

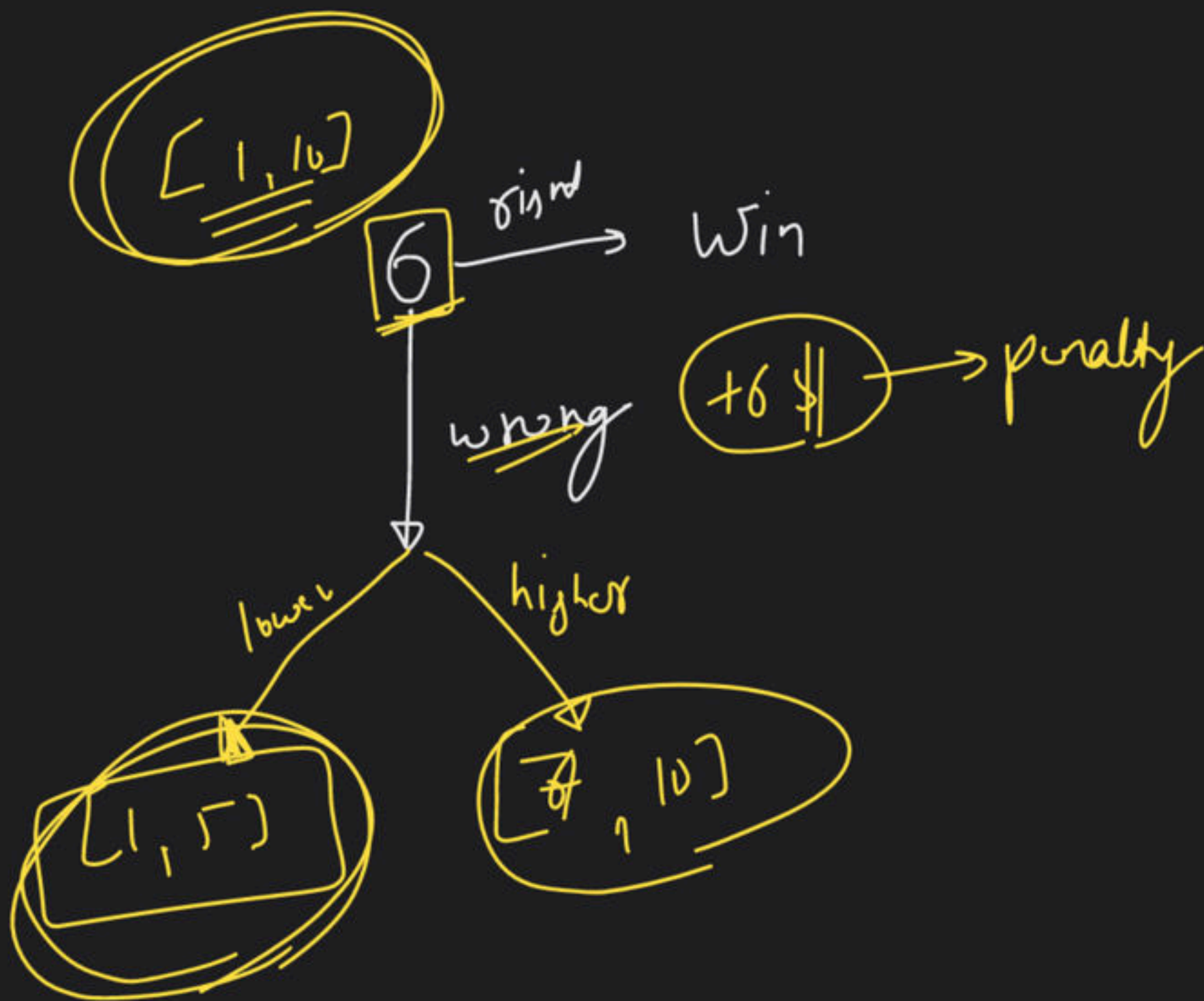
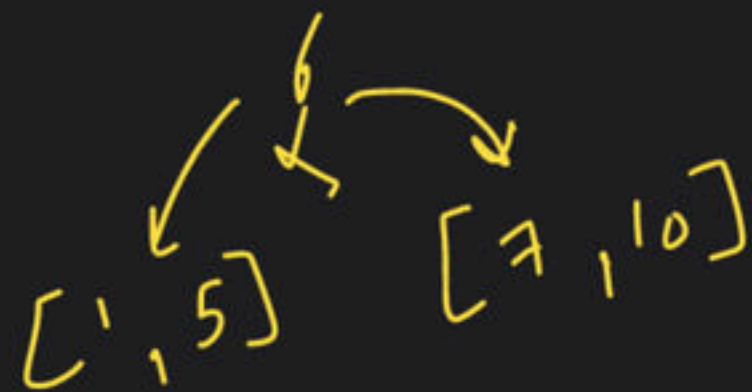


Dynamic Programming Class - 5

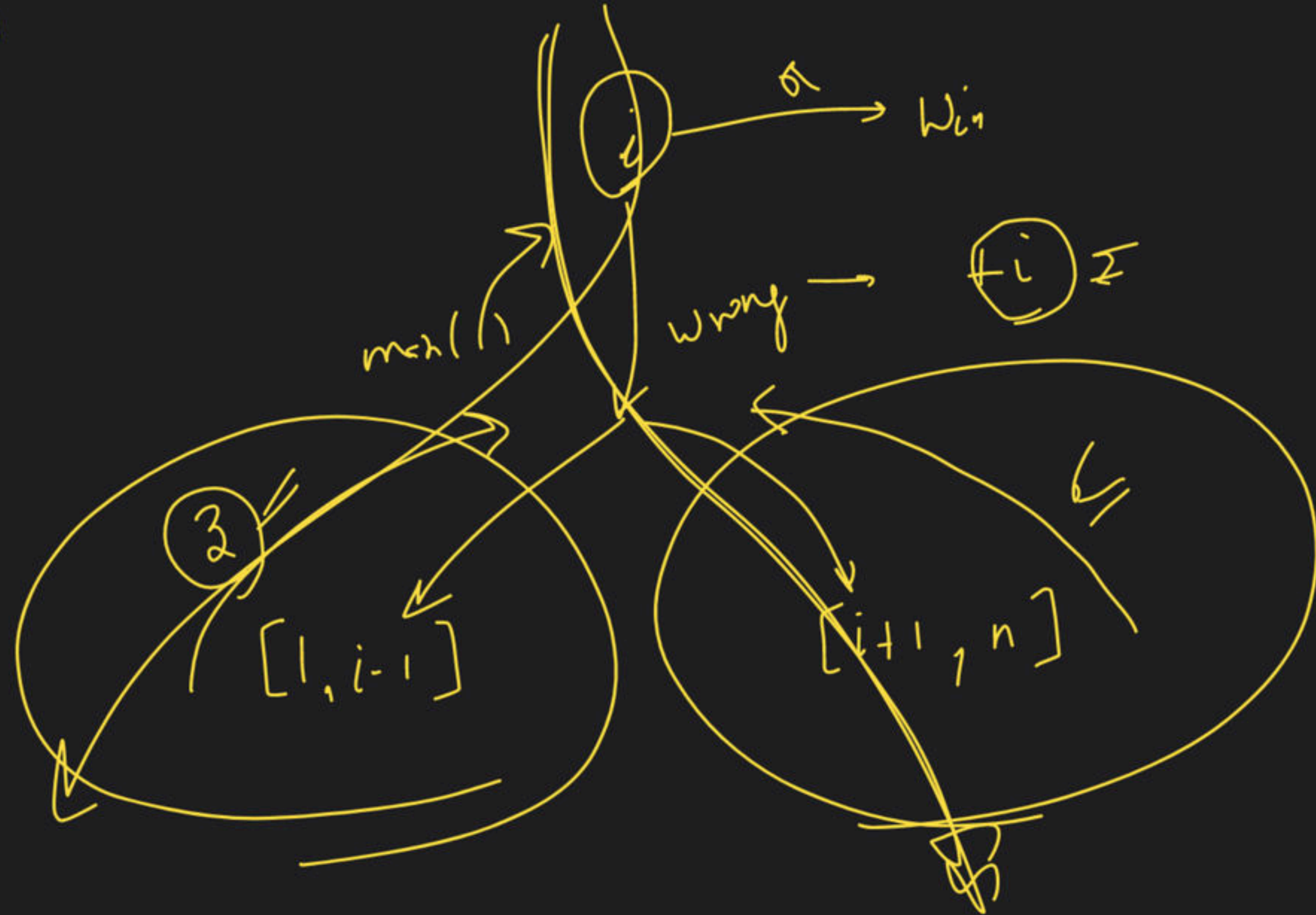
Special class

$n=10$

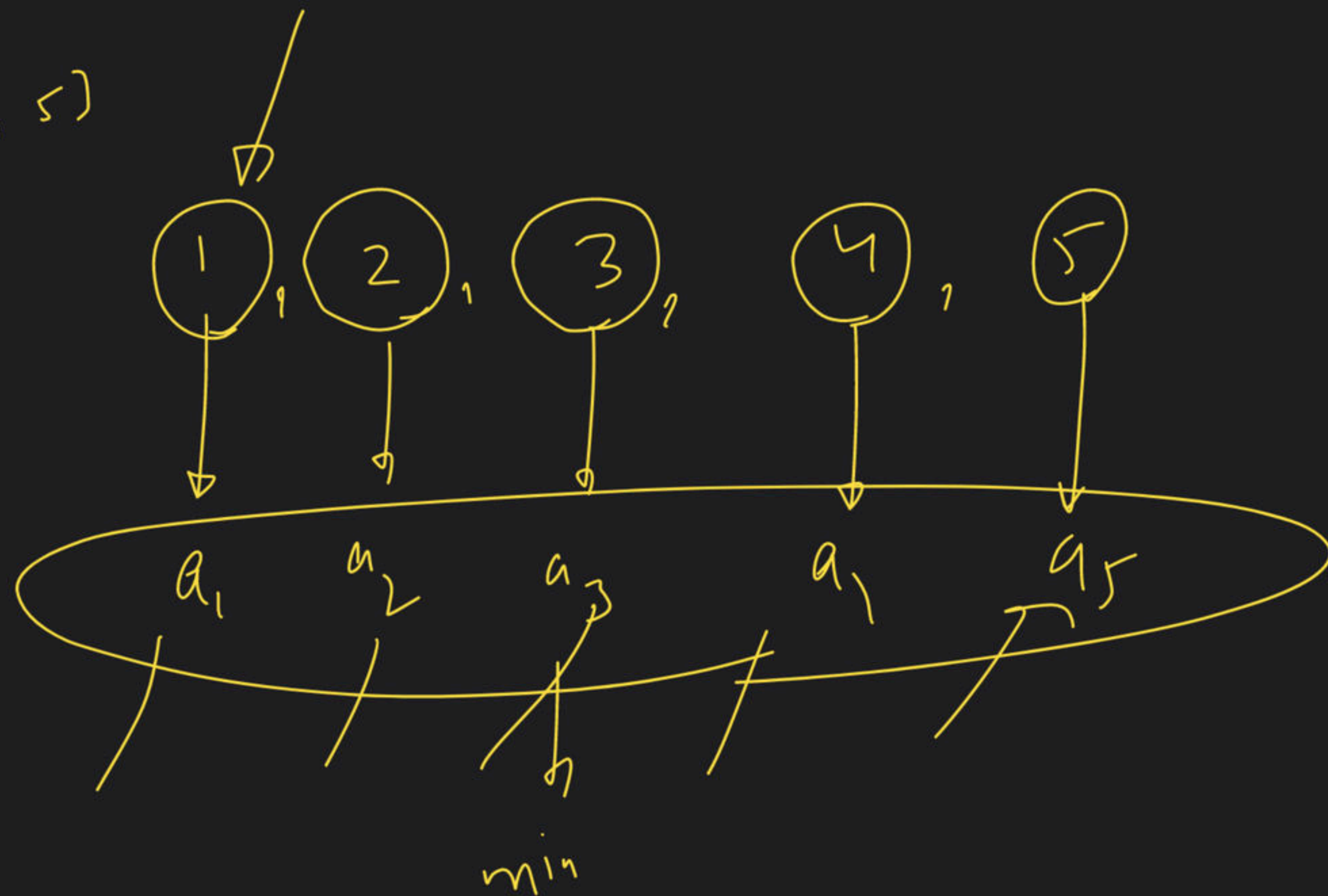
$[1, 10]$



[1, n]



[1, 5]



$[1, 5]$

it's max (left call, right call)

$(8 \pm)$

wrong

$(+3)$

$[1, 2]$

~~$(5 \pm)$~~

$(8 \pm)$

(2)

wrong (2)

ans must
be 1

$[4, 5]$

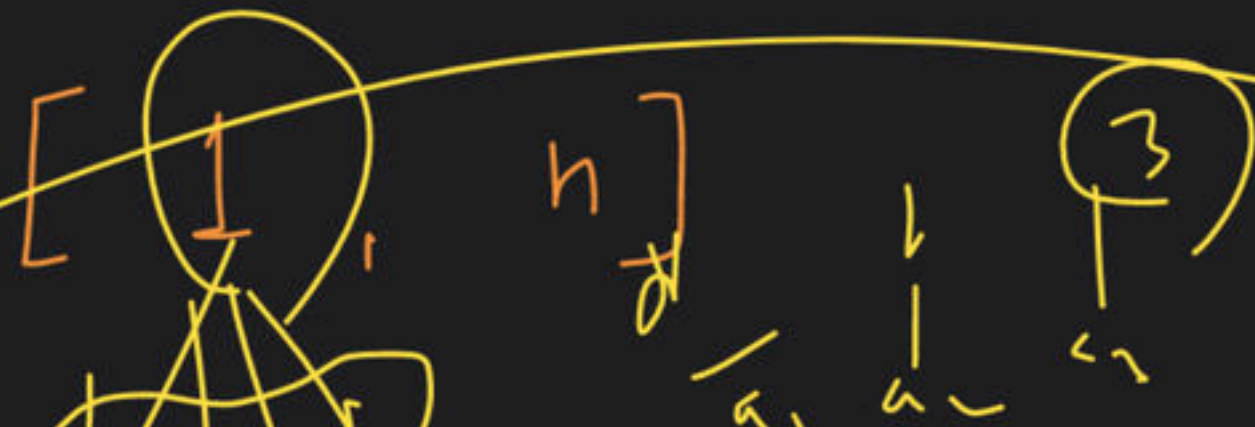
wrong $(+5)$

as must be

(5)



i/p \rightarrow range \rightarrow



in order to win the game



no pick damage



guess

wrong

right

game win

penalty

fair khataam huge

lose game

hint
actual no

higher lower

man penalty

min amount of money

1 top model → min price



Min Cost tree from leaf values

involved traversal of leaves

i/p \rightarrow arr \rightarrow [6, 2, 4]

Question

$T_1 \rightarrow \text{Sum} \rightarrow 27$

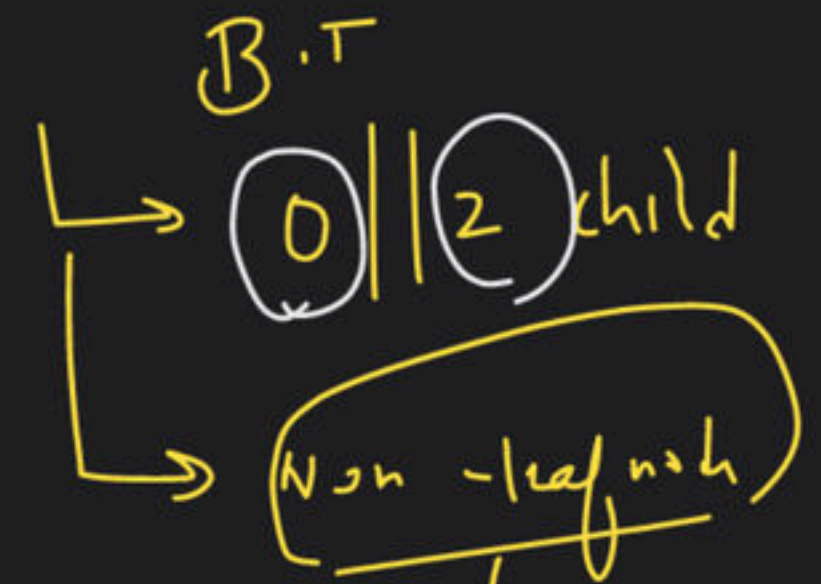
$T_2 \rightarrow \text{Sum} \rightarrow 26$

$T_3 \rightarrow \text{Sum} \rightarrow 36$

$T_4 \rightarrow \text{Sum} \rightarrow 72$

$T_5 \rightarrow \text{Sum} \rightarrow 12$

min \rightarrow 18

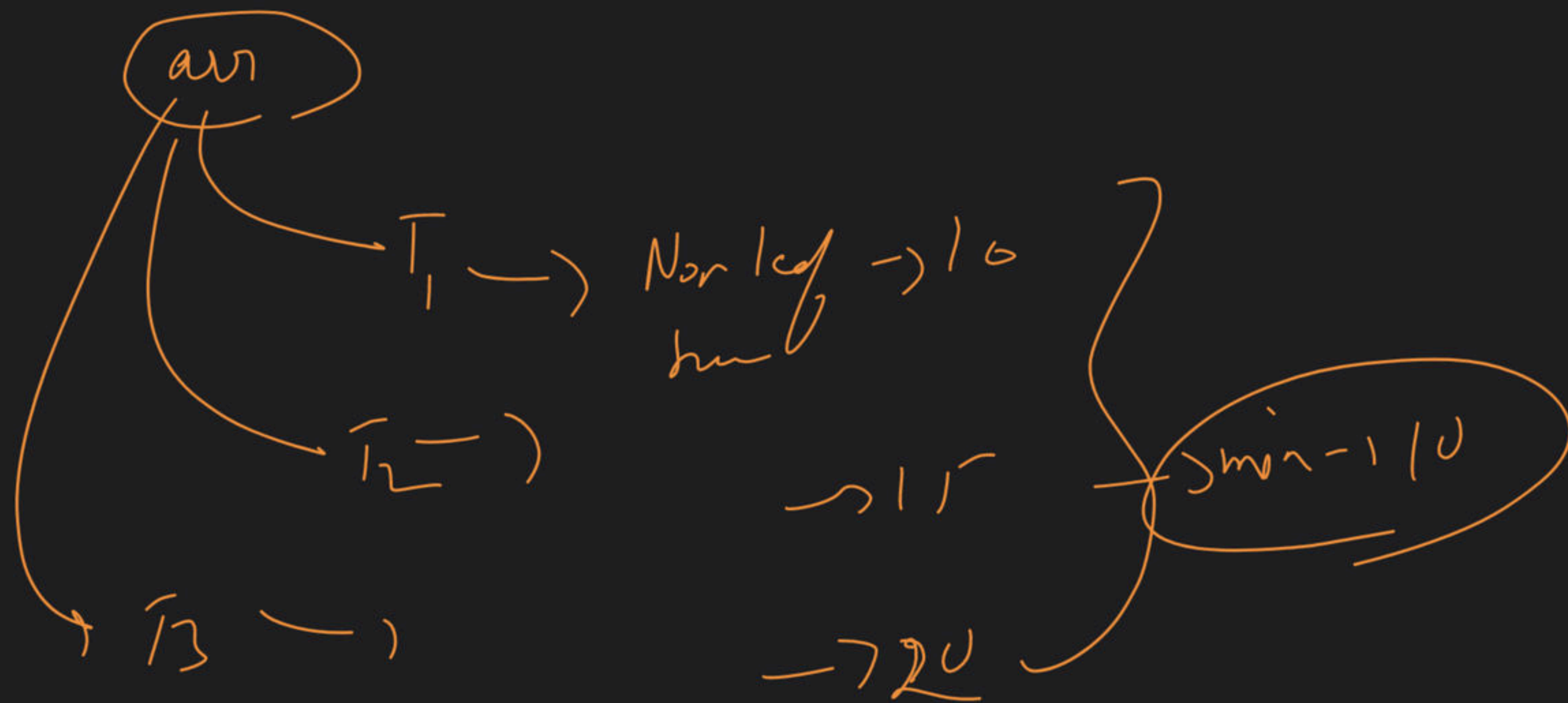


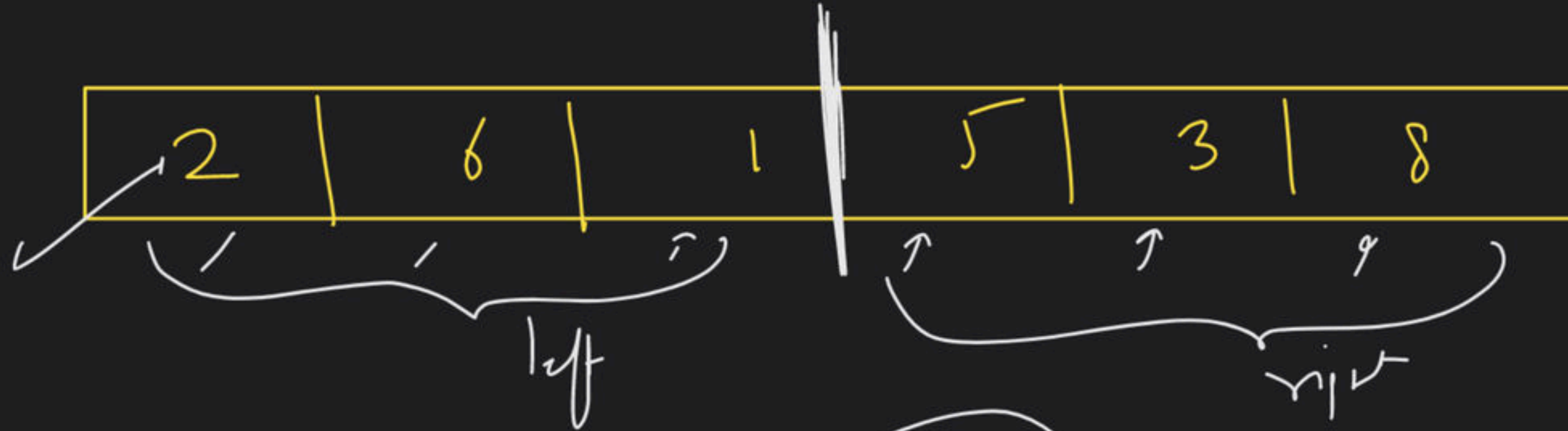
product

min Leaf Val in left Subtree

min Leaf Val in Right Subtree

min Possible Sum of Non-leaf Nodes in trees

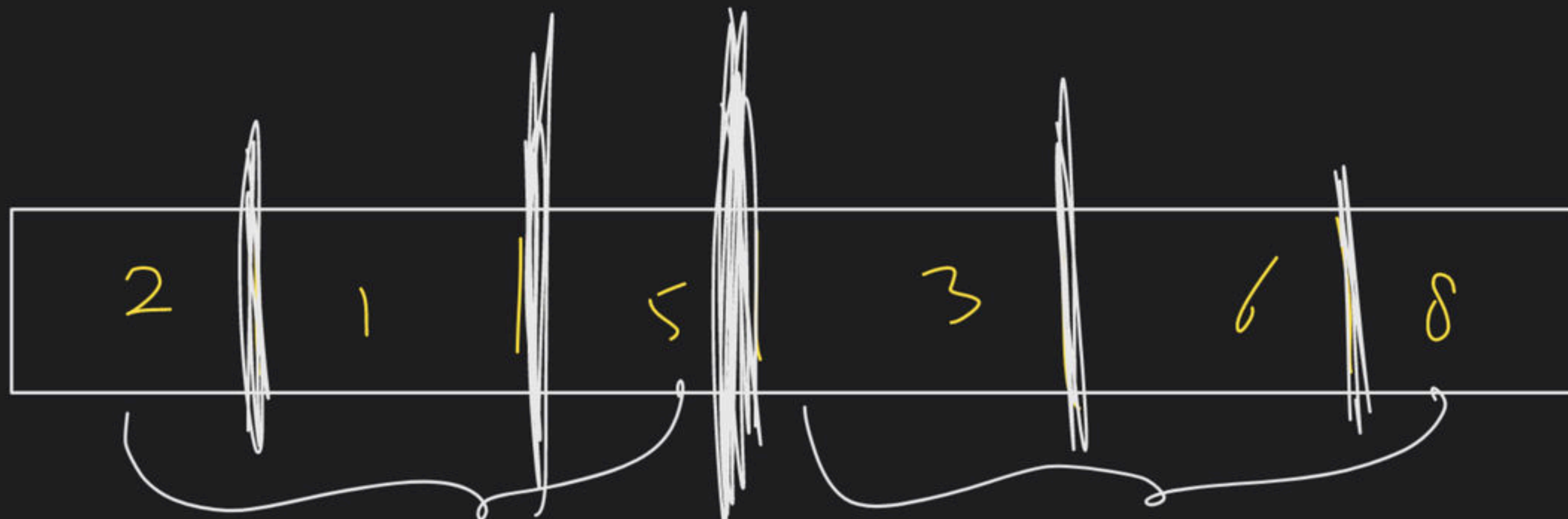


$$i/p \rightarrow$$

$$L \rightarrow M \rightarrow 6$$

$$R \rightarrow M \rightarrow 8$$

48





ans = INT_MAX

i index

left next

ans = min (ans,

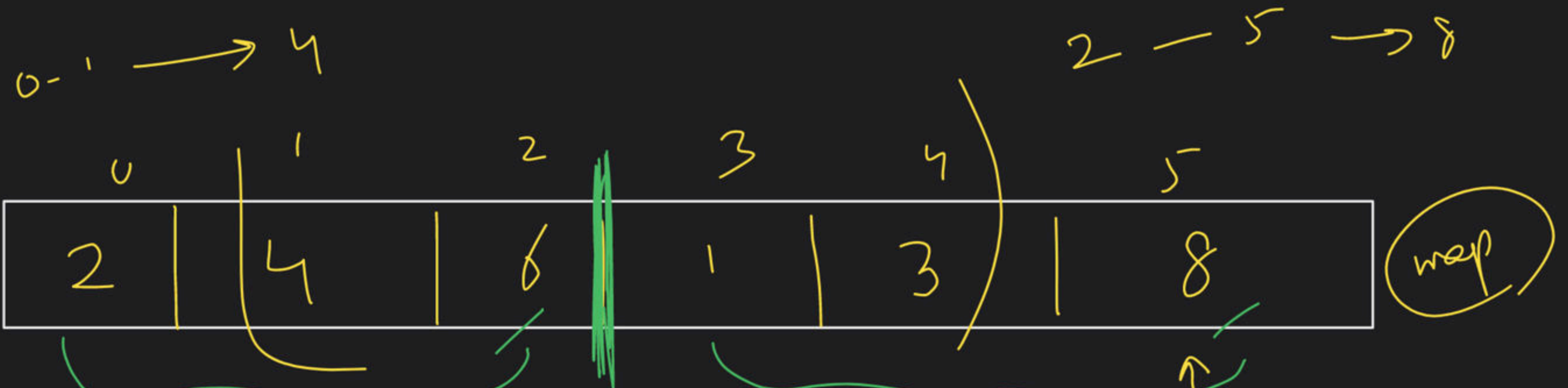
max [arr[i], arr[i+1, right]

+

solve (left, i)

+

solve (i+1, right)

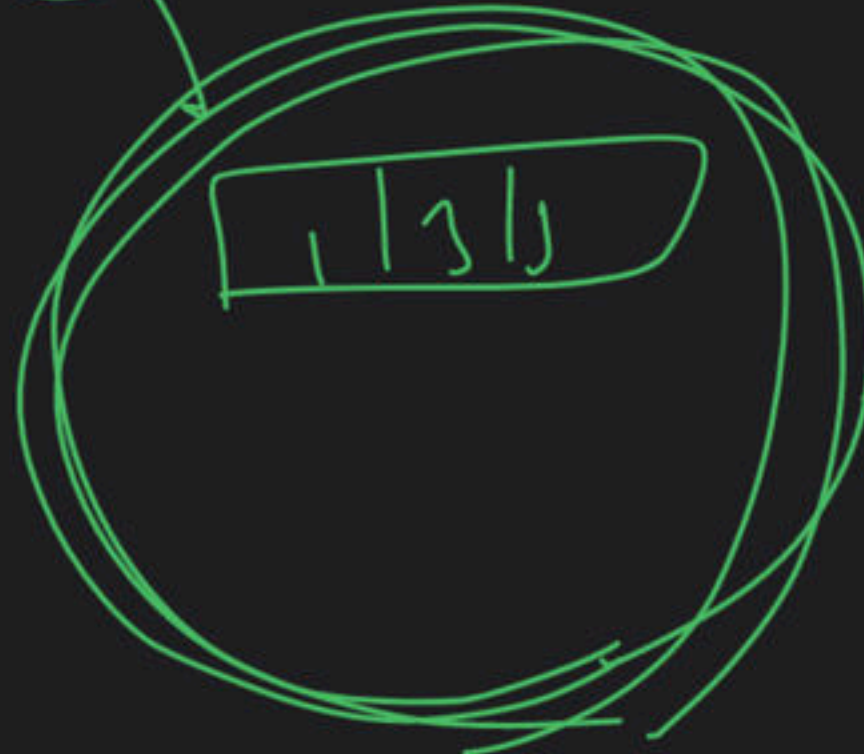
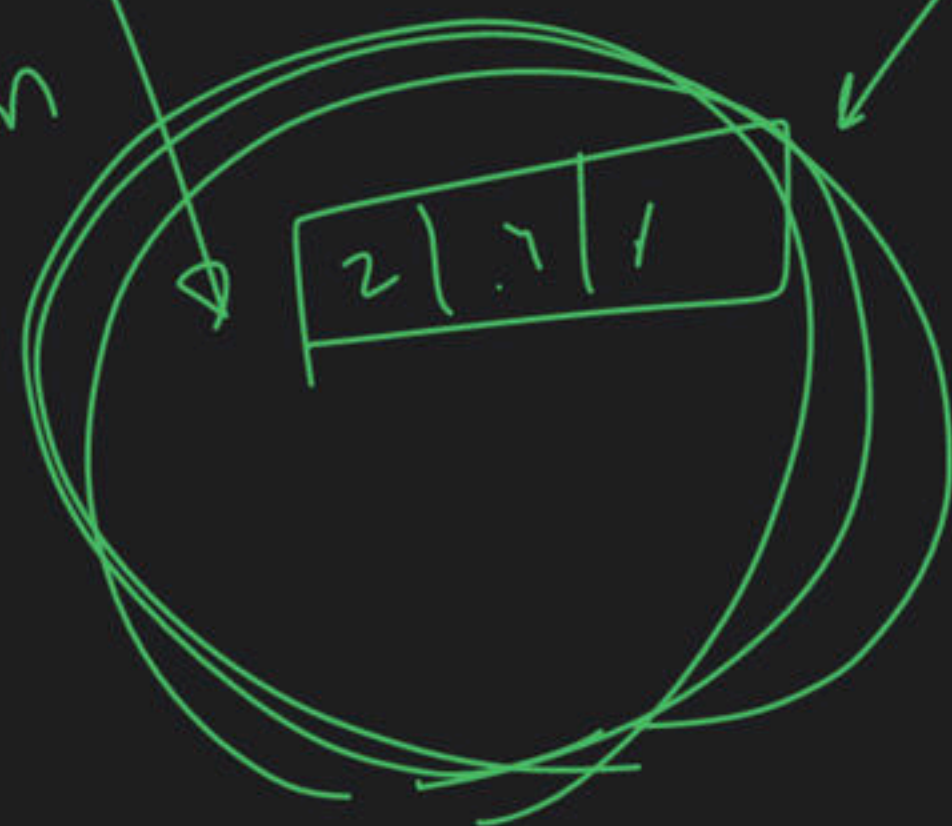


left part

1 → 7 → 6
right

48

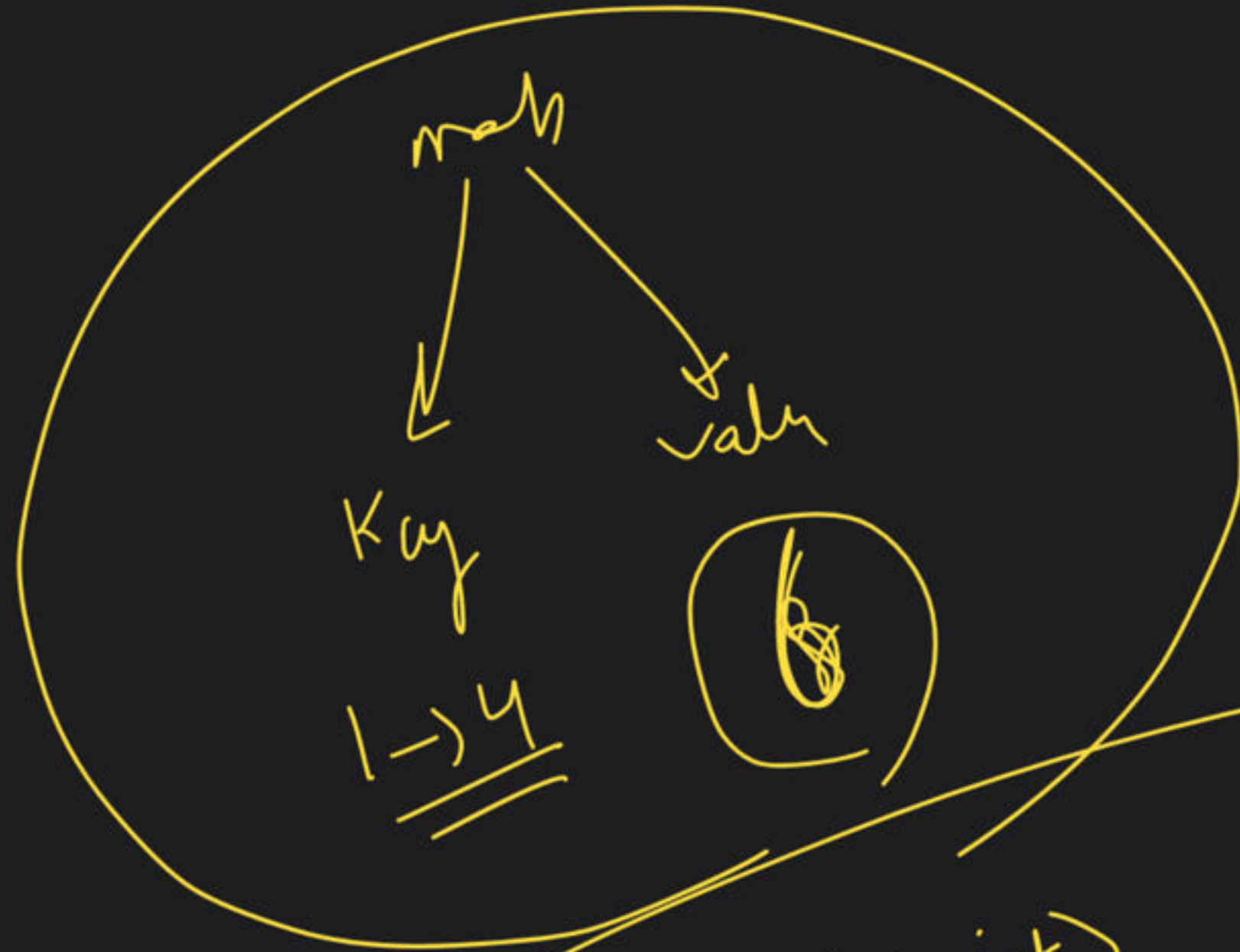
left sum



ans

max[left part] max[right part]

+ solve(left part)
+ solve(right part)



map < pair(int, int), int > m































