

Doubt Clearing Session - Part **VIII**

Foundation Course on Data Structures & Algorithm - III

→ ps / fw / part
→ 'yate
→ any / by
40%
→ 8 weeks → by
→ 2 month → 1hr
→ Rel
→ 1hr

→ (H/W)
 K^{th} character in Grammar

→ Red Zone Problem

→ Median of 2 sorted arrays (same size)

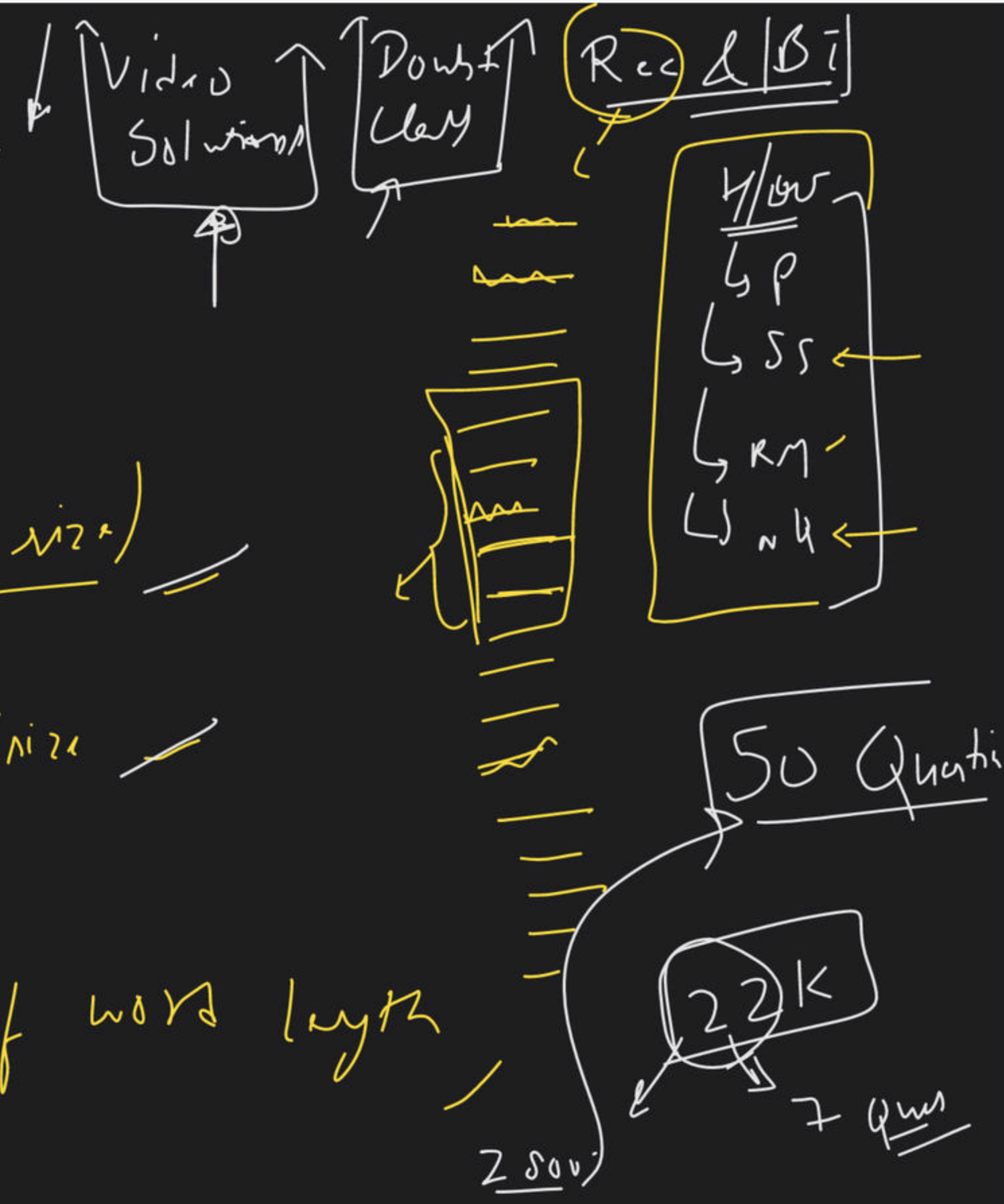
6 Questions

different size

→ STL Vector

→ 310 LC → Max prod of word length

→ inversion count



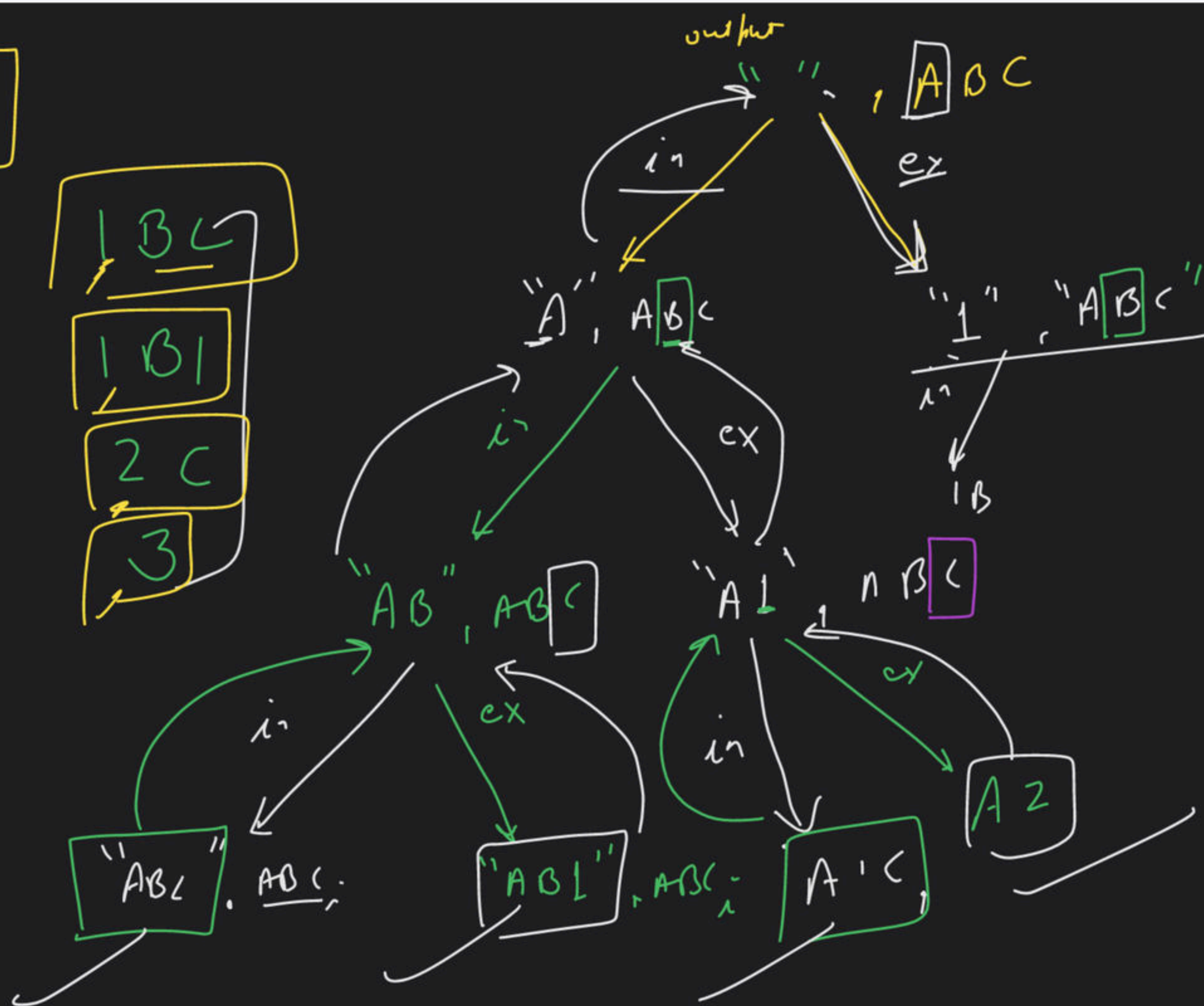
ABC

ABC

AB1

A1C

A2

$$\begin{array}{l} 1 \text{ B C} \\ 1 \text{ B I} \\ 2 \text{ C} \\ 3 \end{array}$$
$$i \geq i_n \cdot \log t$$


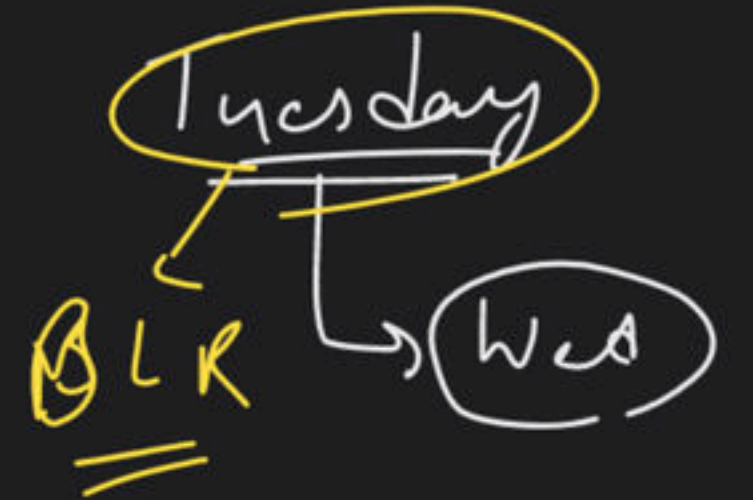
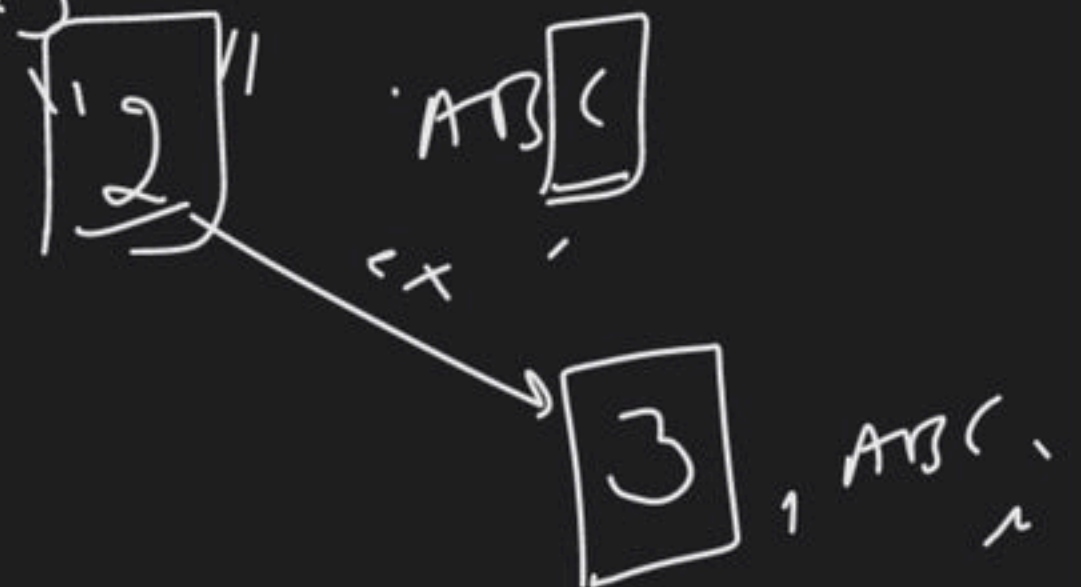
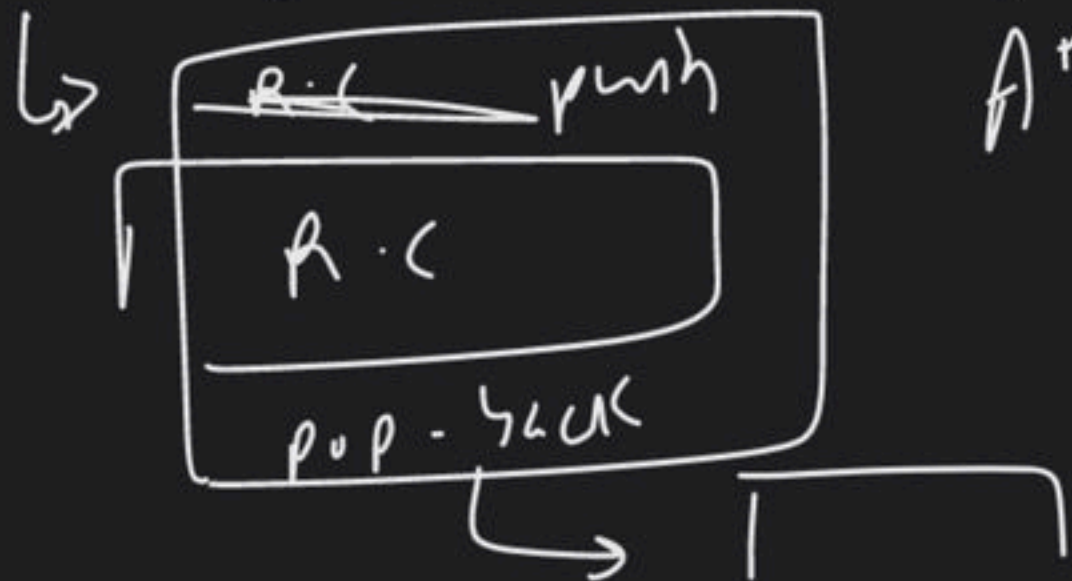


→ GFG → hard
→ LC → premium

code

// B.C

$i \geq \text{str.length}()$

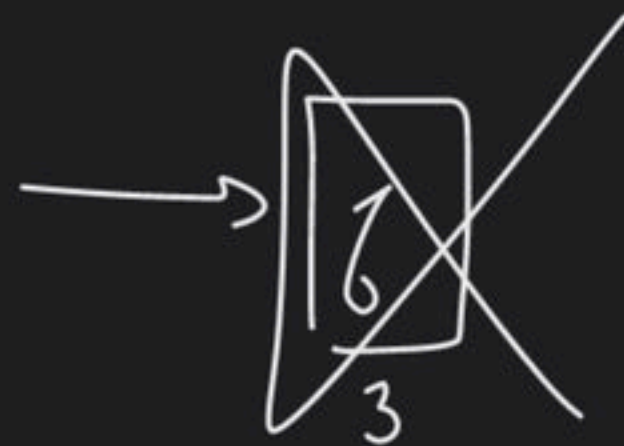


STL

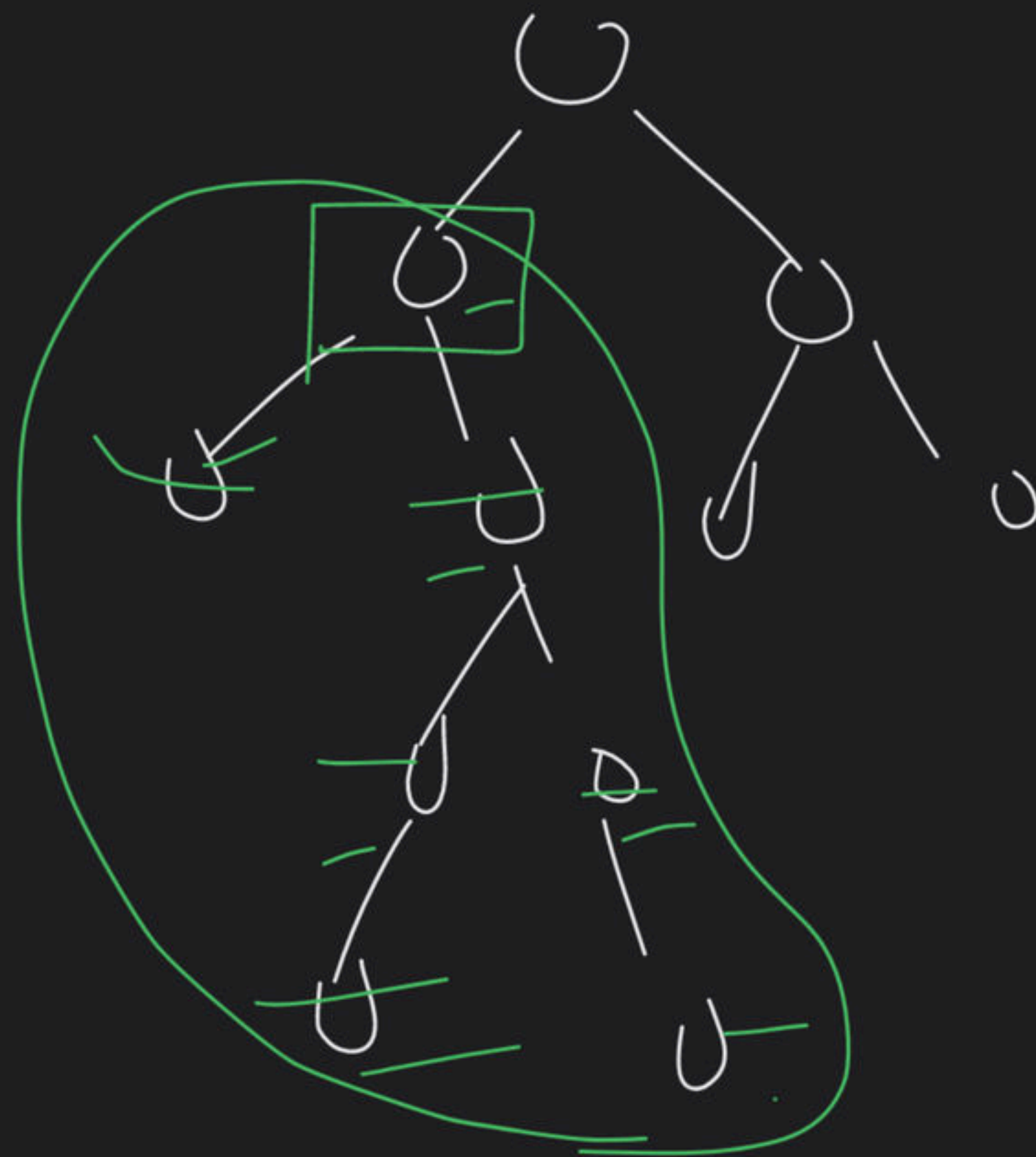
→ elimination game

→ Beautiful arrangement

→
$$\left[\begin{array}{l} i \% a[i] = 0 \\ \text{or} \\ a[i] \% i = 0 \end{array} \right] \text{deep rag}$$



exams



Diff way to ~~code~~ Power

dry

H/W

$$\rightarrow \left(\begin{pmatrix} 2 & -1 \\ 1 & -1 \end{pmatrix} - 1 \right) \quad \text{✓}$$

$$1 - 1 = 0$$

DP

$$\left(\begin{pmatrix} 2 & -1 \\ 2 & -0 \end{pmatrix} - 1 \right) = \boxed{2} \quad \text{✓}$$

$$(2 \star (3 - (1 \star 5))) \rightarrow$$

$$2 \star (3 - 20)$$

$$2 \star (-17) = \boxed{-34}$$

$$((2 \star 3) - (4 \star 5)) = 6 - 20 = \boxed{14}$$

$$(2 \star (3 - 4)) \star 5 = \boxed{-10}$$

$$(2 \star ((3 - 4) \star 5)) = 2 \star (-5) = \boxed{-10}$$

$$((2 \star 3) - 4) \star (5) = \boxed{16}$$

Observation

↓

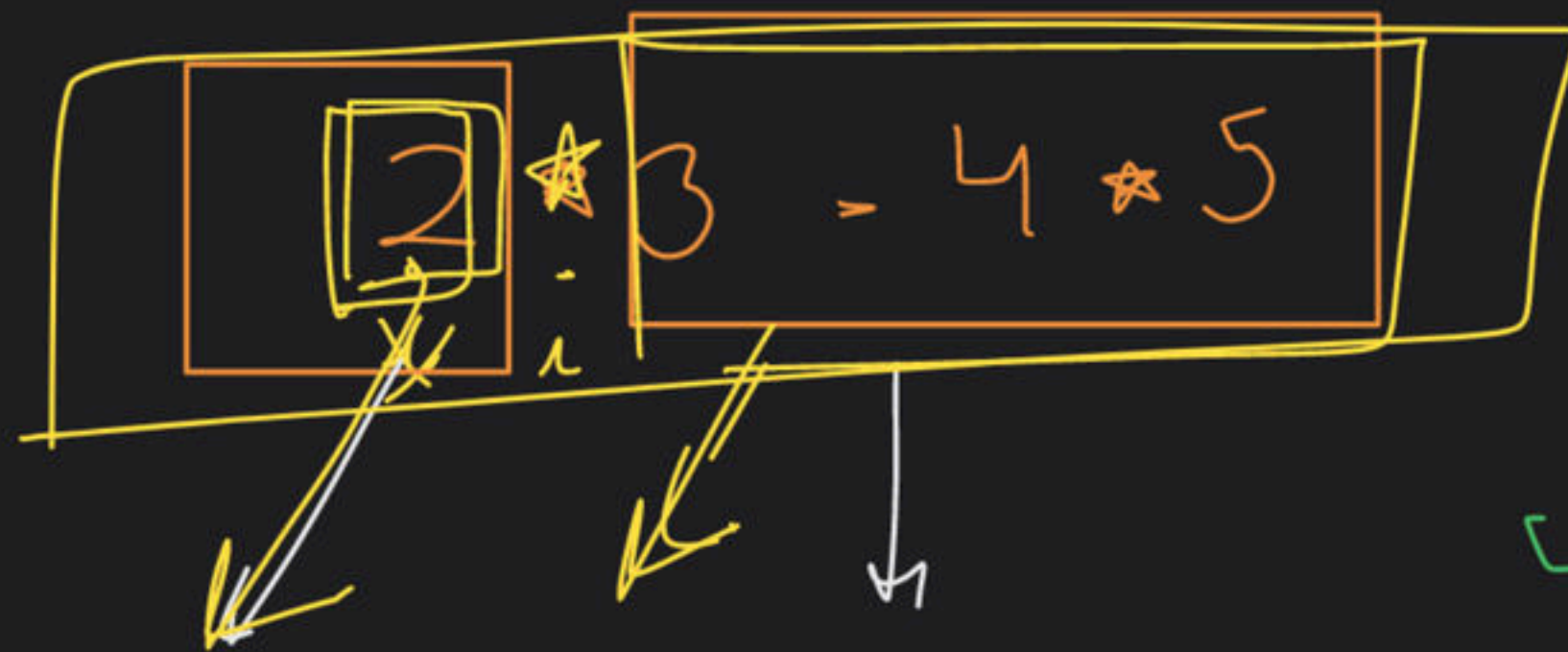
Soln

↳ Division

→ operation

→ Brute force
back

[1 can solve Krage
1 backi ream
kr type]



Integer \rightarrow array

operator

no of ways

Left \rightarrow R - C

vector<int>

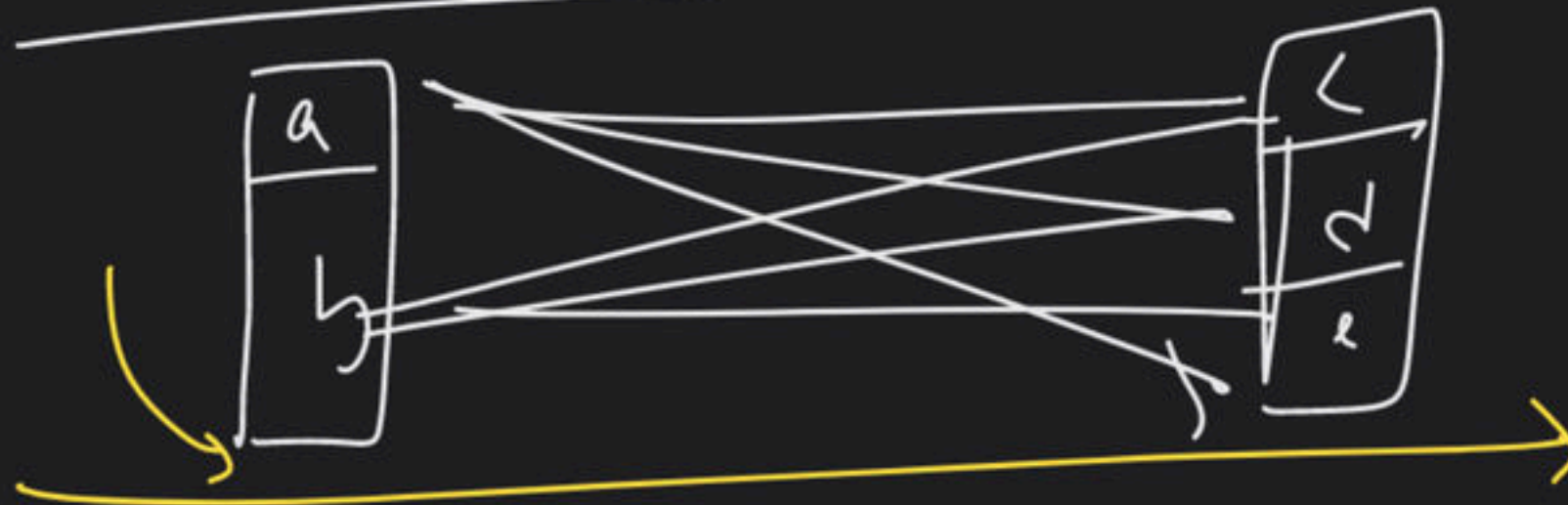
no of ways

right \rightarrow R - C

vector<int>

Output

+



min

return kards

vector<int>

fun (string str)

→ OOPS
(pointer
error)

vector<int> output;

for (int i = 0; i < str.length(); i++)

if (str[i] == '+' || str[i] == '-' || str[i] == '*')

{ string leftStr = str.substr(0, i);

string rightStr = str.substr(i+1);

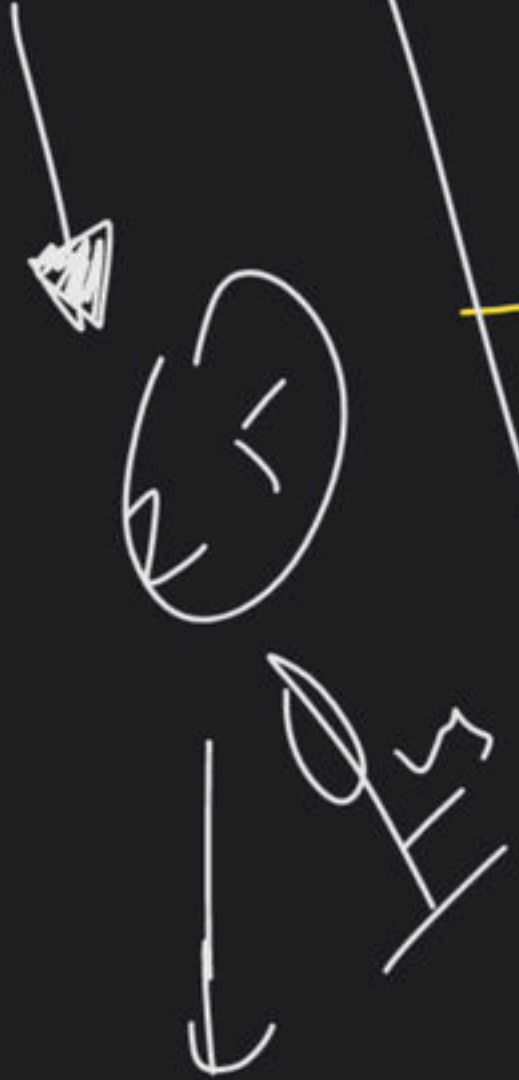
vector<int> leftAns = f(leftStr)

vector<int> rightAns = f(rightStr)

Video 2/10
4/9

9
←
1

DP



for (\longrightarrow left) \rightarrow right)

{ $a = \text{left}[j]$

for (\longrightarrow right)

{ $b = \text{right}[k]$

{ if ($\text{str}[i] = '-'$)

output.push(a+b)

\longrightarrow $\text{str}[i]$

\longrightarrow (a+b)

\longrightarrow a

\longrightarrow (a+b)

}
}

return output;

output

4/p →



stoi()

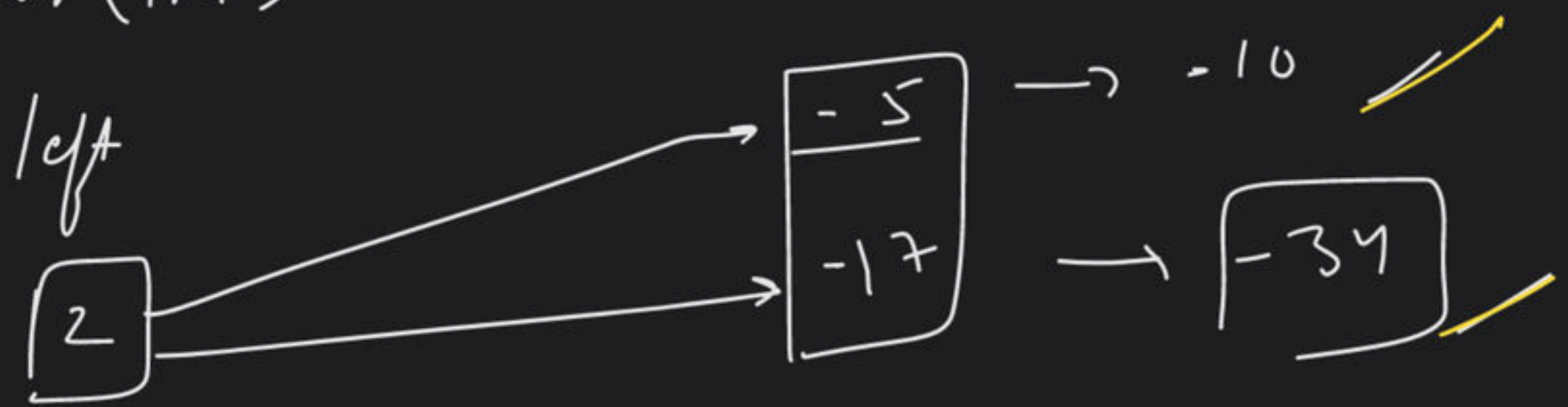
3000
3000

if (output.size() == 0)

output.push_back(stoi(exp));



vector<int>



$$2 * 3 = 4 * 5$$

$$\frac{2 * 3}{\downarrow} 6$$

$$6 - 20 = -14$$

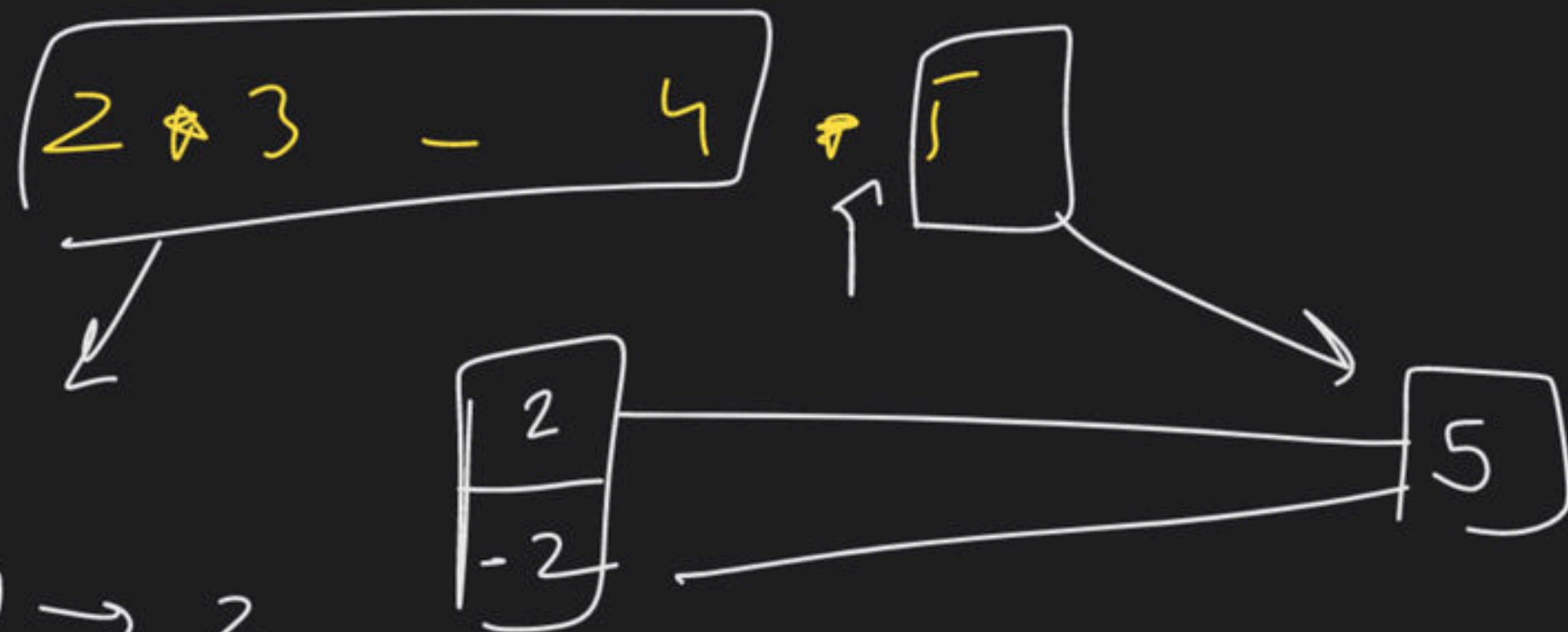
$$(3 - 4) * 5 = -5$$

$$3 - (4 * 5)$$

$$3 - 20 = -17$$

$$\begin{array}{r} -10 \\ -34 \\ -17 \\ 10 \\ -10 \end{array}$$

$$\frac{4 * 5}{\downarrow} 20$$

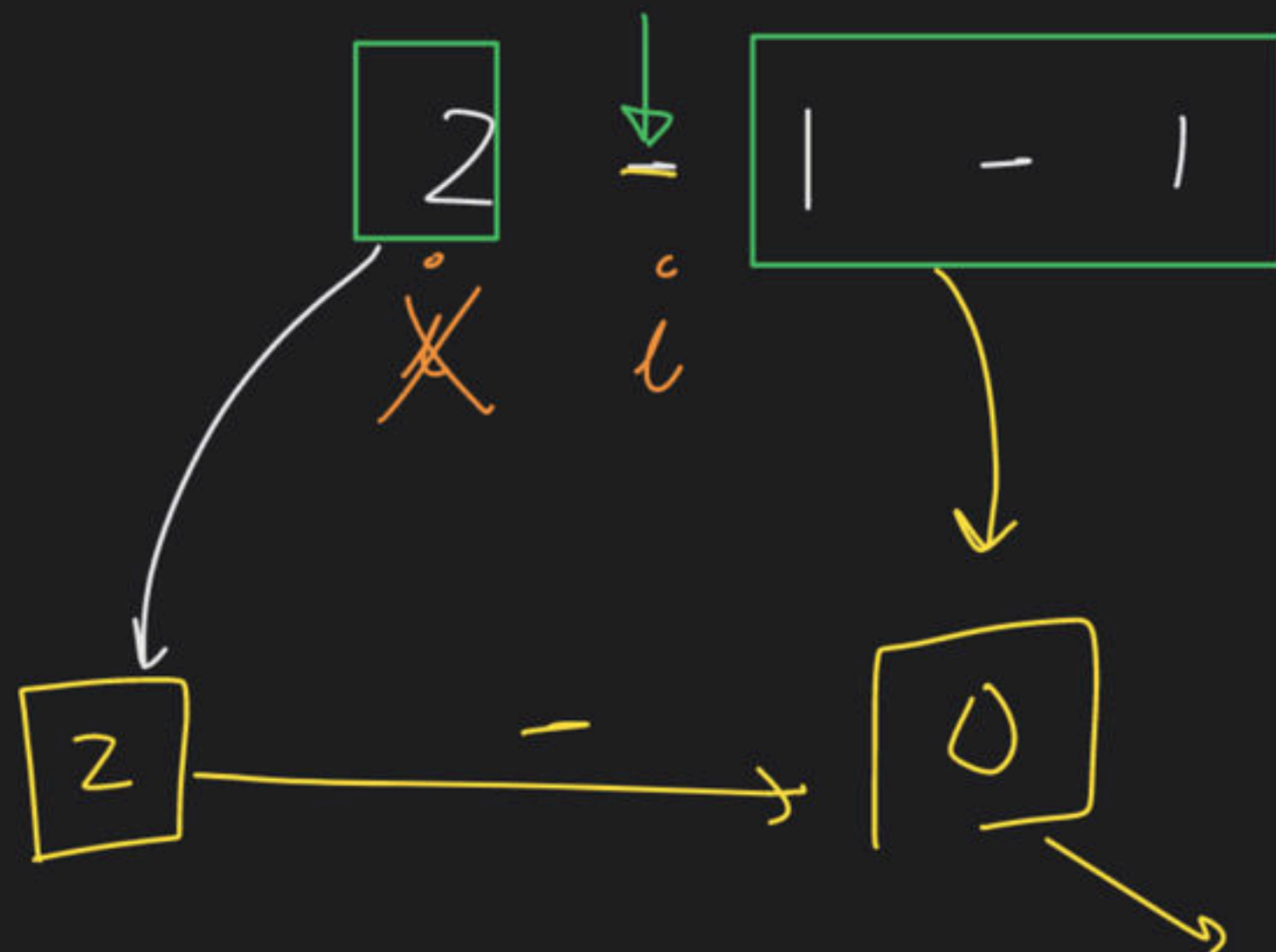


$$(2 * 3) - 4 \rightarrow 2$$

$$2 * (3 - 4) \rightarrow -2$$

$$\begin{array}{r} 10 \\ - 10 \\ \hline \end{array}$$

ilp \longrightarrow

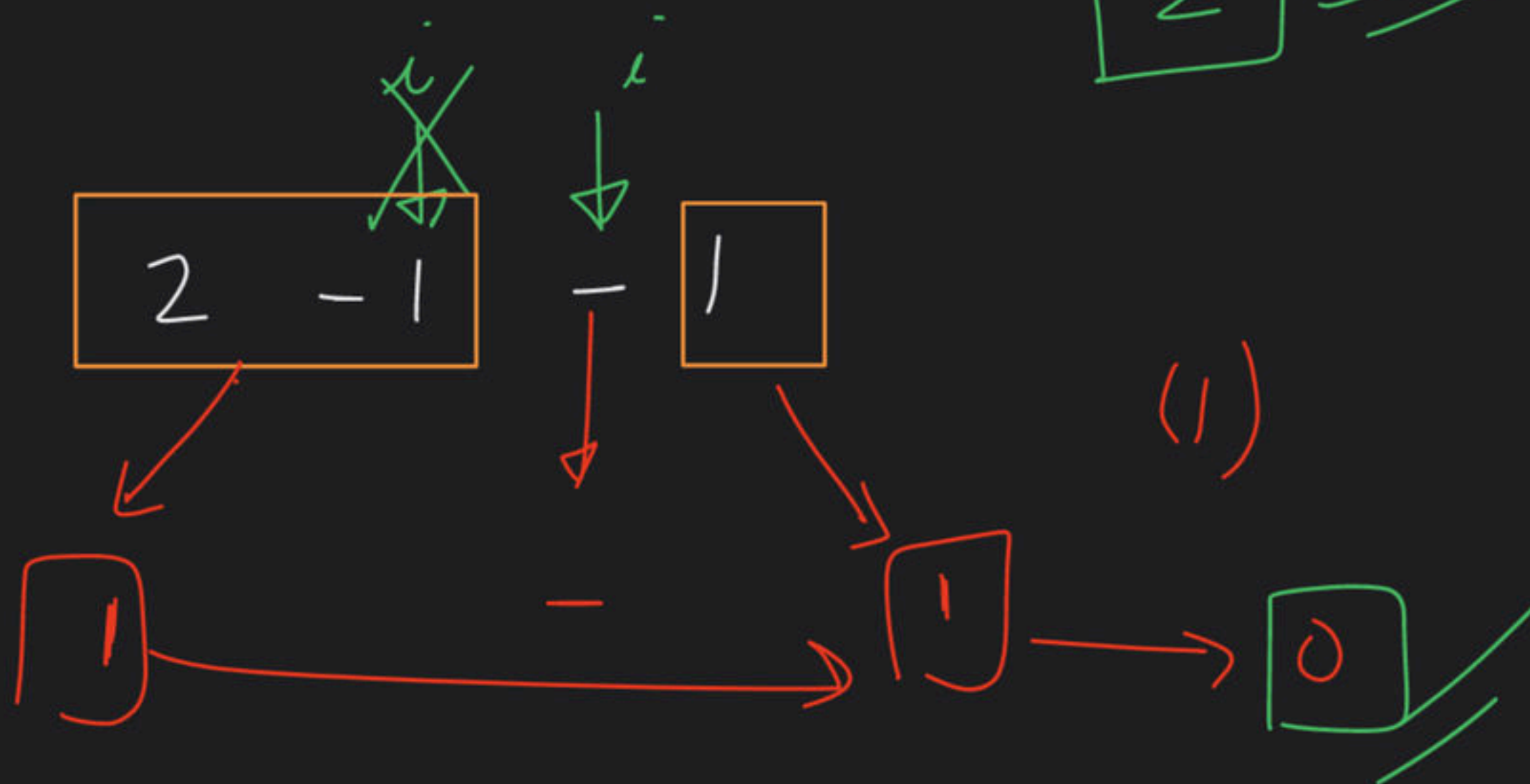


if (op == '+')

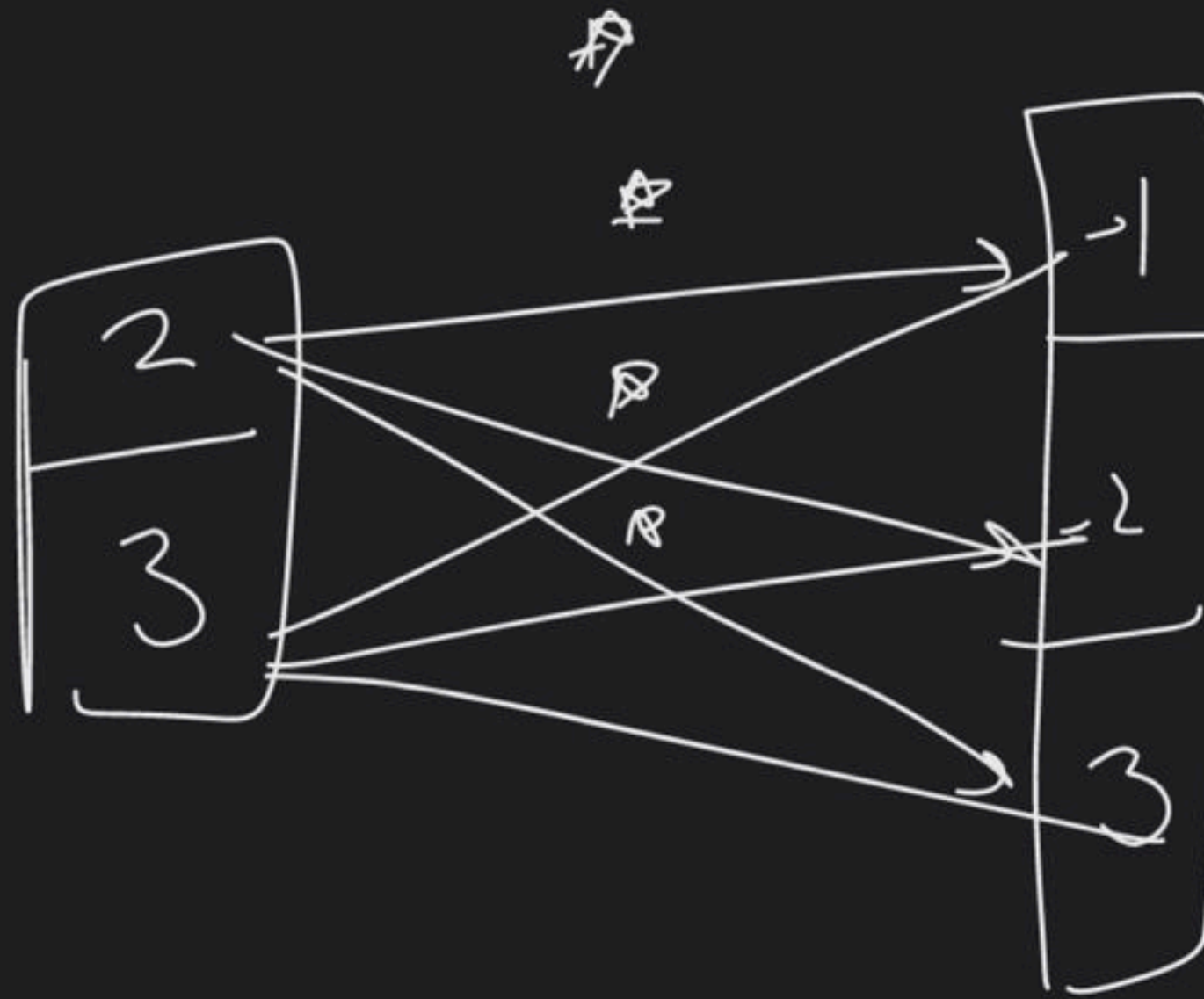
(1 - (1))
(1 - 1)

2

(2 - (1))
(2 - 1)



(1)



- 2	- 3
- 4	- 6
6	9

→ CS2 :-

⑧

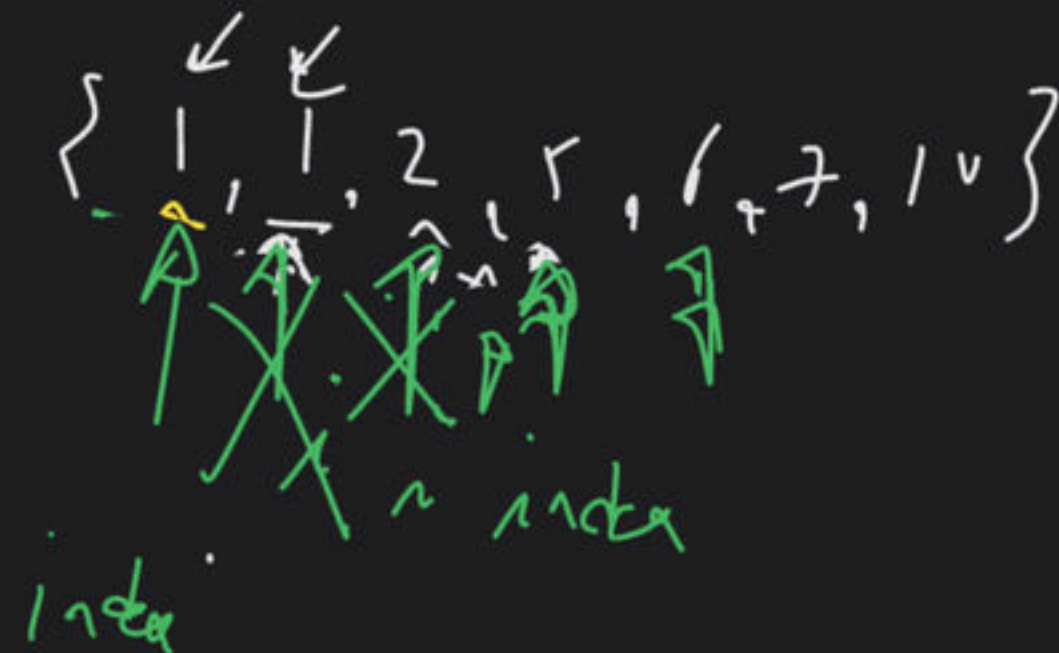
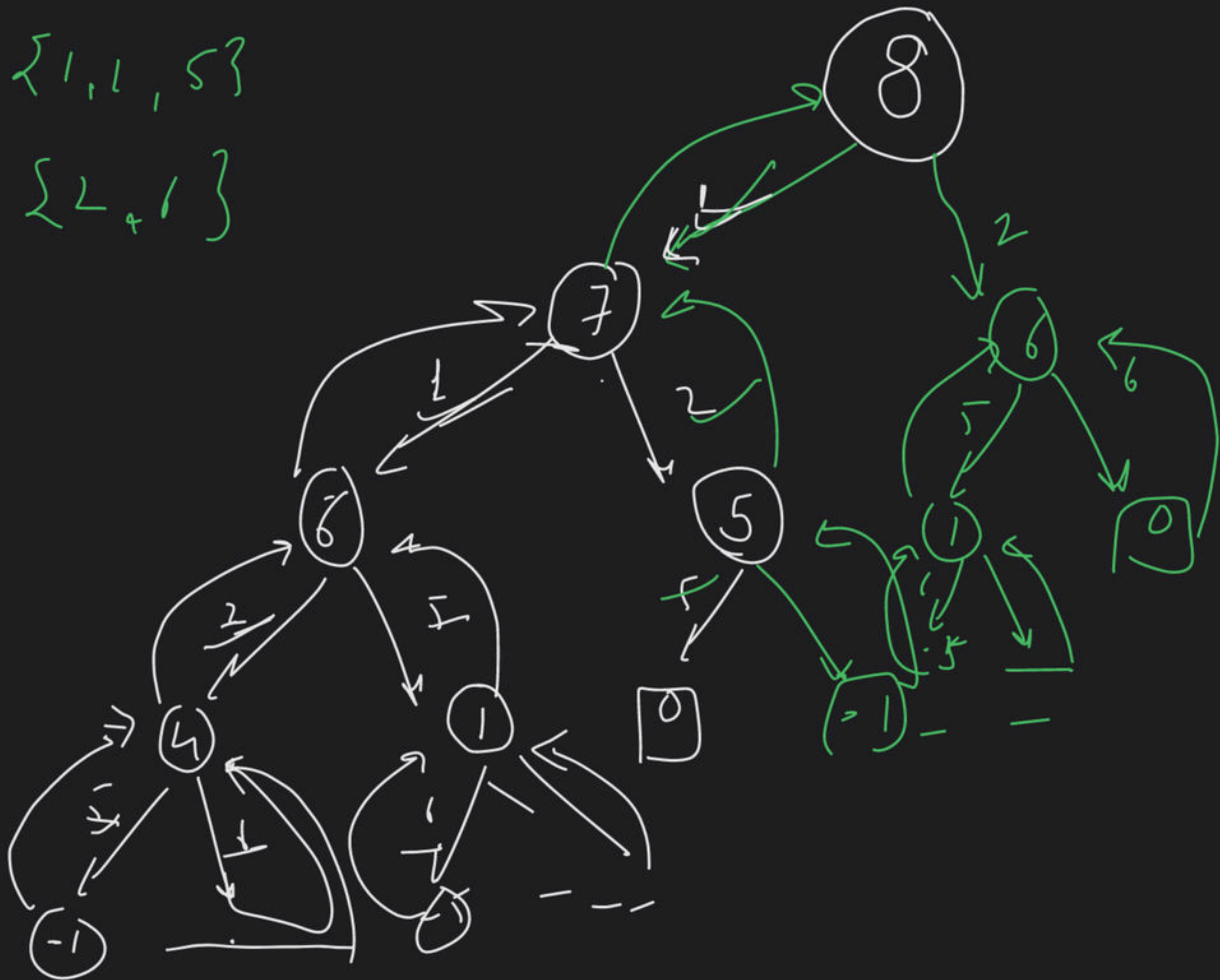
1 1 2 5 6 7 10



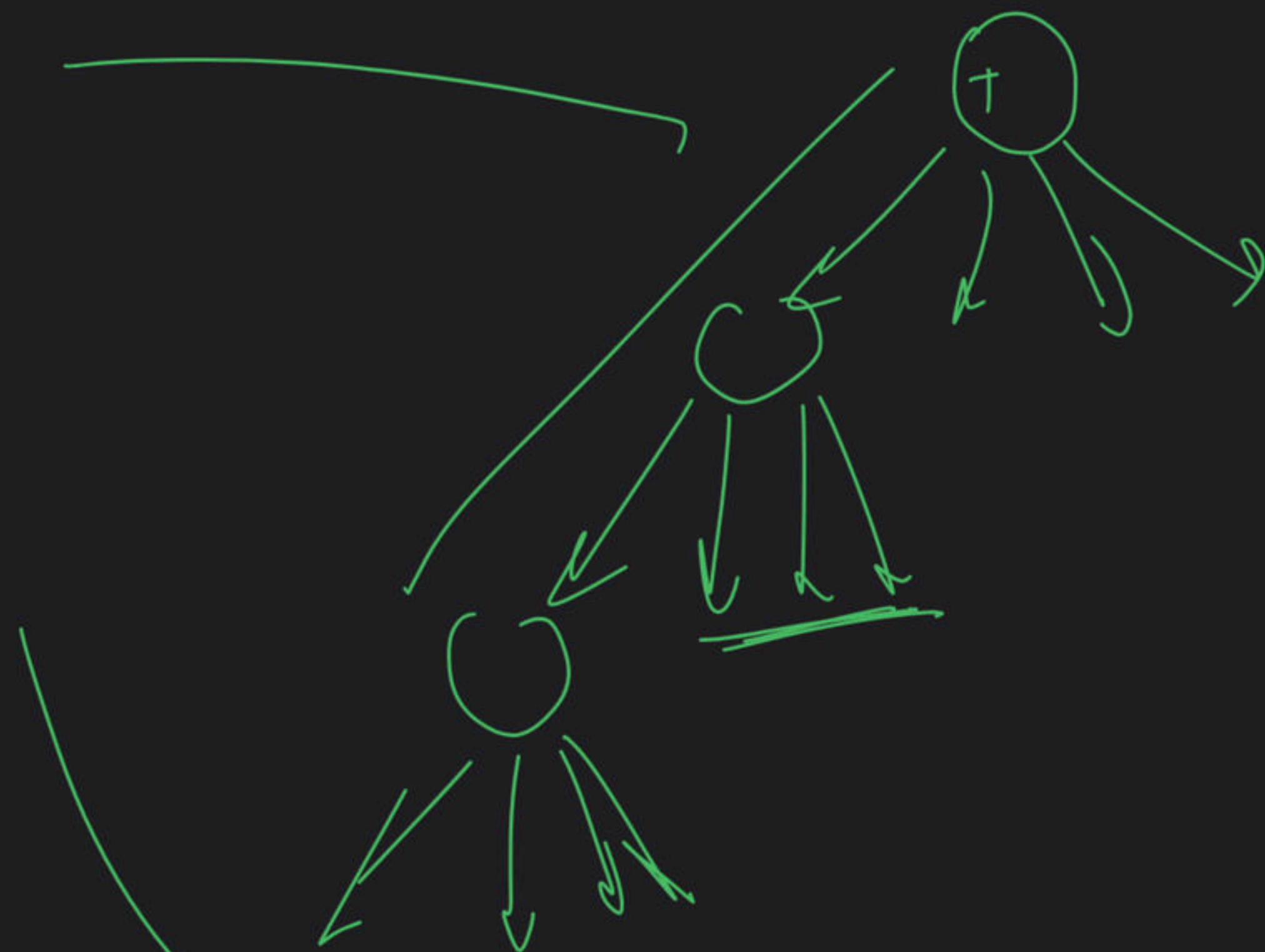
① → { 1, 1, 2, 5, 6, 7, 10 }

$\{1, 1, 5\}$

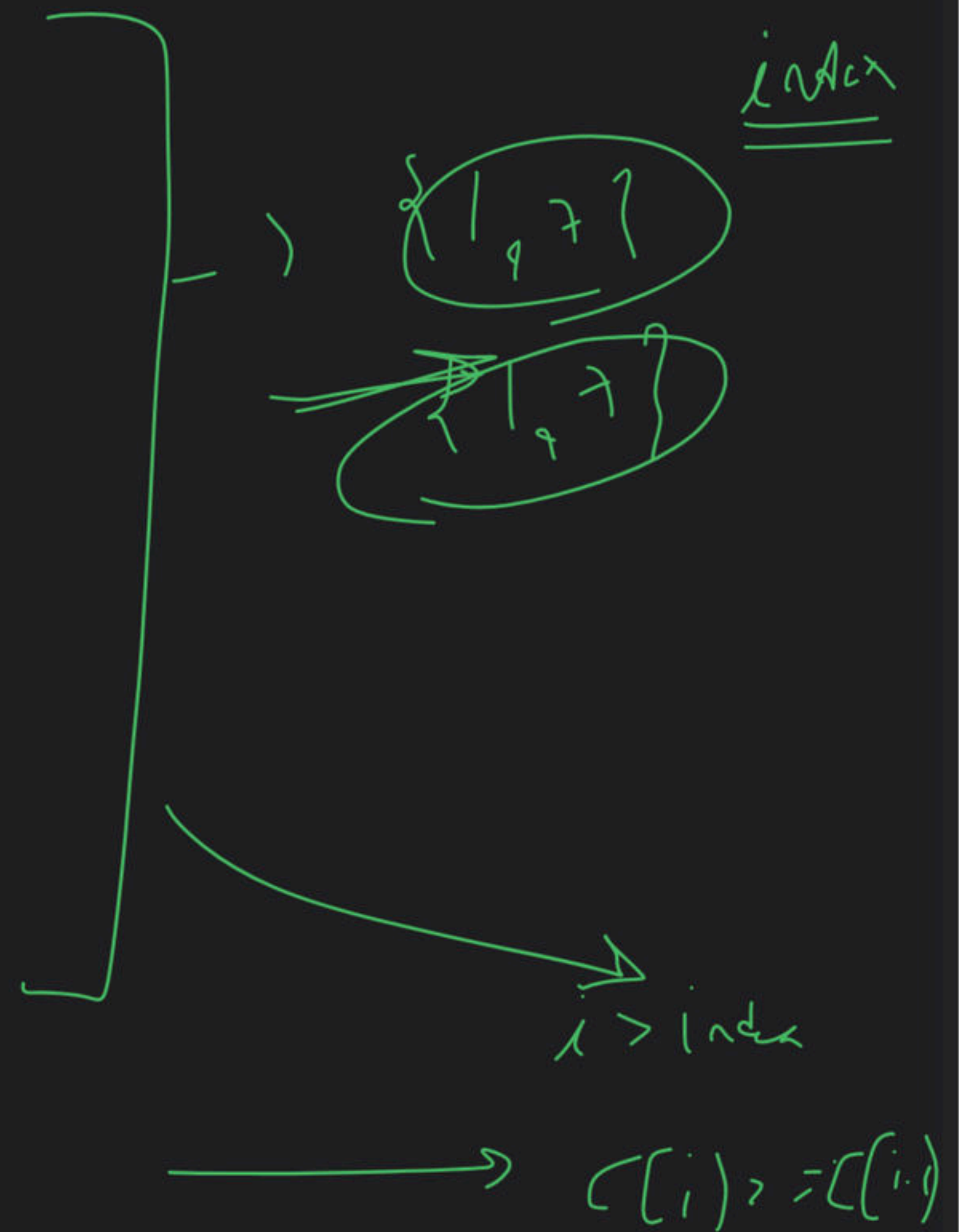
$\{2, 1\}$



```
i > index  
if  
c[i] == c[i-1]  
Continue
```

() 2





3-4 cx

Code

2 days

↓
30%

20%

→ 10%

LOVER

Σ

Σ

Σ

S1 — } Unknown
S2 — }

Big → Small

mohit

→ Disliked

10 min

↓
Now?

←

















