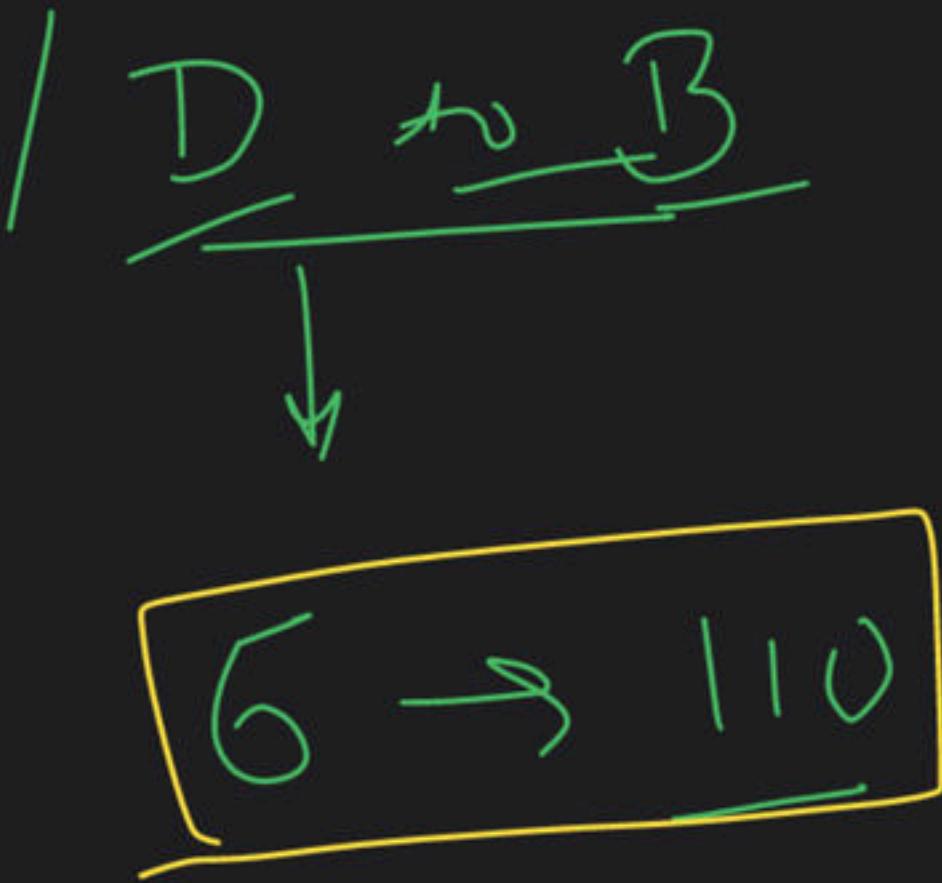
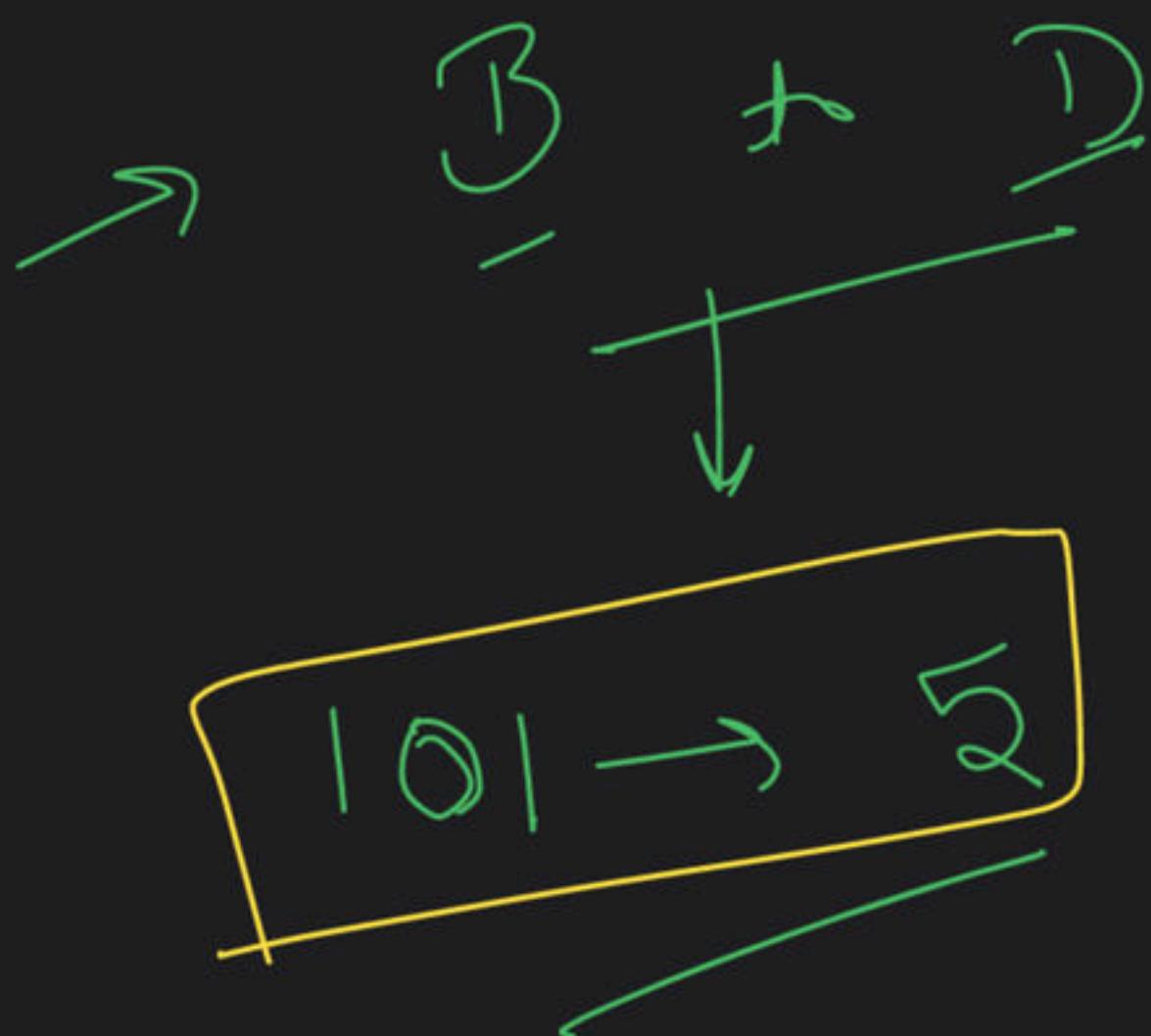
$$\rightarrow \left[ (10 / 10) * 10 \right]$$



same  
precedence

$$= 1 \rightarrow 10 = 10$$





$n = 137$

$\overline{137}$

1, 3, 7

$n_0 \rightarrow \text{digit} \rightarrow$   $\boxed{0.10}$

$137 \cdot 0.10 \rightarrow 7$

$13 \cdot 0.10 \rightarrow 3$

$1 \cdot 0.10 \rightarrow 1$

$10 \cdot 137 = 10$

$n \rightarrow \text{chotta loop}$

$10 \left[ \begin{array}{r} 137 \\ 130 \\ \hline 7 \end{array} \right] \equiv 13$

$137 \rightarrow 13$

$10 \left[ \begin{array}{r} 13 \\ 10 \end{array} \right]$

$10 \left[ \begin{array}{r} 10 \\ 10 \end{array} \right]$

$10 \left[ \begin{array}{r} 10 \\ 10 \end{array} \right]$

↗ No → digit → Solve

$$\cancel{23} \cancel{N} \cdot \cancel{10} \rightarrow \cancel{7}$$

$$\cancel{2} \cancel{N} \cdot \cancel{10} \rightarrow \cancel{3}$$

$$2 \cdot \cancel{10} \rightarrow \cancel{2}$$

$n - -$

$\times 10^N$   
↓  
 $6 \rightarrow (n-1)$

$$23 \boxed{7} \% 10 = 7$$

$$\frac{237}{10} = 23$$

$$23 \% 10 \rightarrow 3$$

$$\frac{23}{10} = 2$$

$$2 \% 10 \rightarrow 2$$

$\frac{2}{10} = 0 \rightarrow n=0 \rightarrow$  loop message

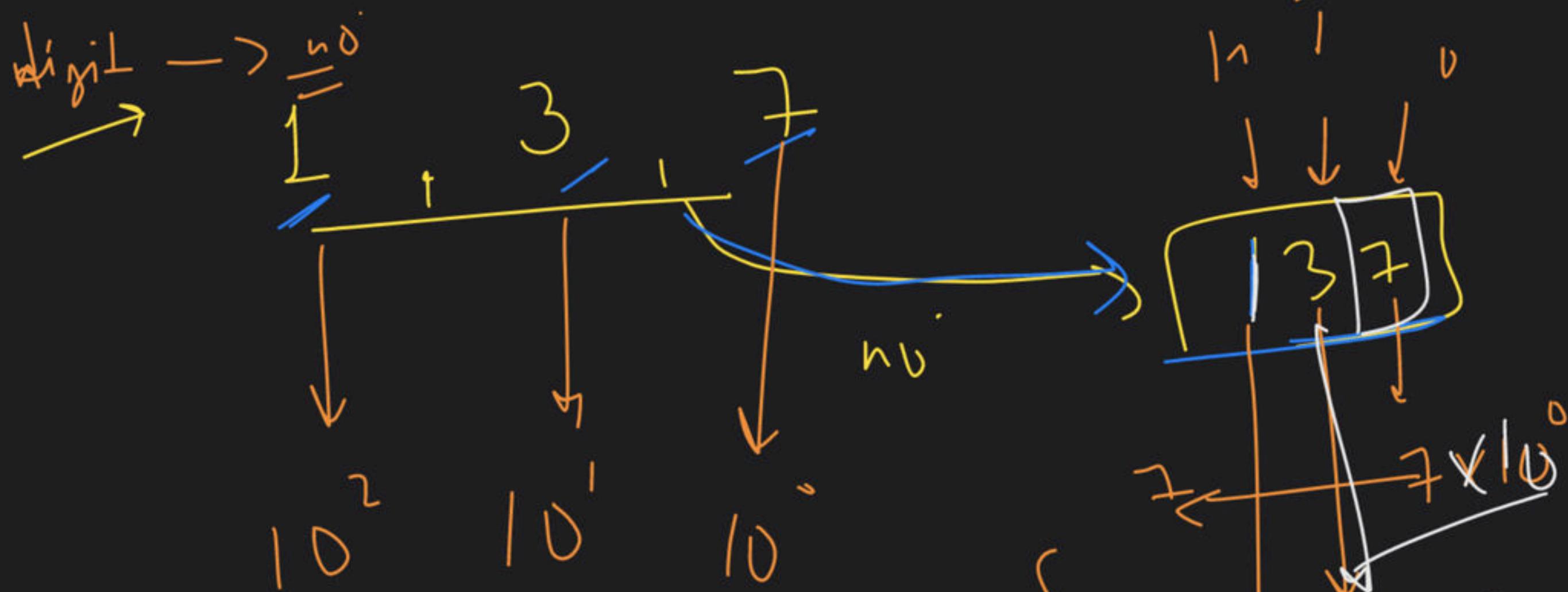
$$23 / 10 \rightarrow 2$$

$$23 / \cancel{2}$$

$$23$$

$$\frac{237}{10} = \boxed{23} \cdot 7$$

int  $\rightarrow$  int



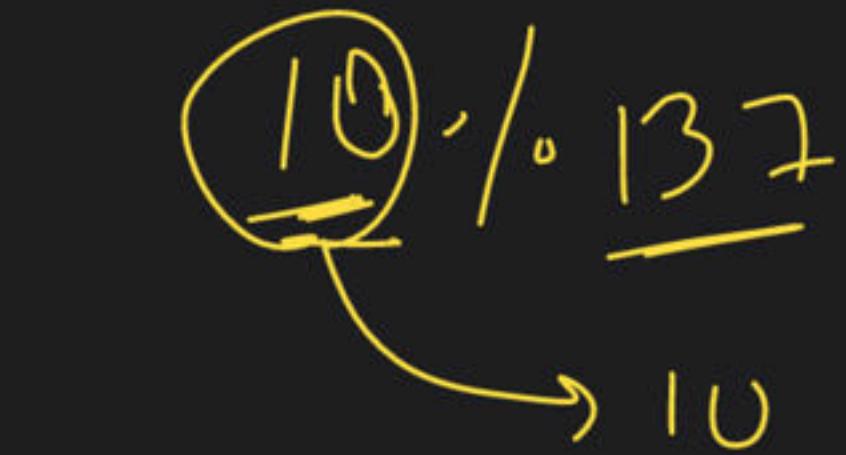
$$1 \times 10^2 + 3 \times 10^1 + 7 \times 10^0$$

$\therefore \boxed{137}$

$$\left\{ \begin{array}{l} 10^0 = 1 \times 10^0 \\ 10^1 = 3 \times 10^1 \\ 10^2 = 1 \times 10^2 \end{array} \right.$$

$$\downarrow$$

$$\boxed{137}$$



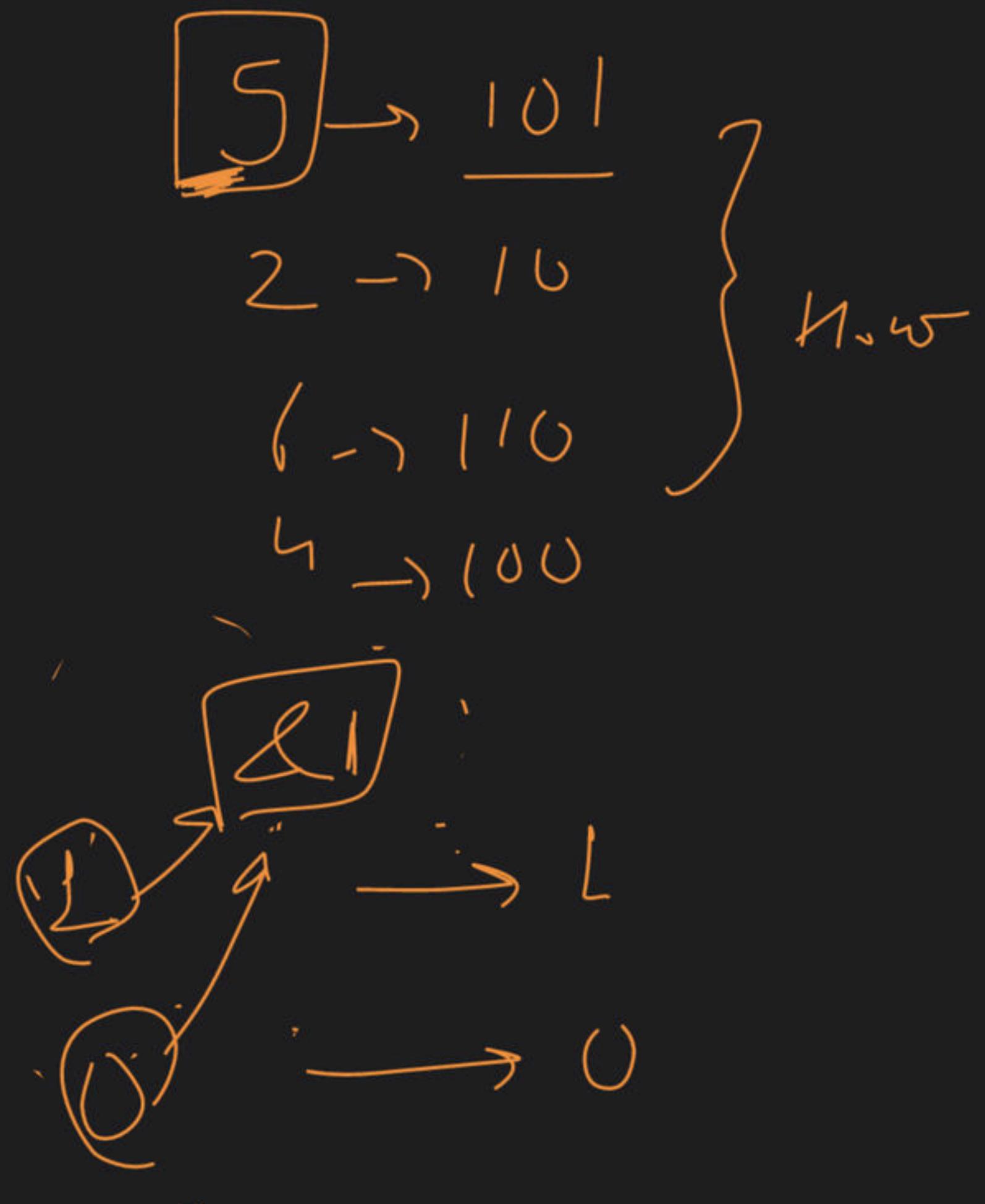
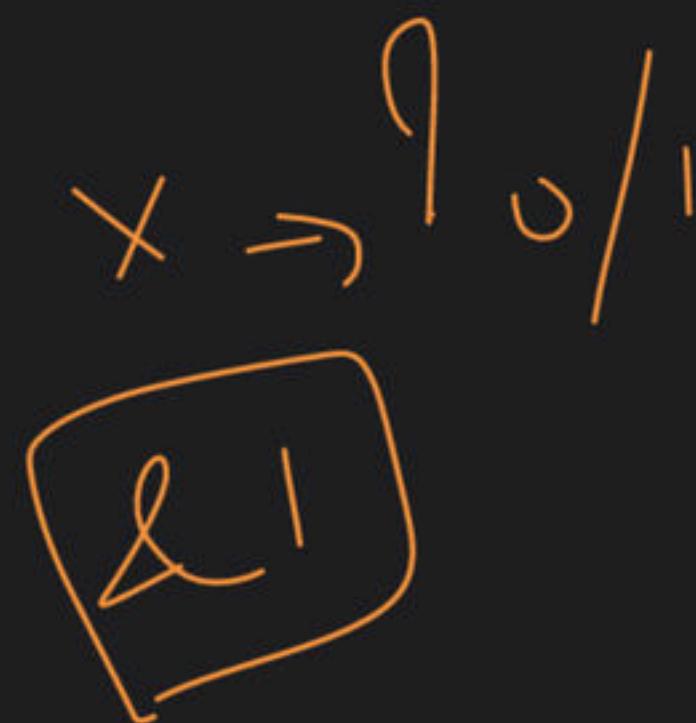
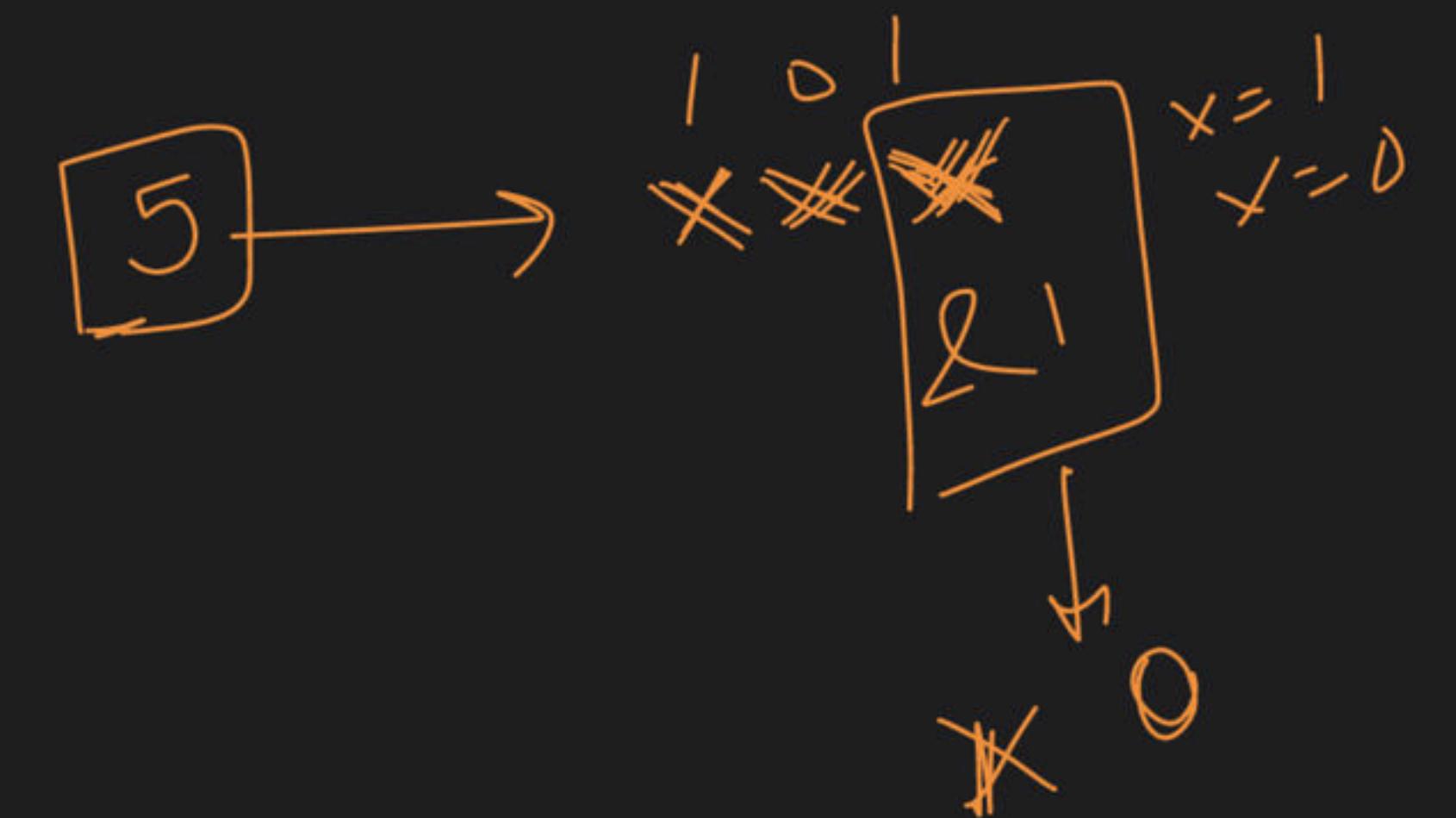
$$n \times 2^k$$

$$\downarrow$$

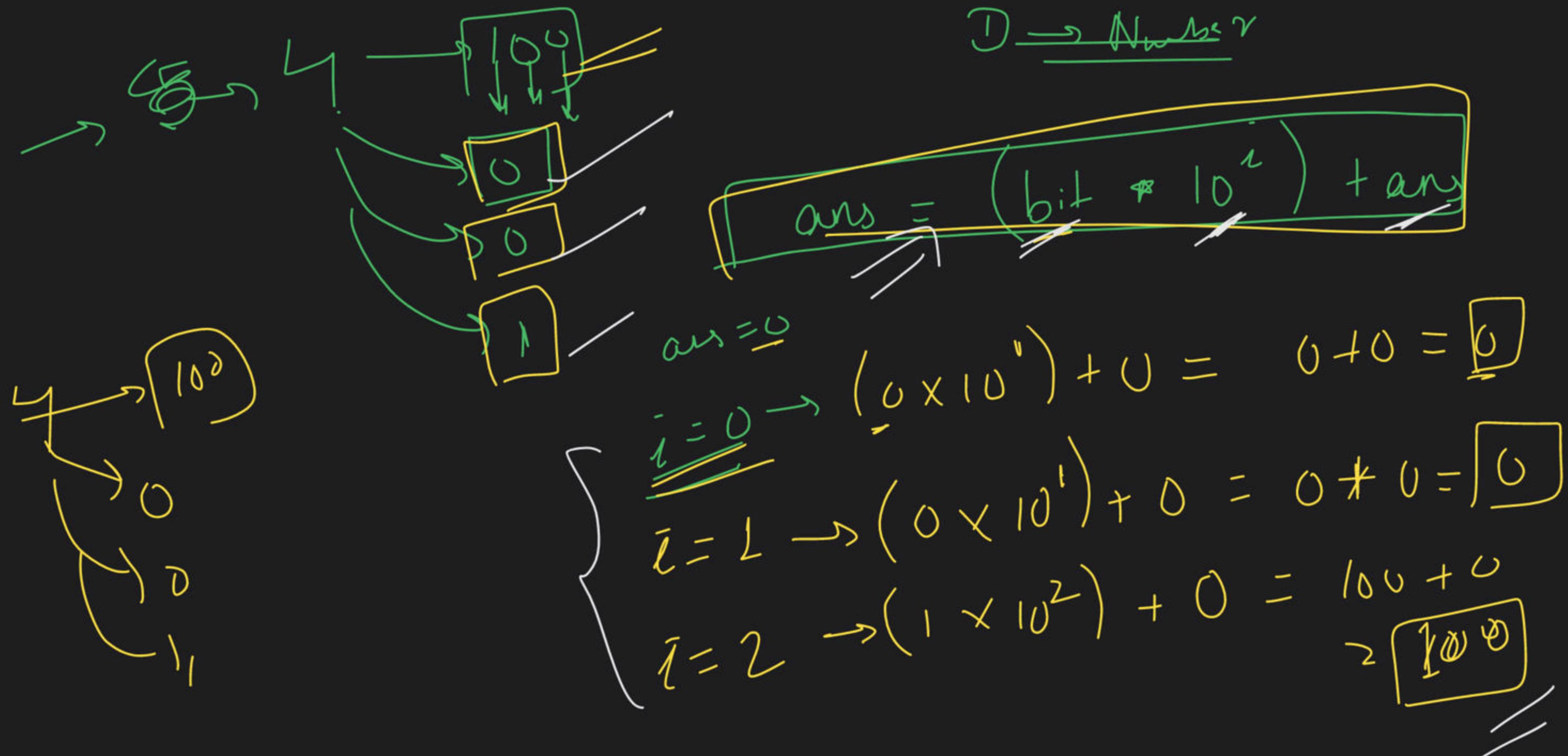
$$0 - (n - 1)$$

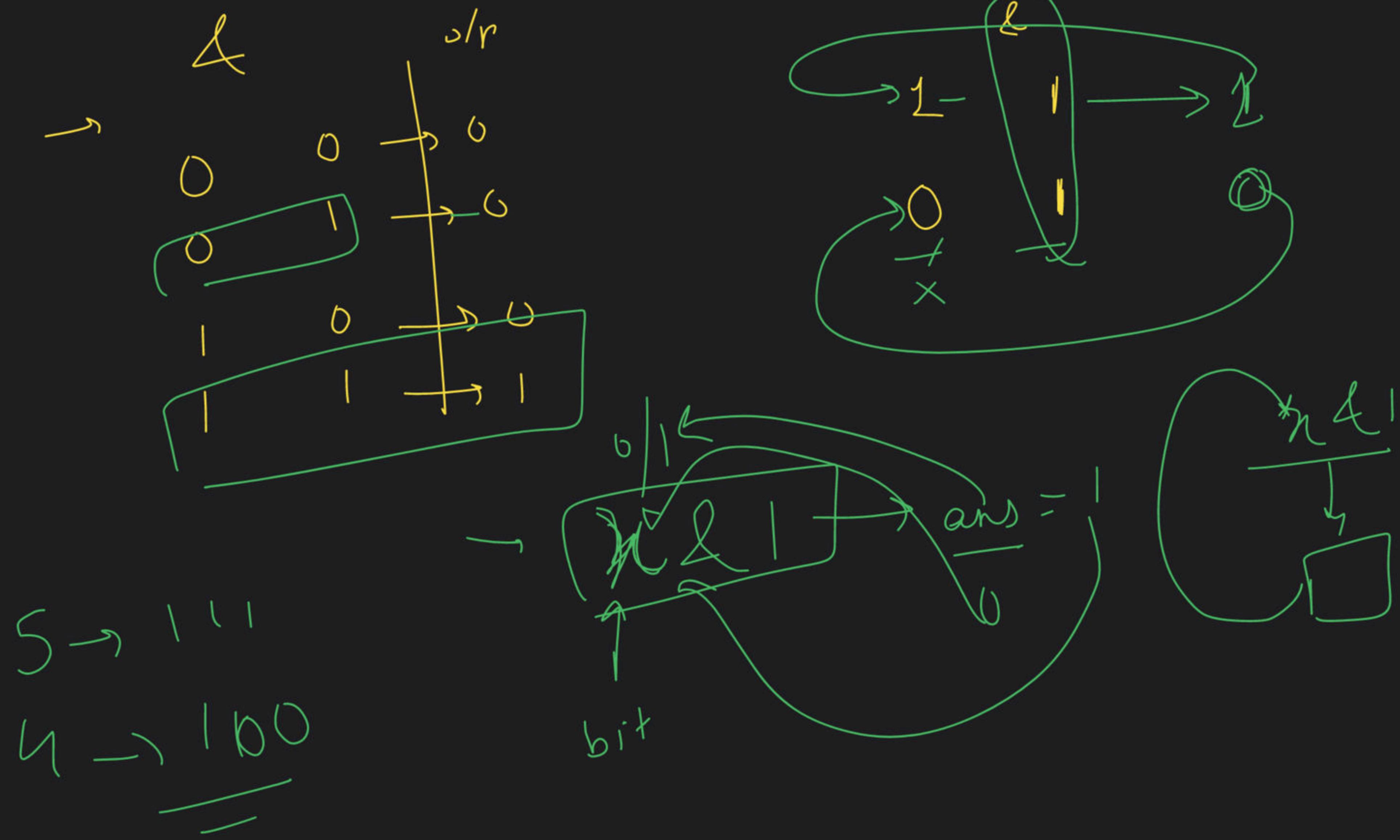
$$\boxed{10} / 10 \rightarrow 1$$

→ Decimal → Binary









$n = 1374$

while ( $n \neq 0$ )

{

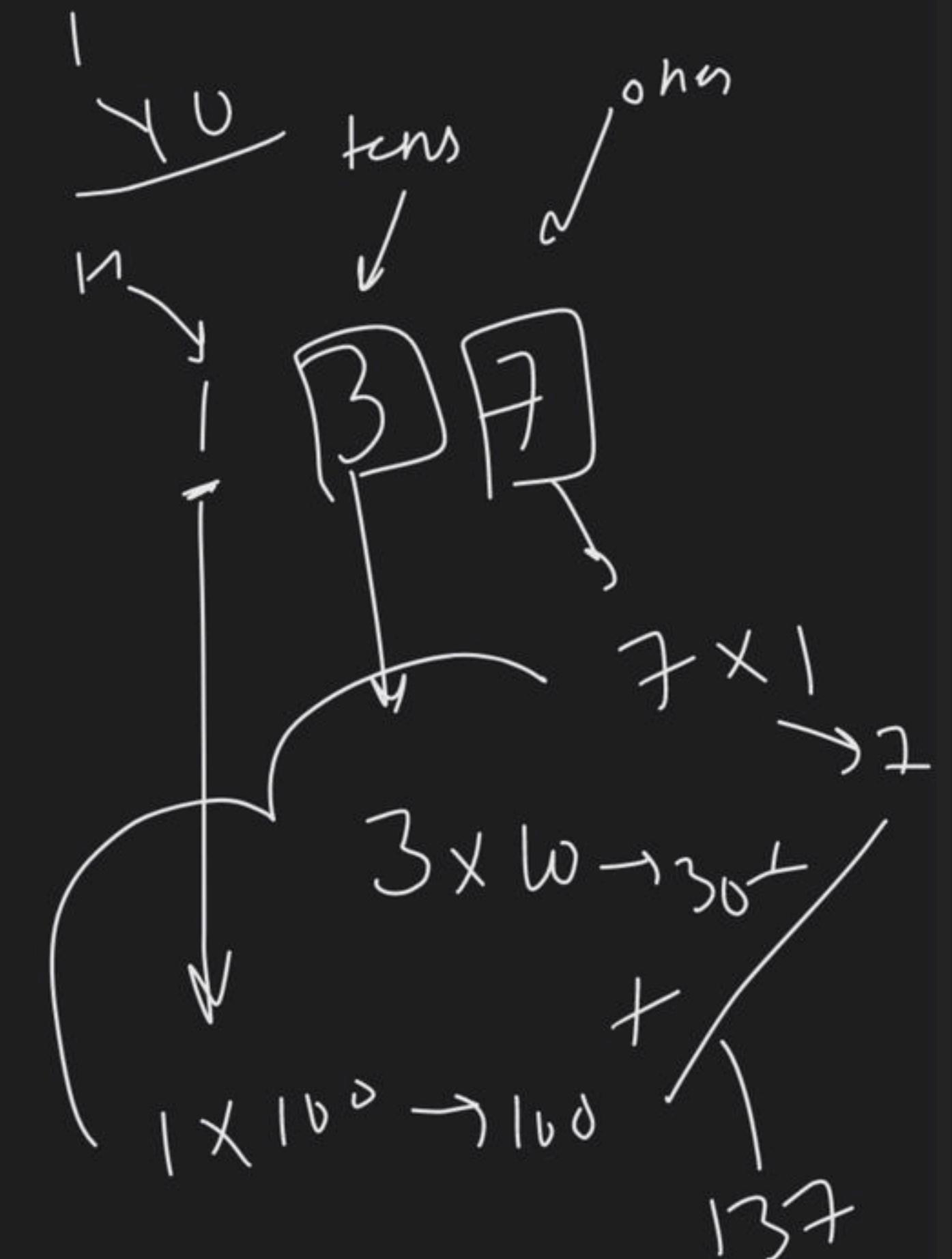
int bit =  $n \& 1$ ;

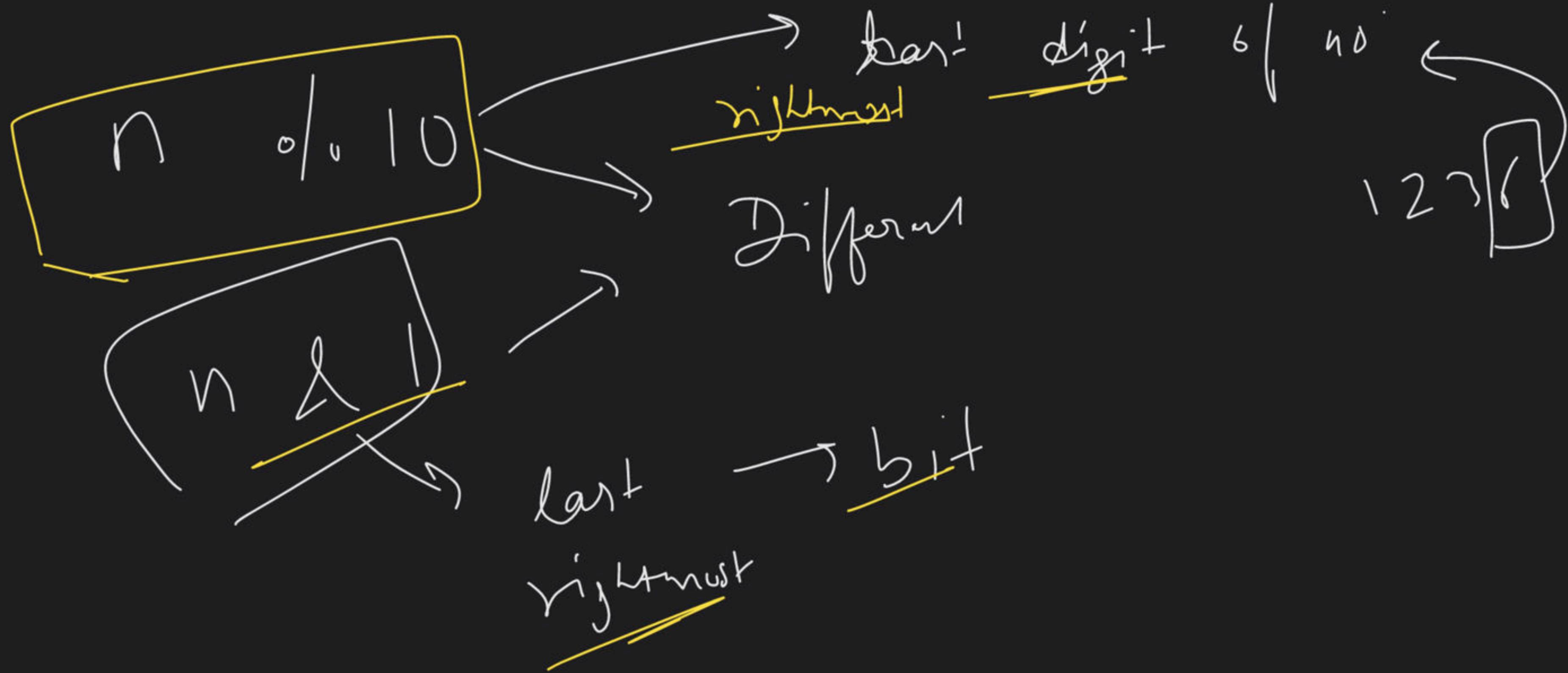
ans = (bit \*  $10^i$ ) + ans

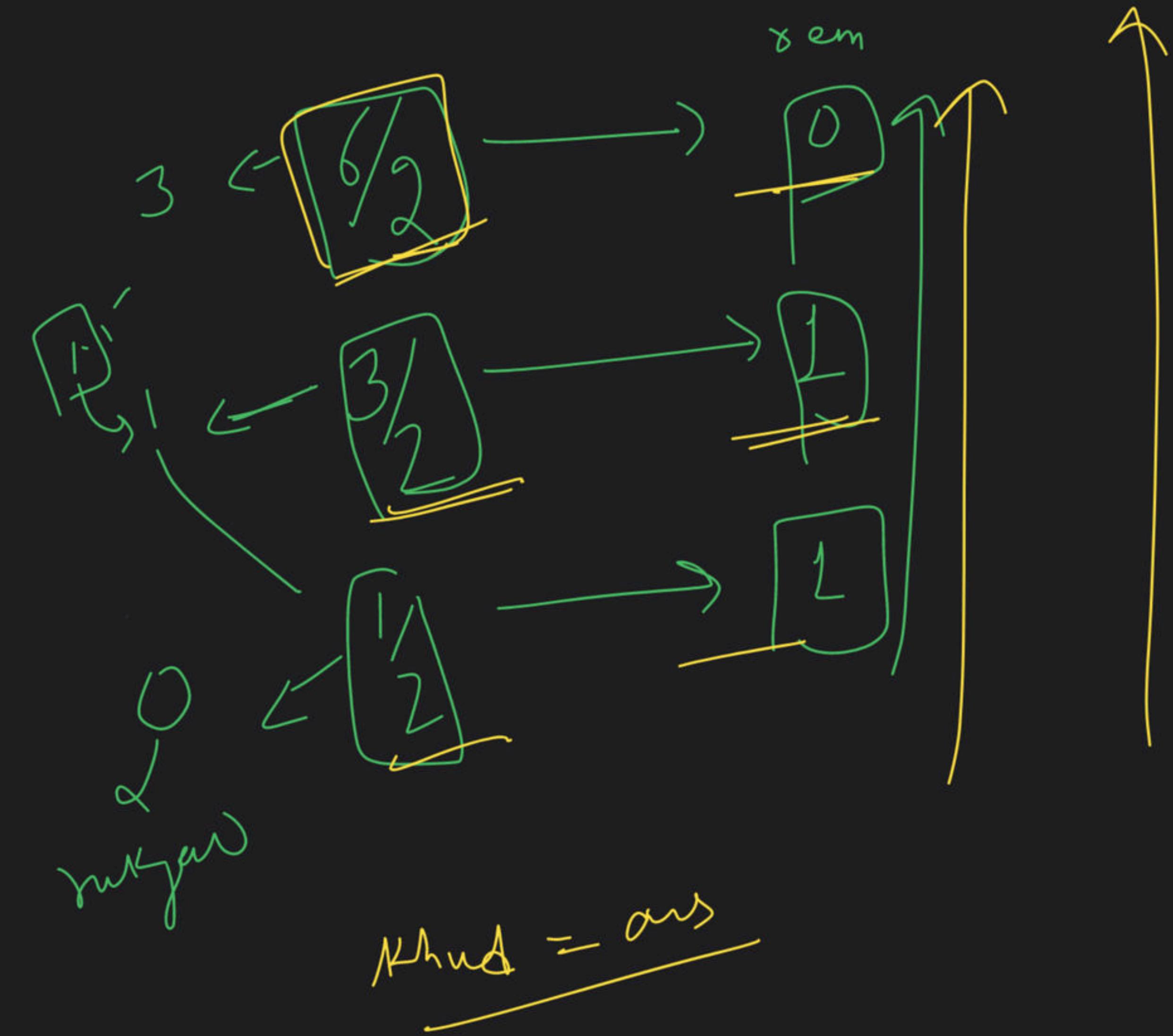
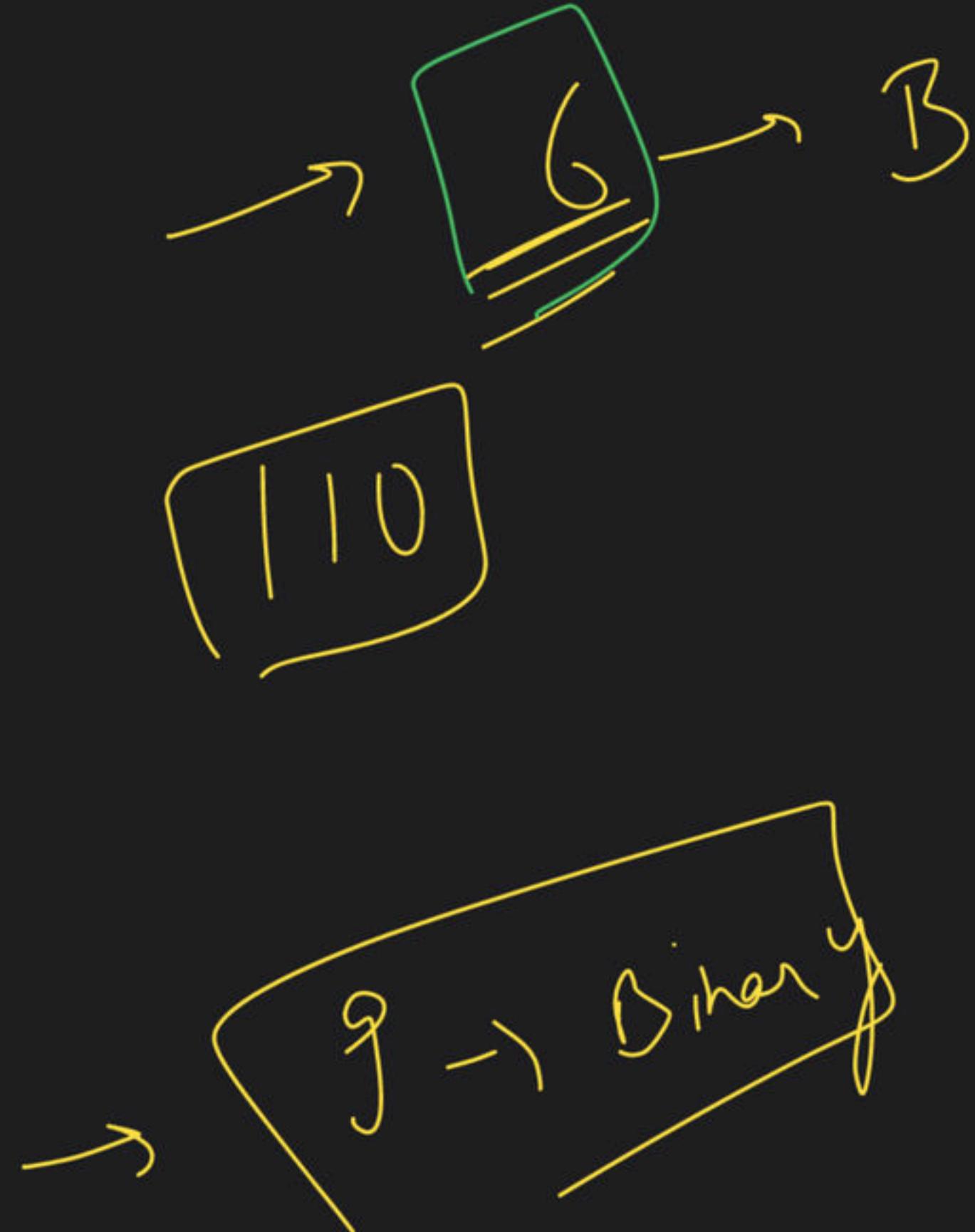
$n = n >> 1$

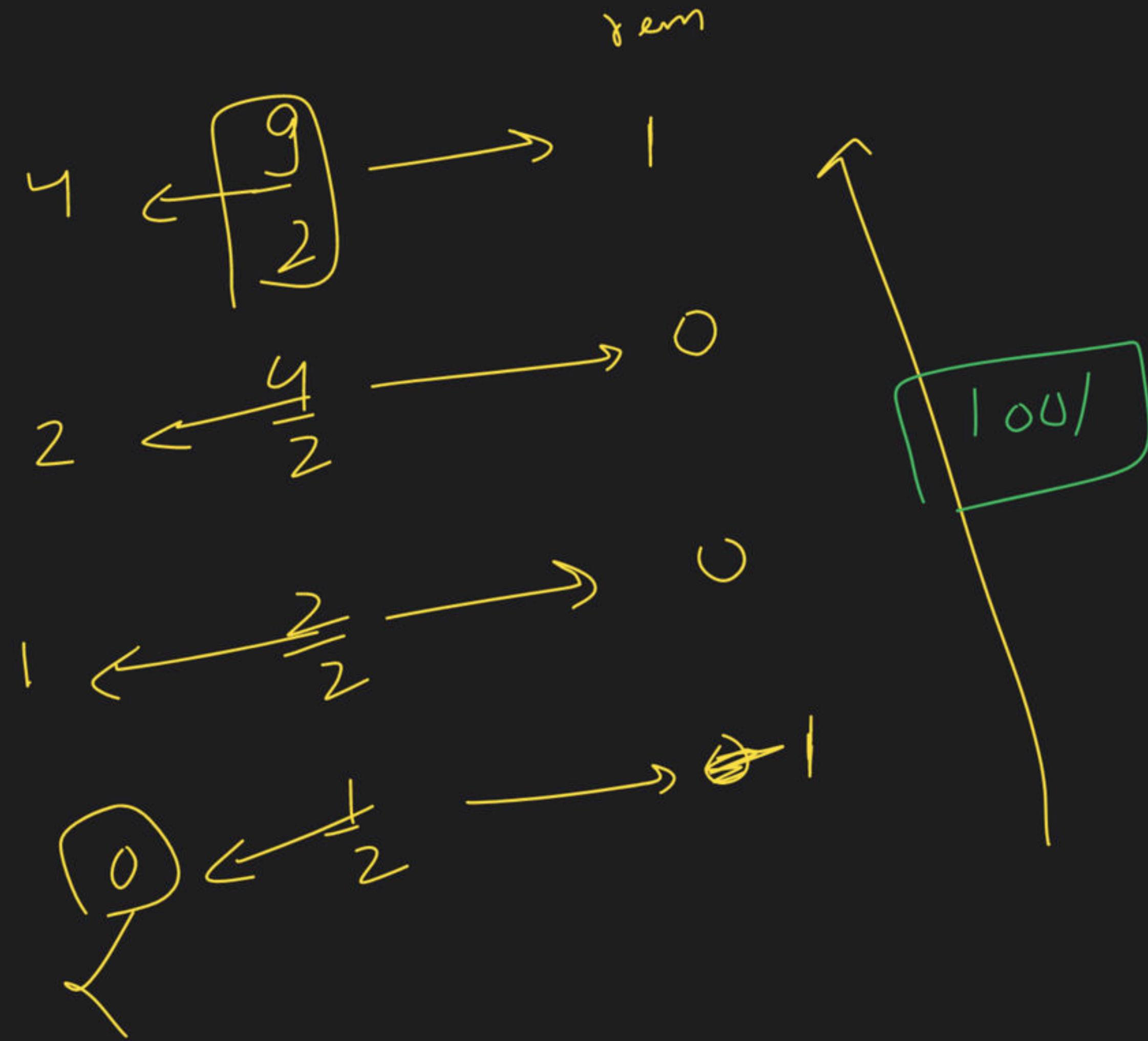
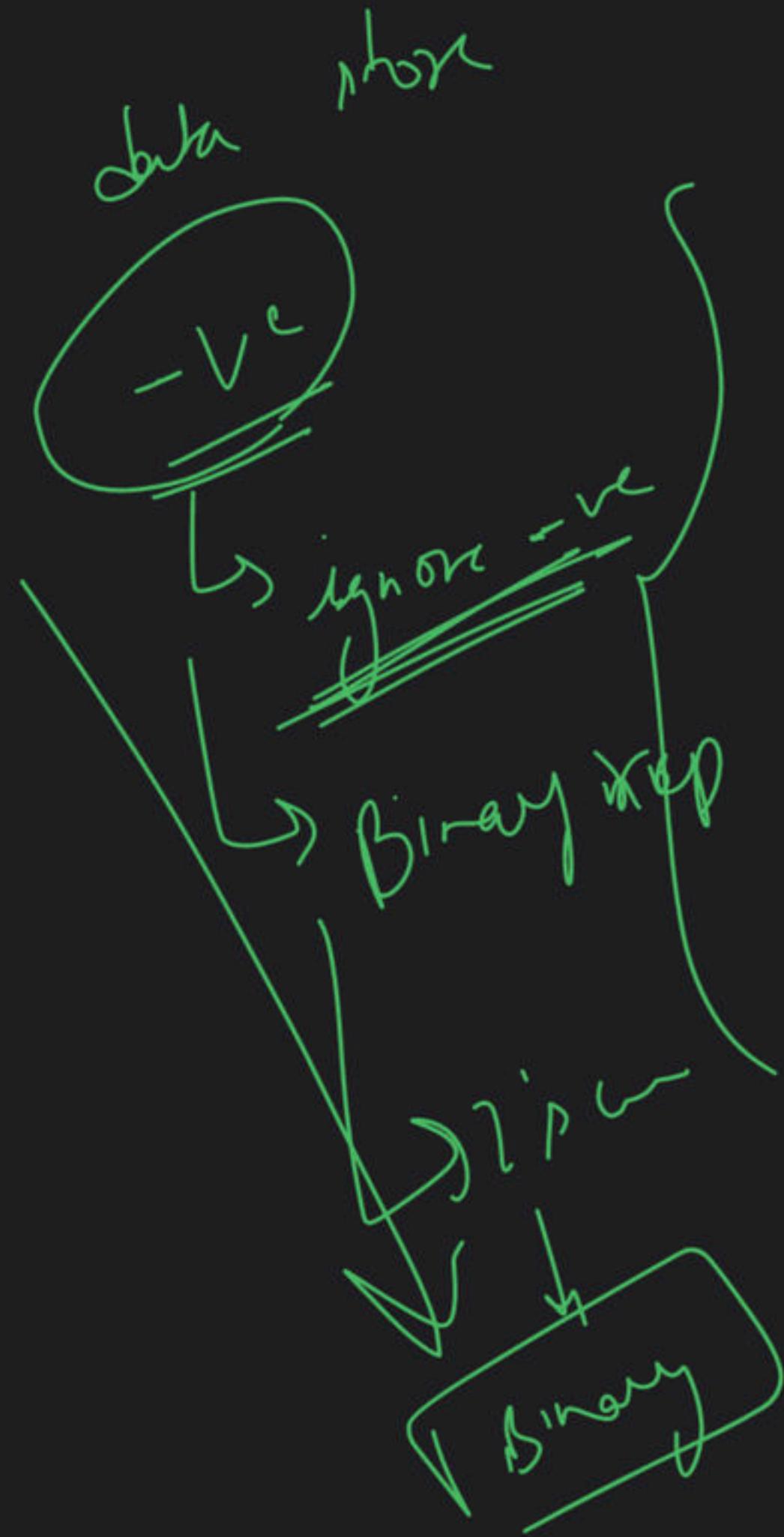
$i++$

}









→ 234 → 1010 → areaah  
→ ~~copilot~~

n line



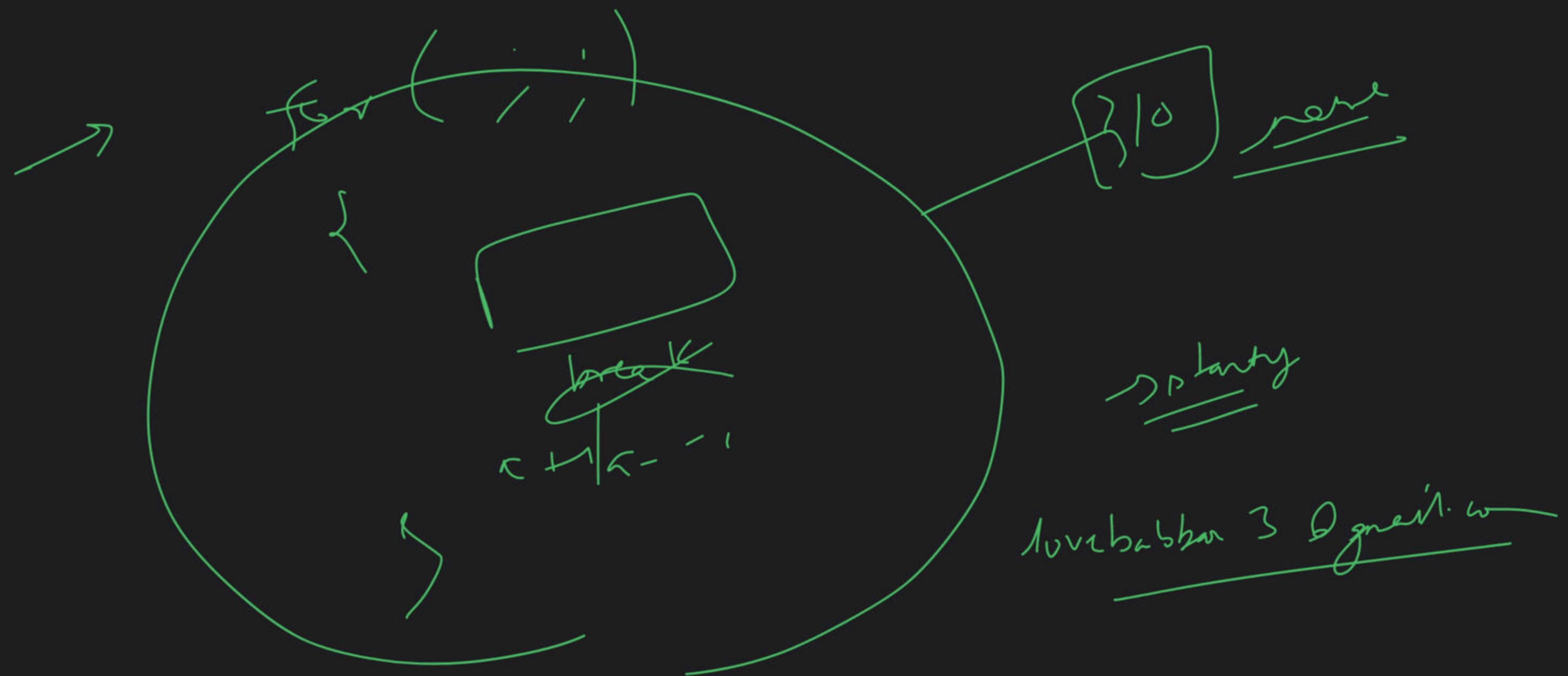
f(i)

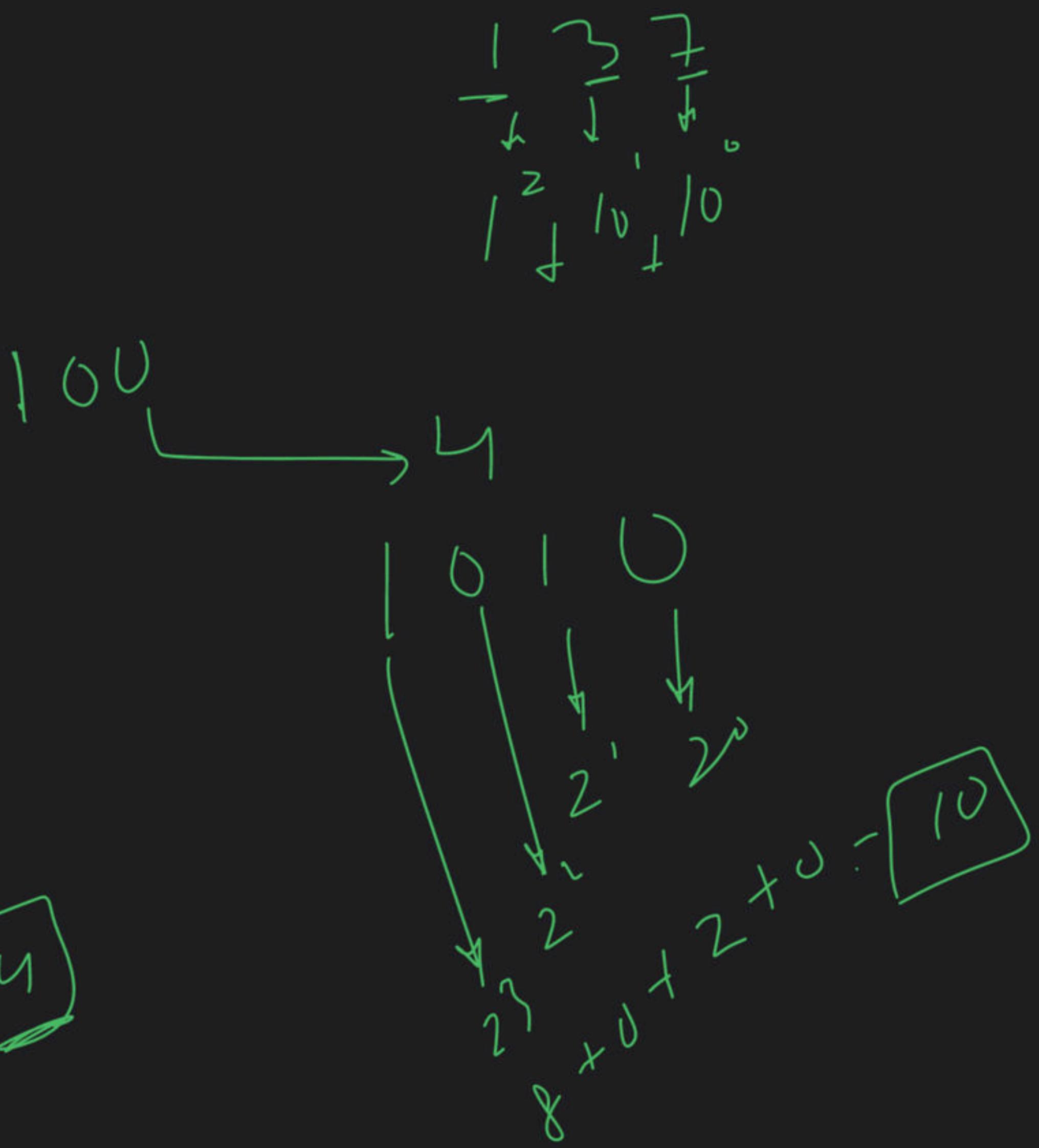
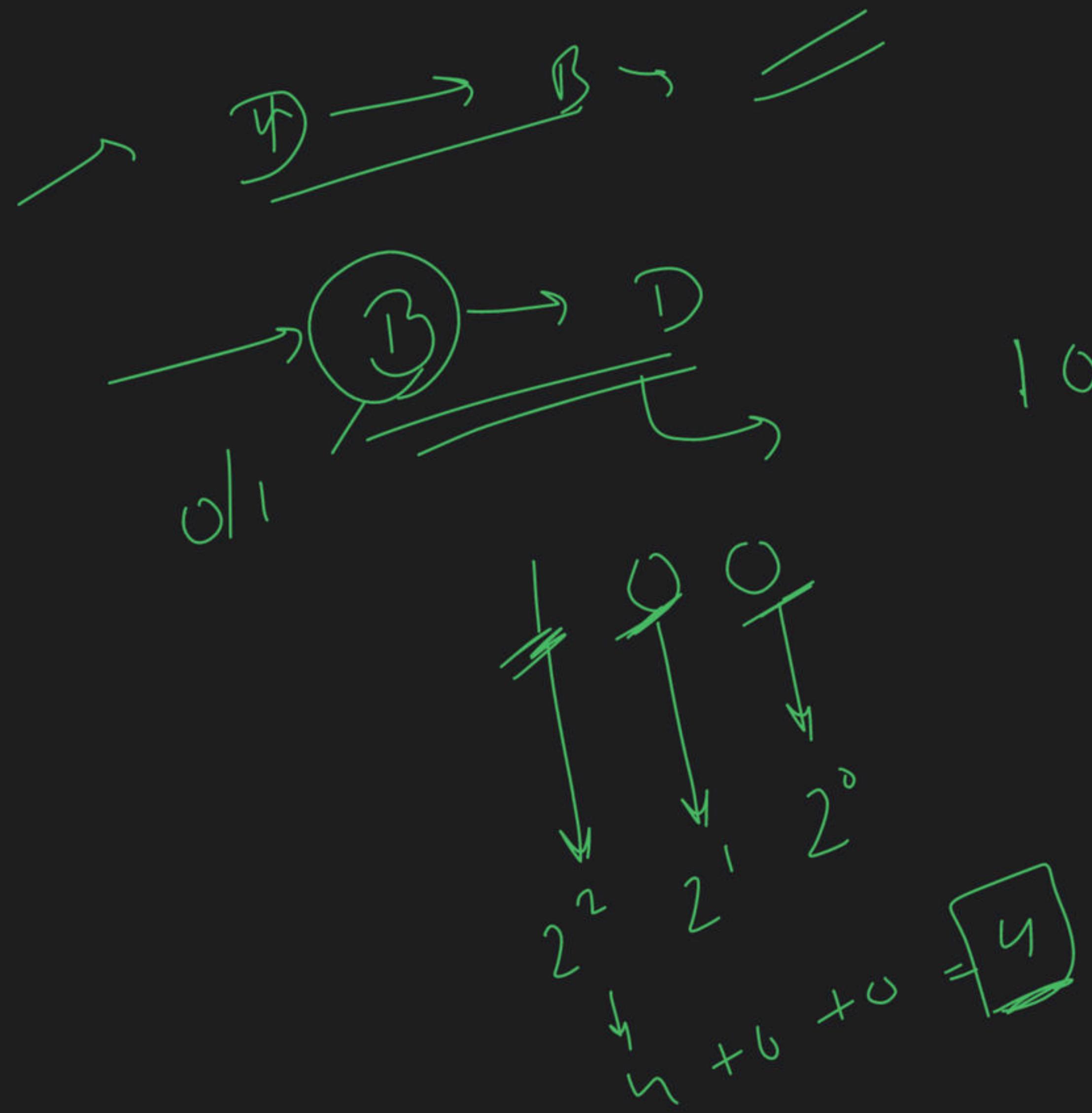
{  
  break  
  }

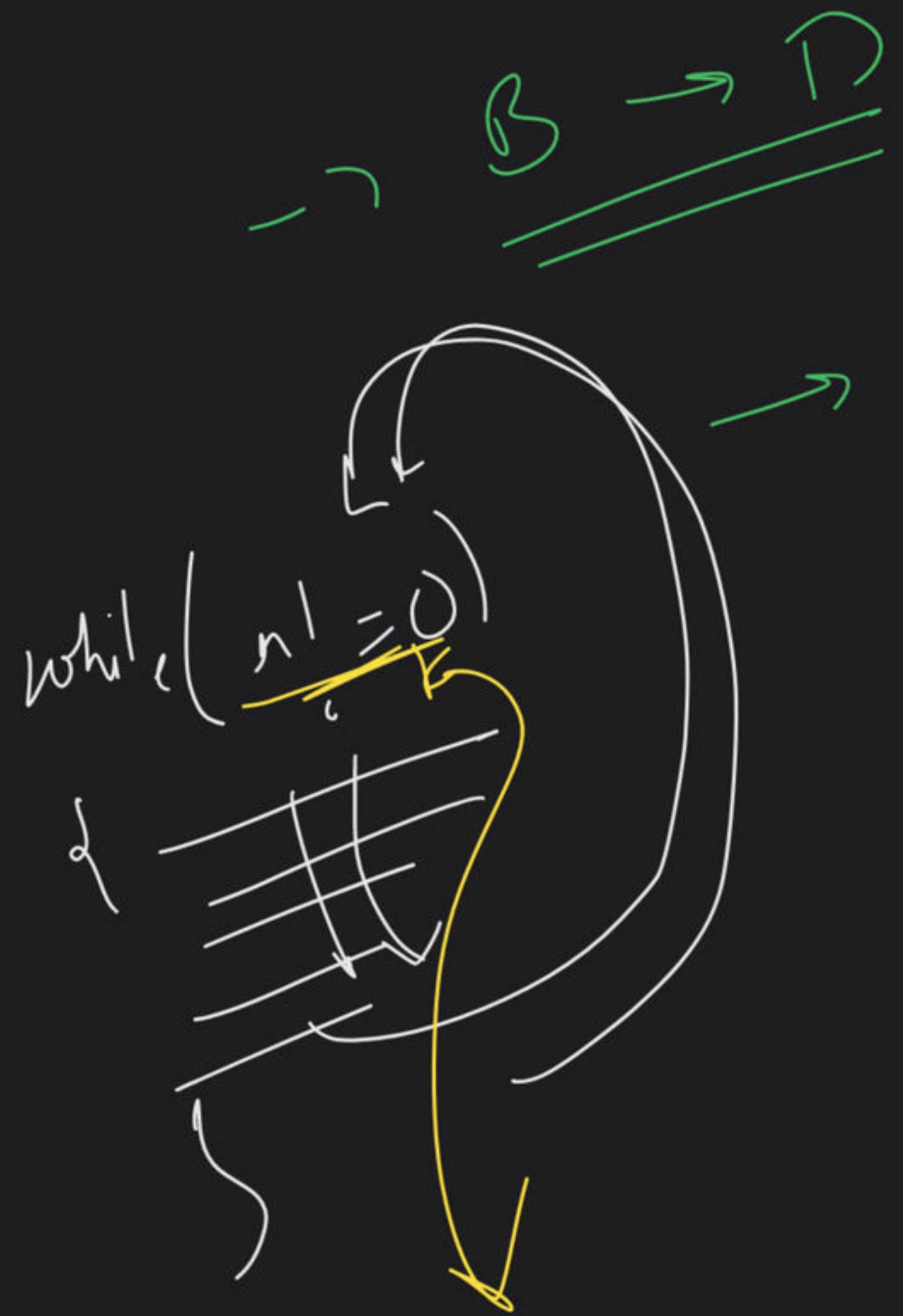
a+i  
a--

while (n != 0)

i++  
for ( ; i < n ; i++)  
{  
  cout << a[i];  
  a--  
}  
}



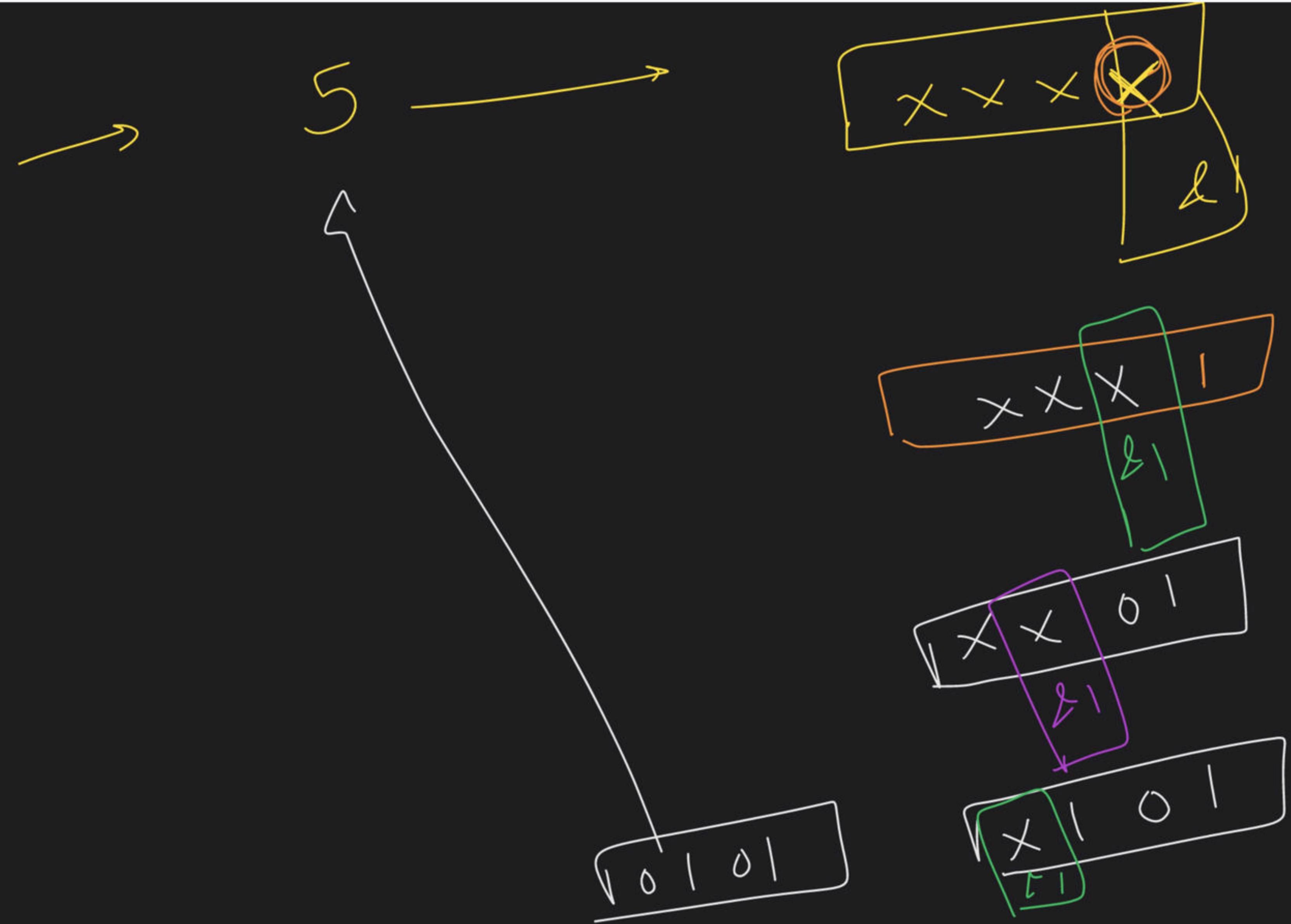




```

for (int i=0, i<n; i++)
{
    if (if (down)
        skip
}
  
```

The code snippet shows a for loop with initialization  $i=0$ , condition  $i < n$ , and increment  $i++$ . Inside the loop, there is an if statement that checks if  $(down)$  is true. If it is, the word  $skip$  is written. A brace groups the if statement and the word  $skip$ .



$$\begin{array}{ccc} \rightarrow & 5 & \rightarrow \\ & | & | \\ & 101 & \cancel{0} \end{array}$$

5 → | 0 |

A hand-drawn diagram on a white background. At the top left, there is a large, thin-lined curved arrow pointing towards the left. Below it, near the center-left, are two smaller, thin-lined arrows pointing towards the left. To the right, there is a roughly drawn rectangular box. Inside the box, there is a small circle on the left side and a vertical line extending downwards from the top-right corner.

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for (int i = 1 ; i <= h ; i++)

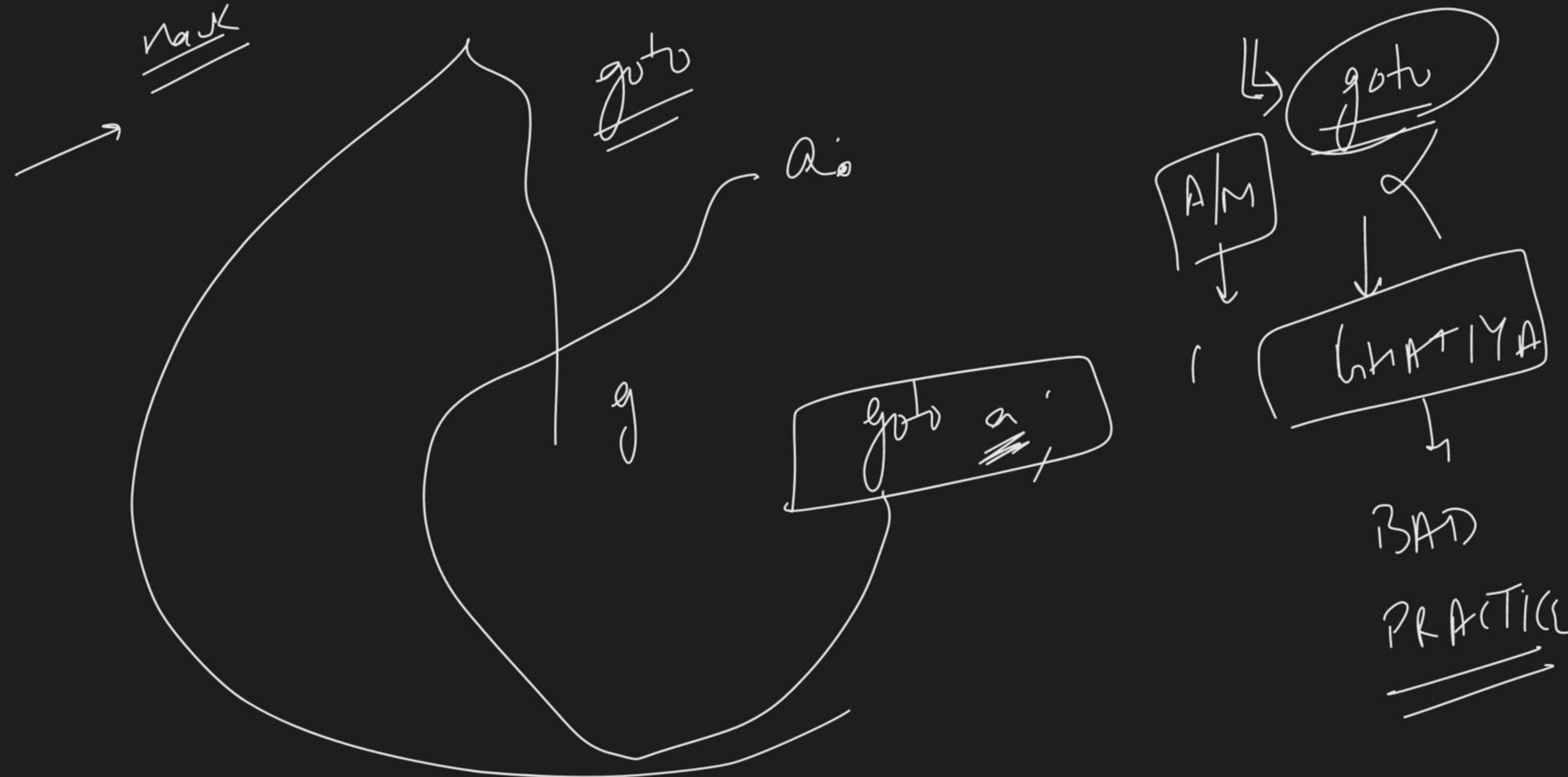
for (int j = 1 ; j <= h ; j++)

{

}

cout << i << " - " << j << endl;

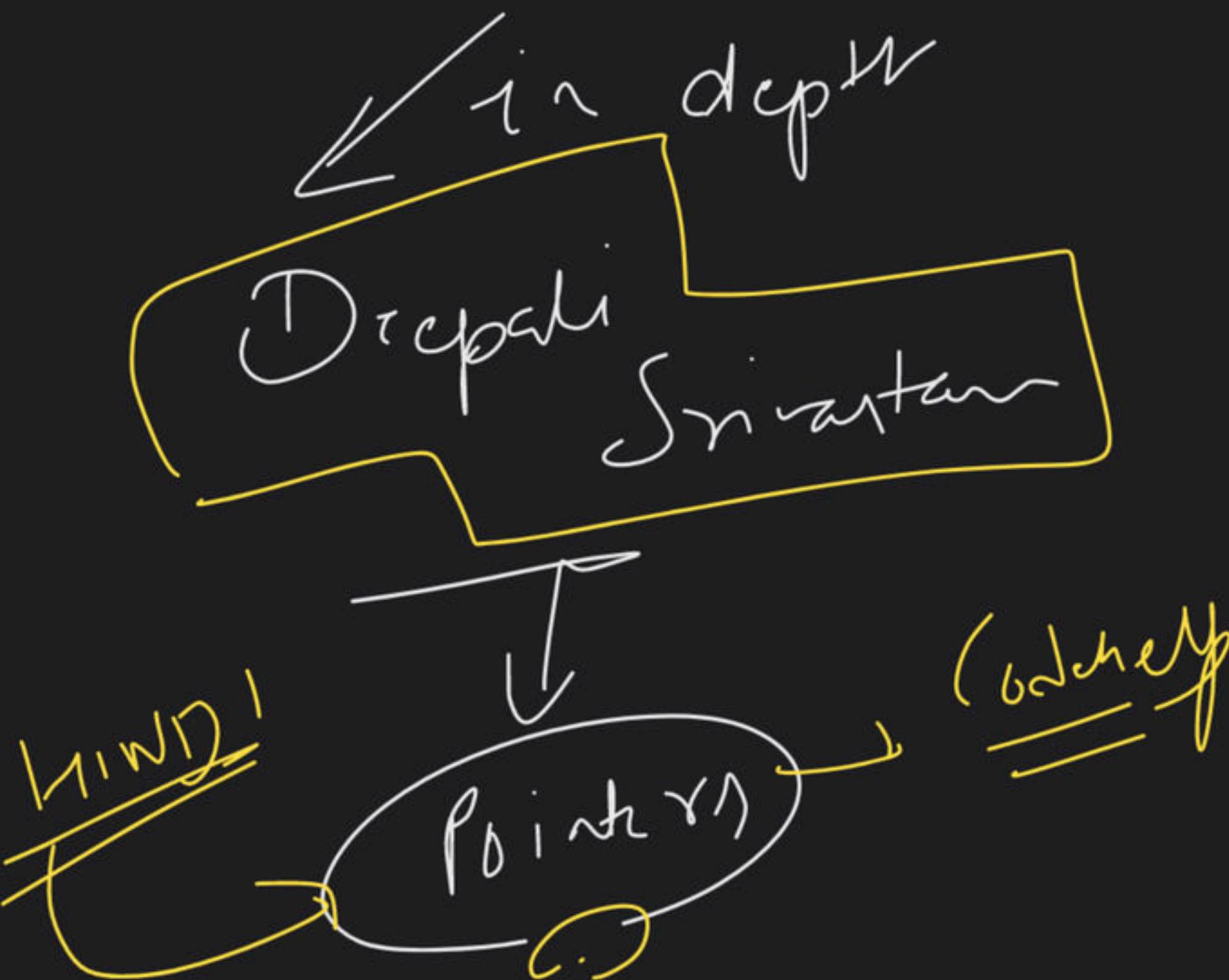
Output







→ Data Structure  
through `C++`



→ Prime no

$n = 13$

$\frac{1}{2} - \frac{n-1}{2}$  → 0  
prime no

$i=2$

$i < n$

$\frac{1}{2} - \frac{(n-1)}{2}$

$\frac{1}{2} = 0$   
not a prime  
 $n$ .

$n \mid i = 0$   
 $N \vee N \perp$

flowchart

Flowchart

Flowchart

$2 < 14$

$14 \% 2 = 0$

$2 \neq 5$

$2 \neq 5$

$5 \% 2 = 1$

$3 < 5 ==$

$5 \% 3 = 0$

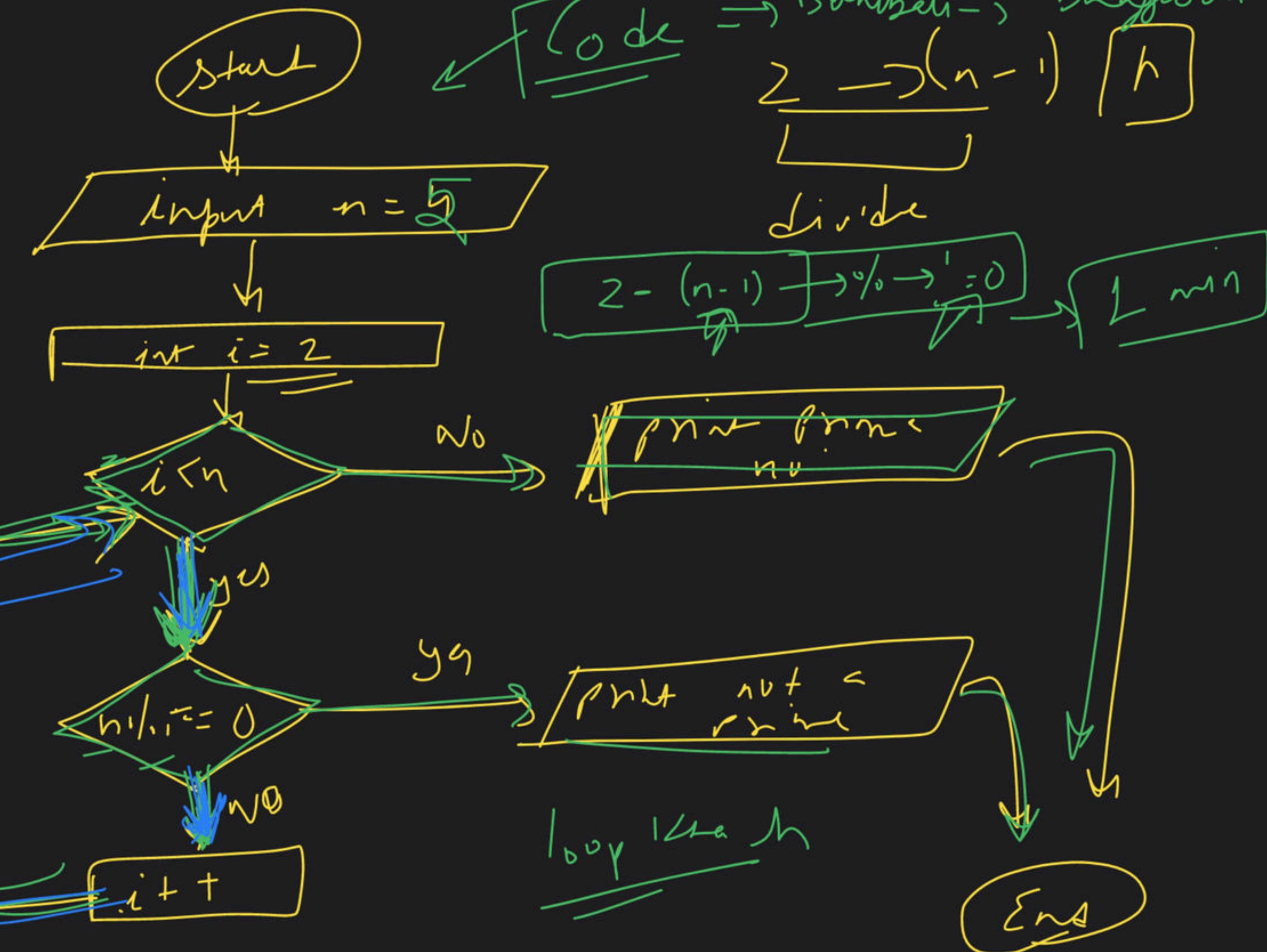
Y

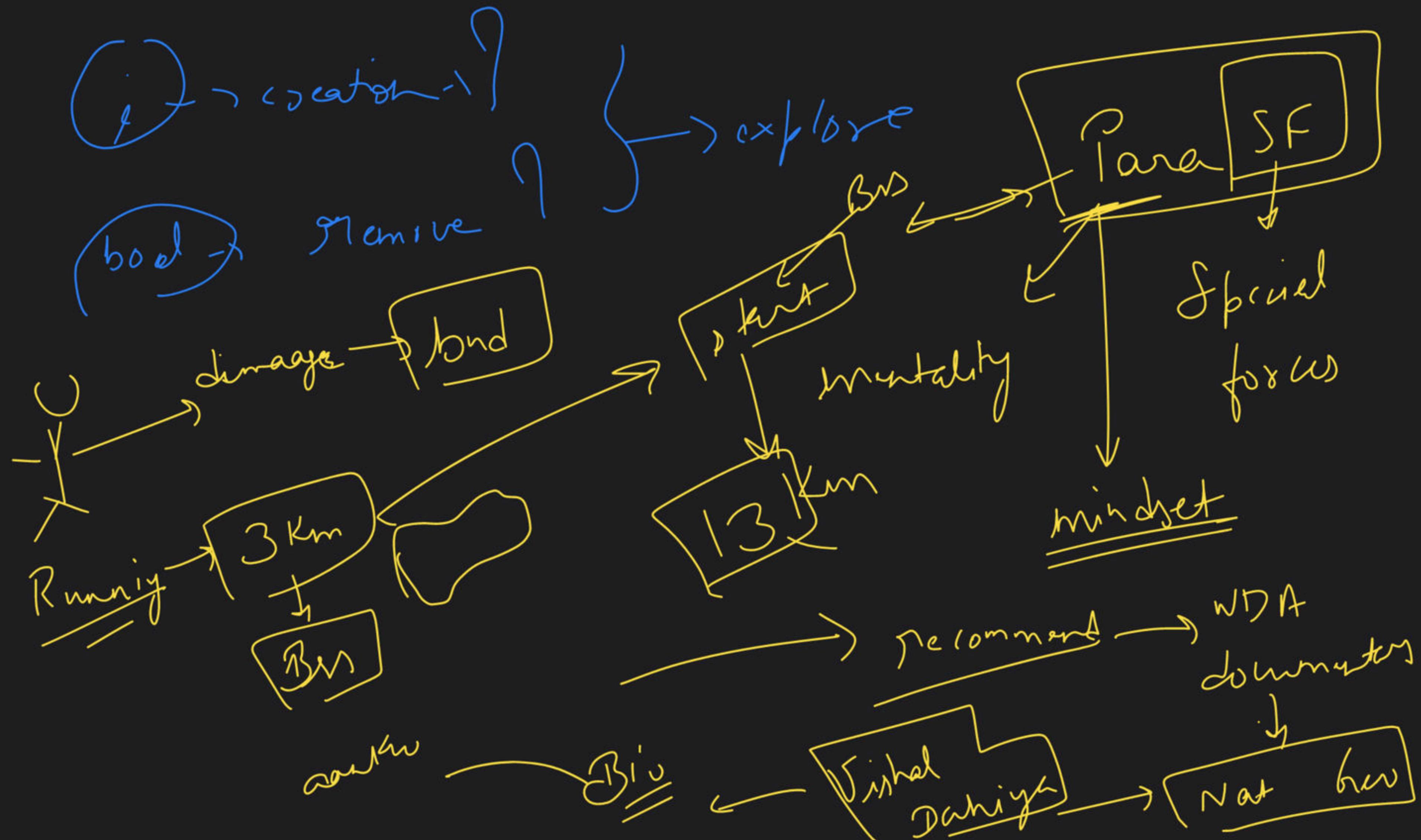
$i < 5$

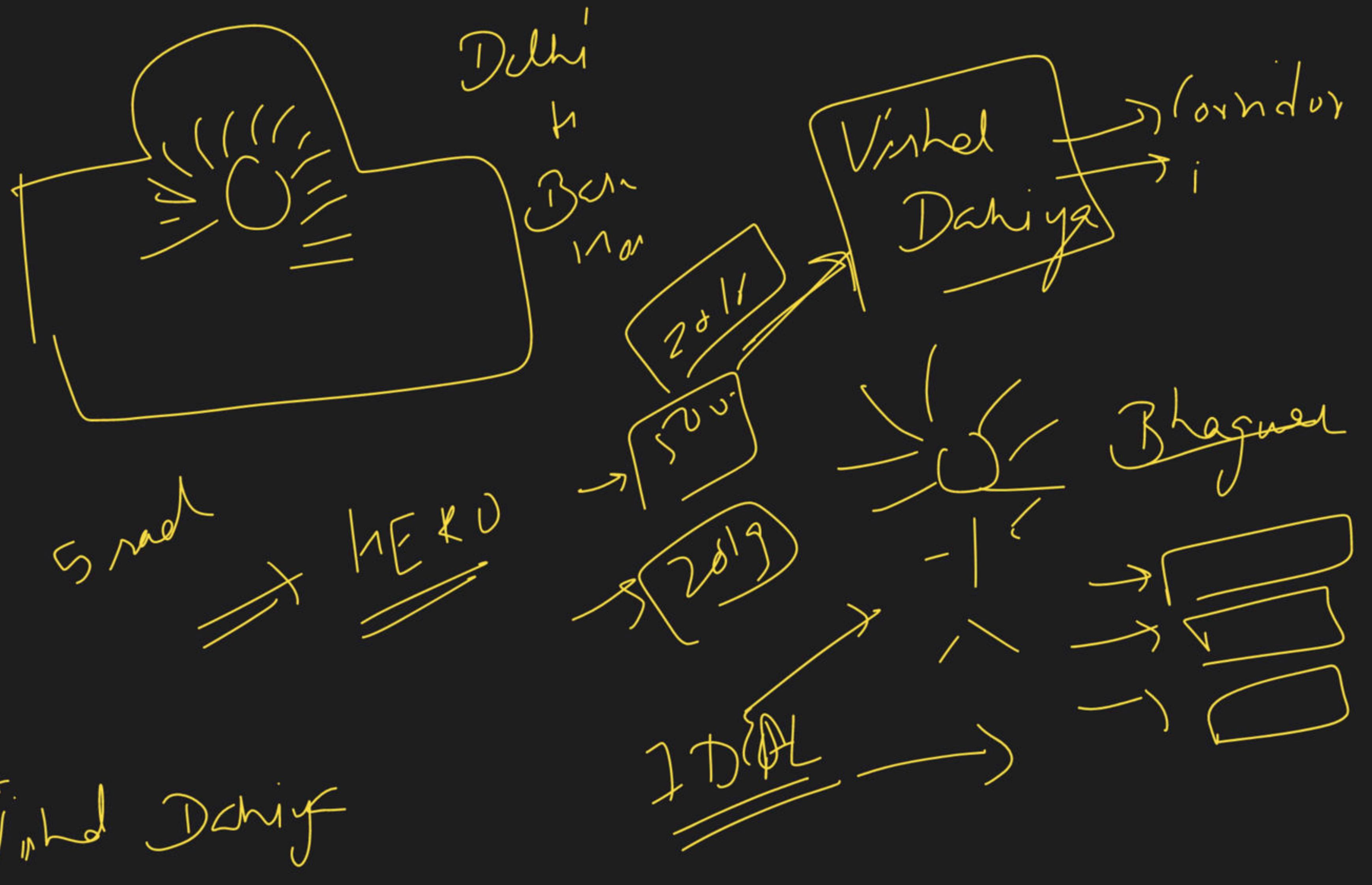
$5 \% 1 = 1$

$5 < 5$

F

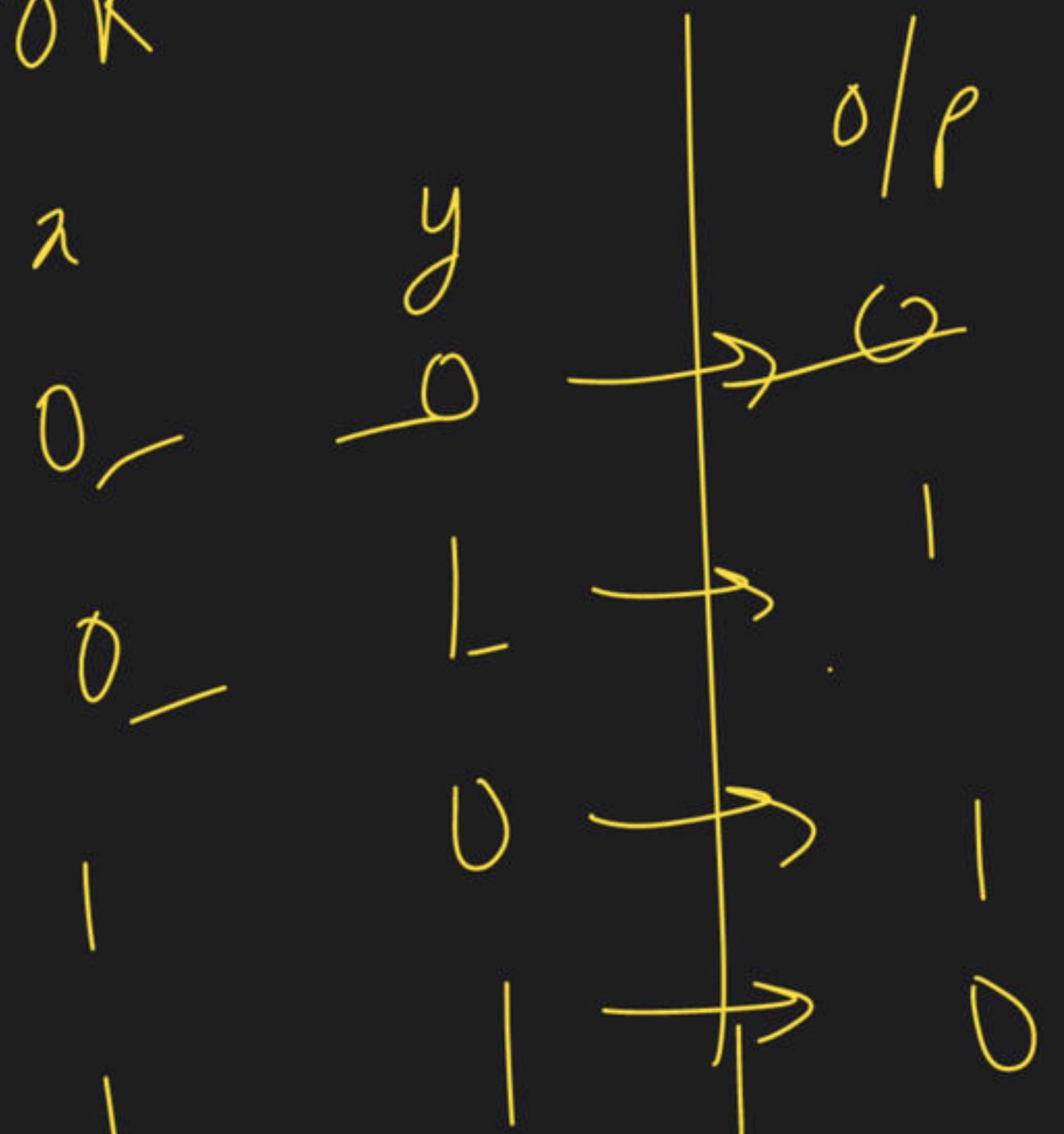




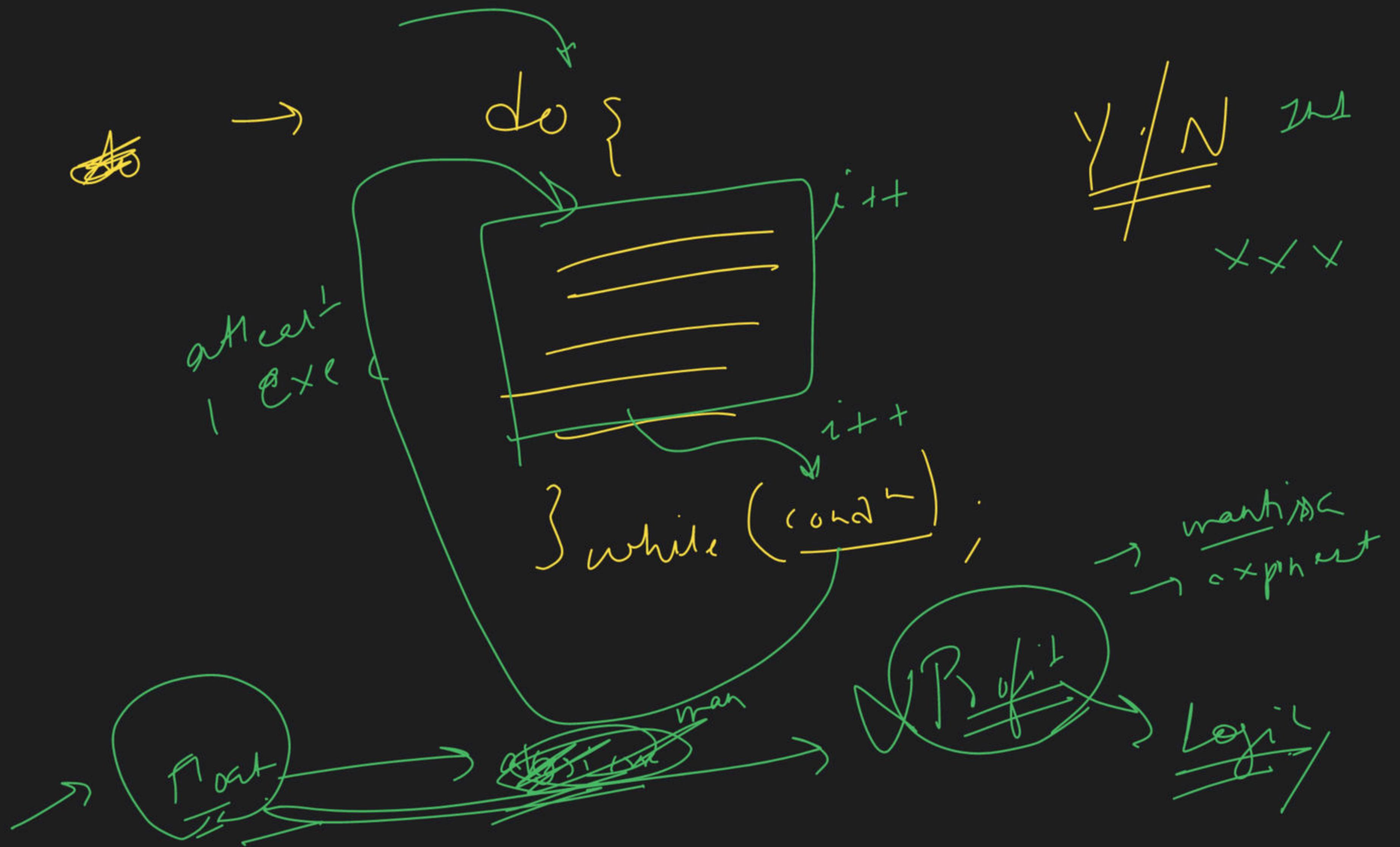


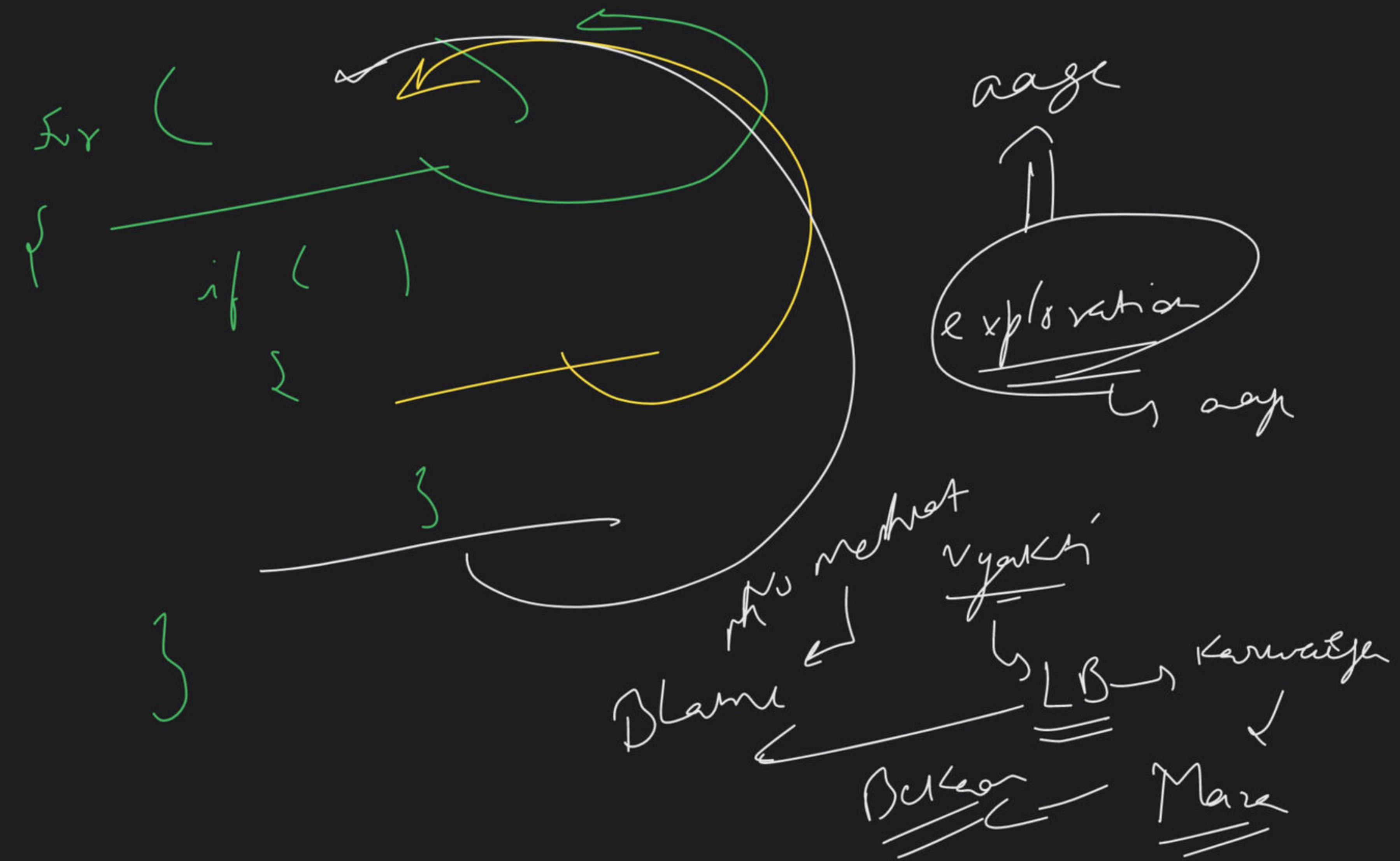
$\gamma$  wave

XOK



same  $\rightarrow 0$   
diff  $\rightarrow 1$



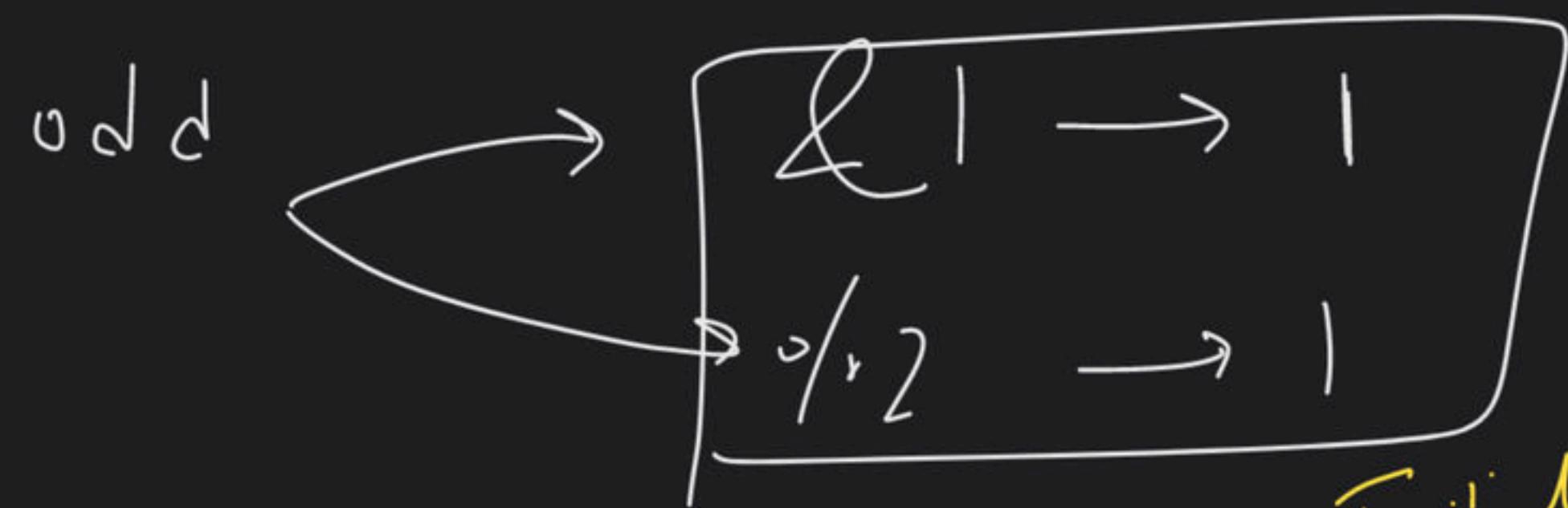
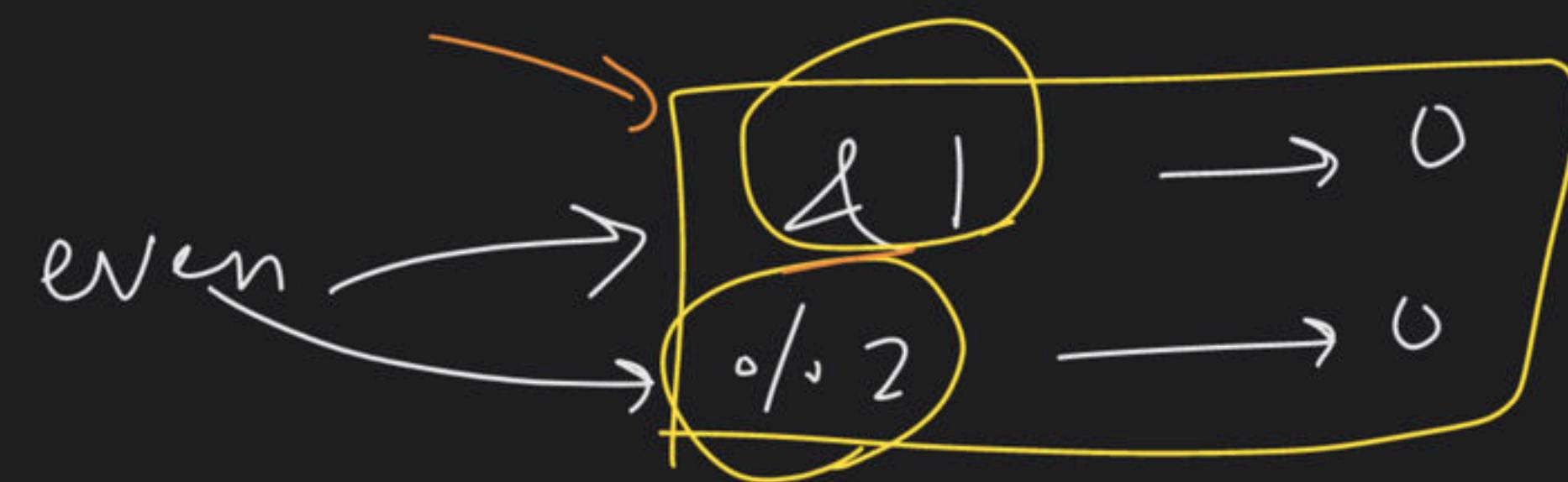


1 Doubt

$\delta$   $\frac{0}{0} \cdot 2$

$\frac{0}{0}$

heavy operation

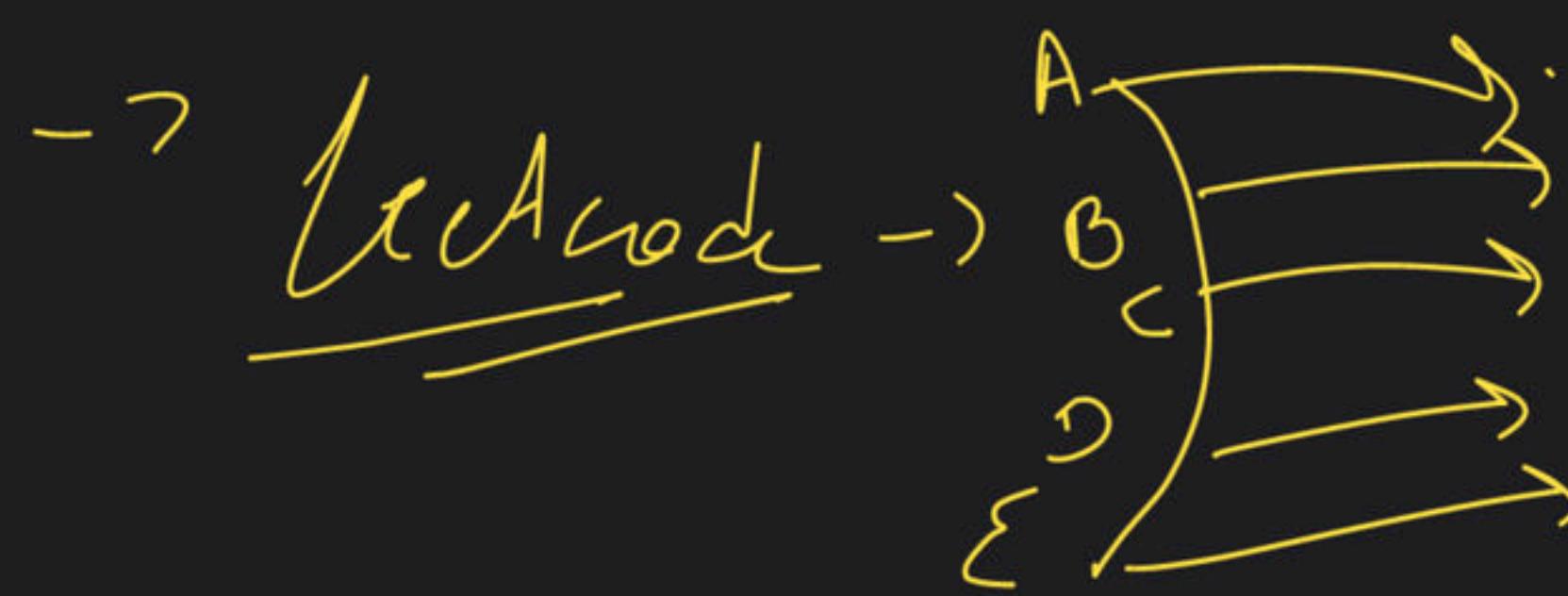


$\frac{0}{0} \rightarrow \delta$

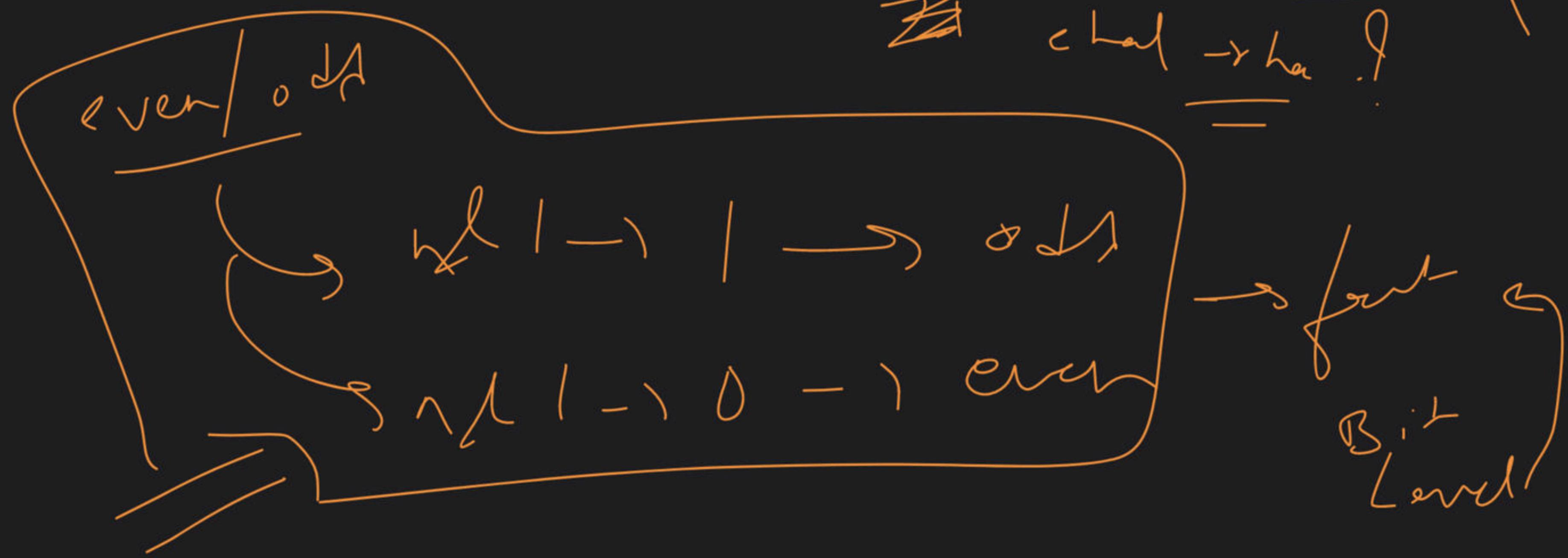
fert

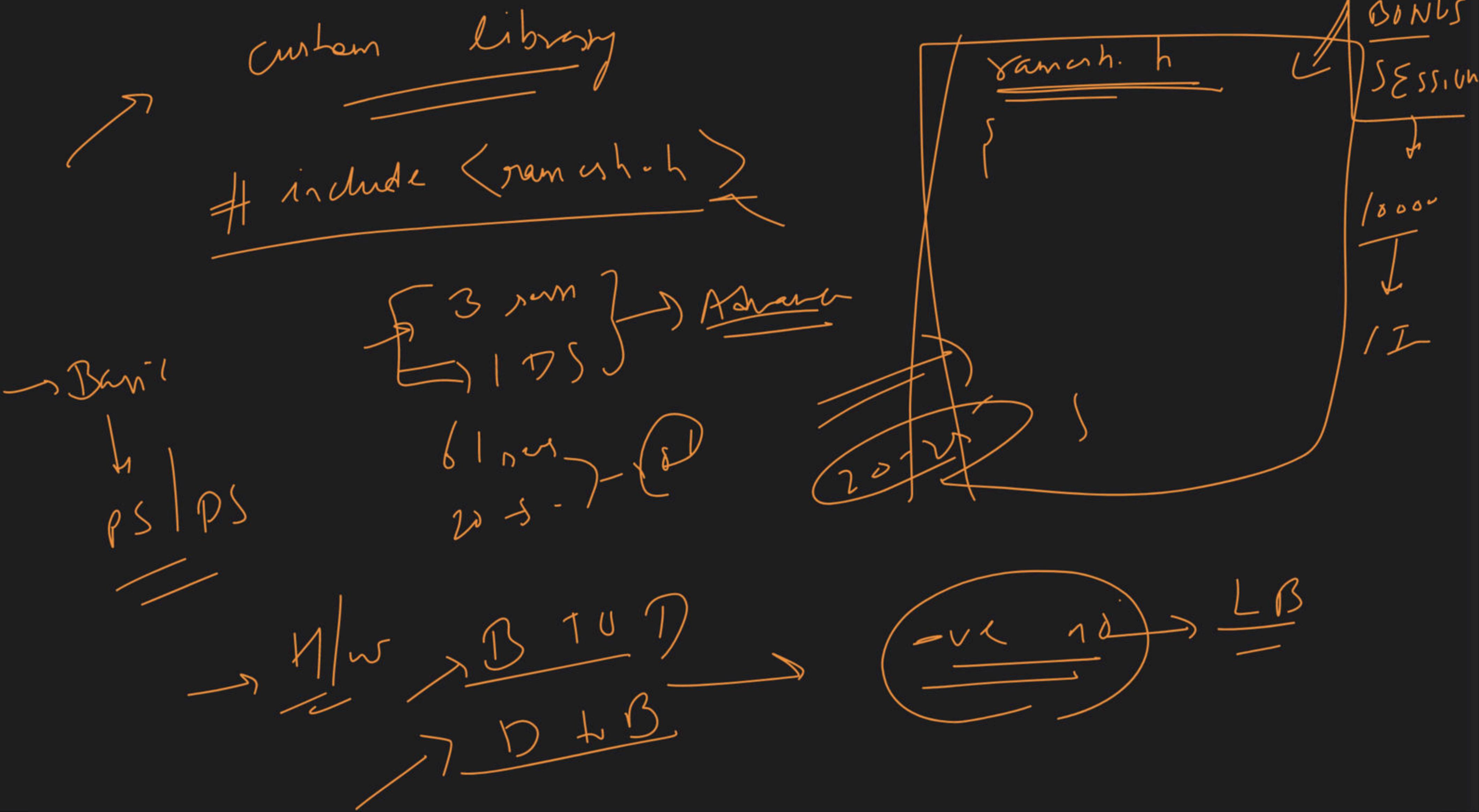
~~Solve~~  $\rightarrow$  initial perception  
99%

~~B~~  $\rightarrow$  ~~Solve~~



13 Jet  $\rightarrow$  5  $\rightarrow$  ~~T L E T~~ "Top"  $\hookrightarrow$  T L E X





Patience

$\lambda >> 1$

-ve

Prim

$\overline{L}$

FC

—

—

C++

try

Stack

Memory

Java

Unacademy

Dropouts

Jobless

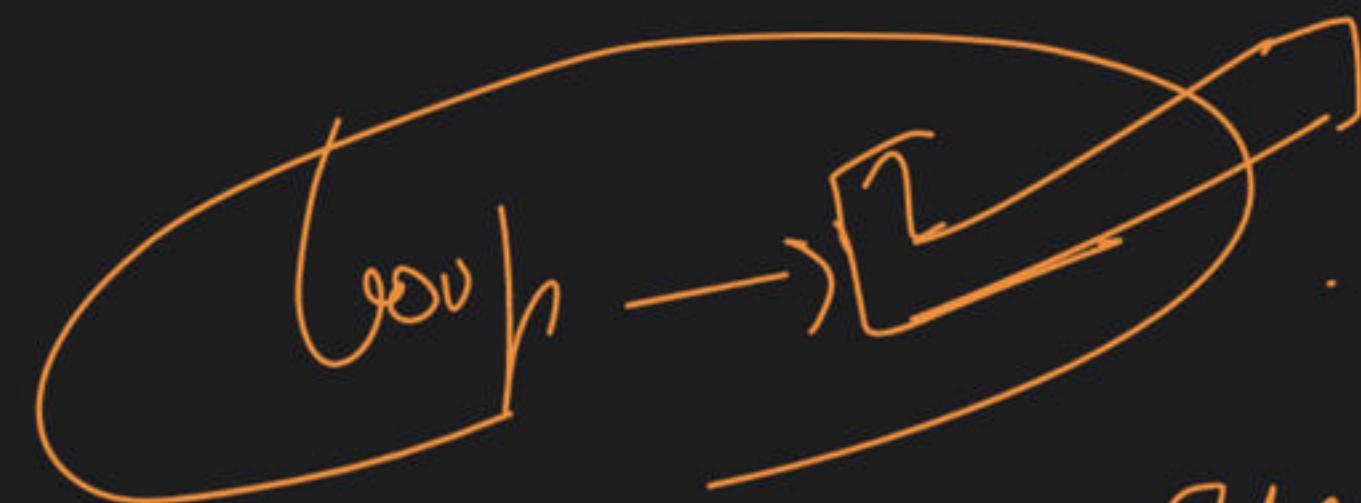
Final comm.

Dunja

Low  
Babbar

B + D

D + B



# analytical mindset

D.C

