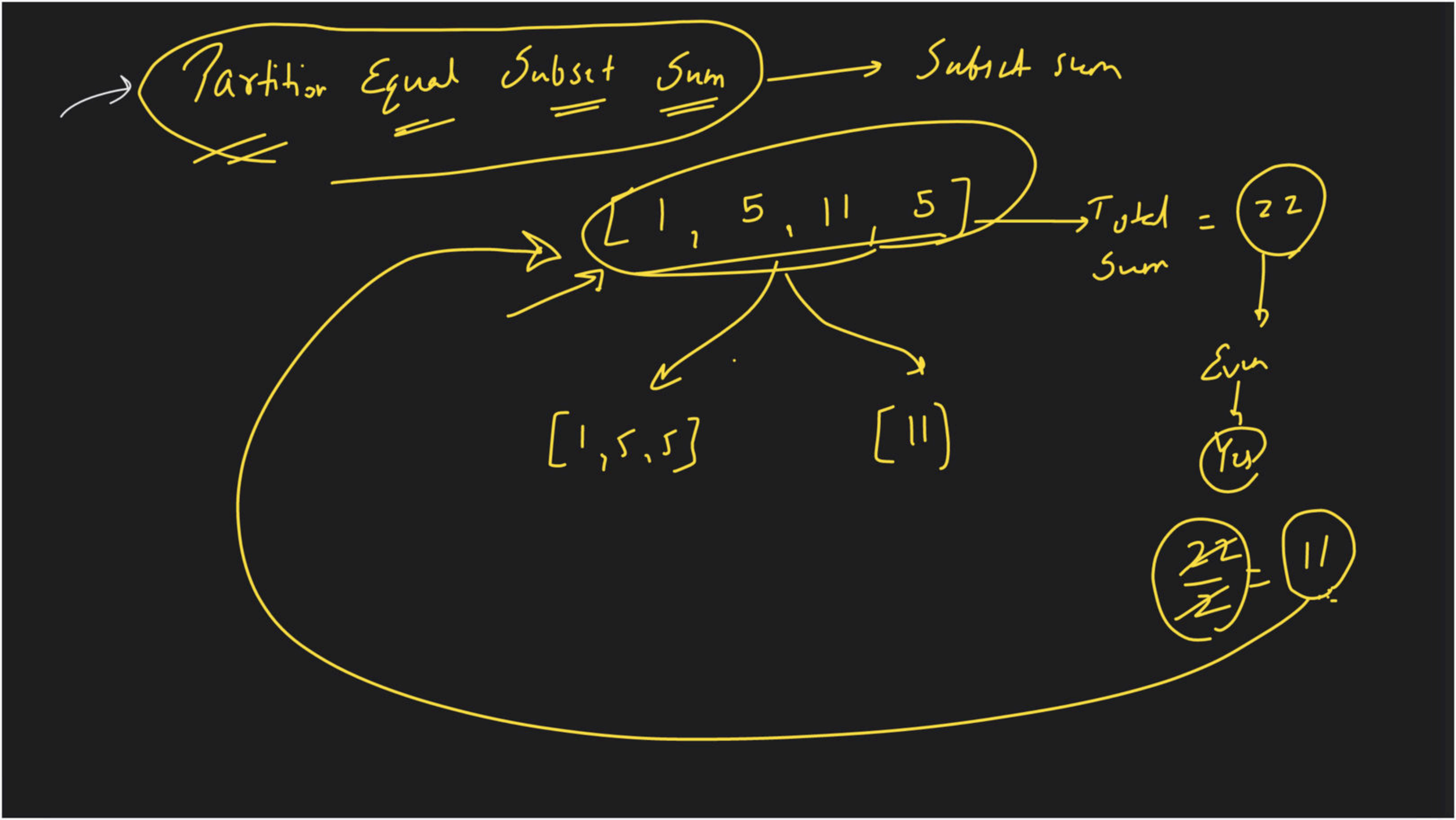
Dynamic Programming Class-7

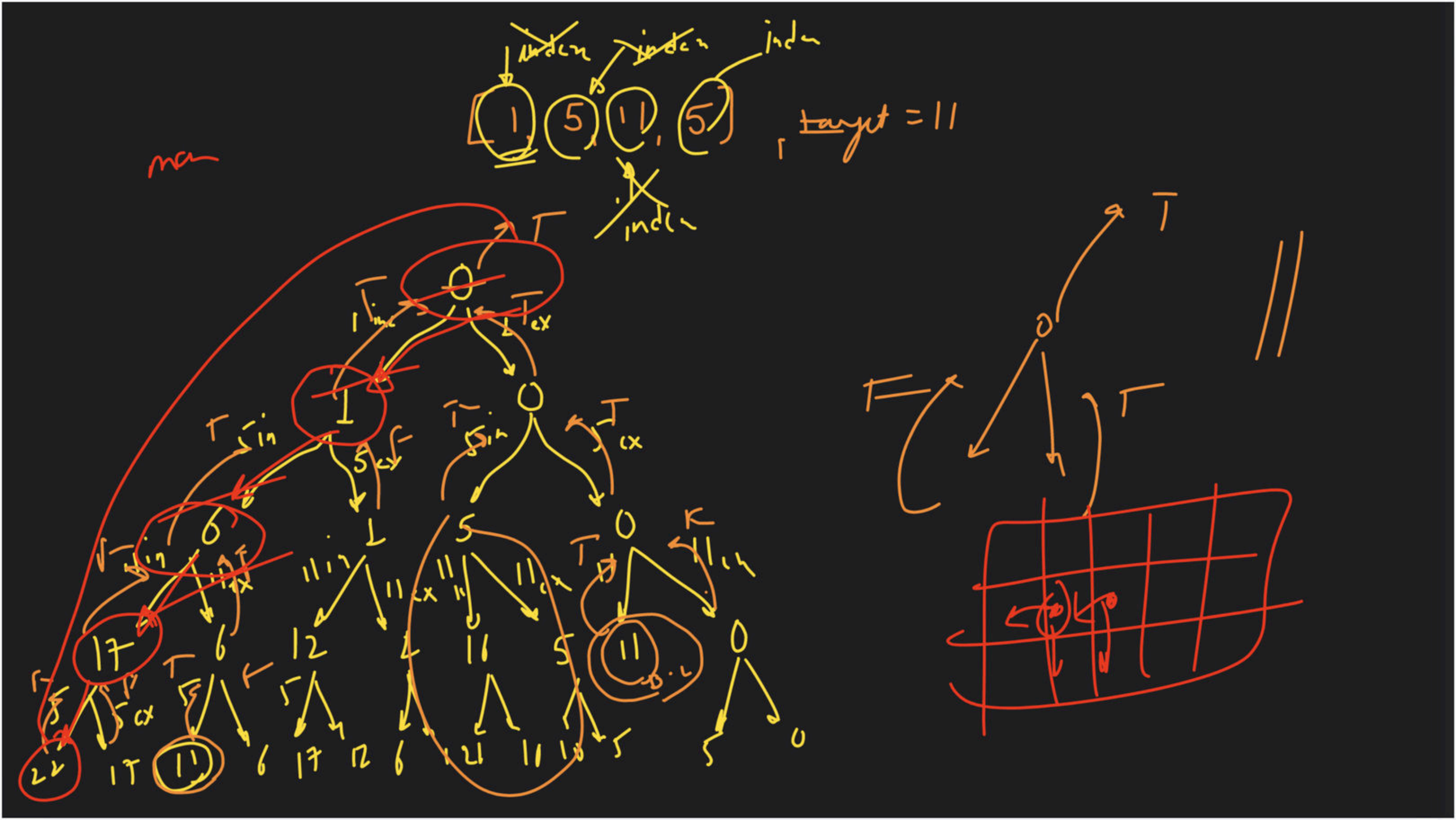
Special class

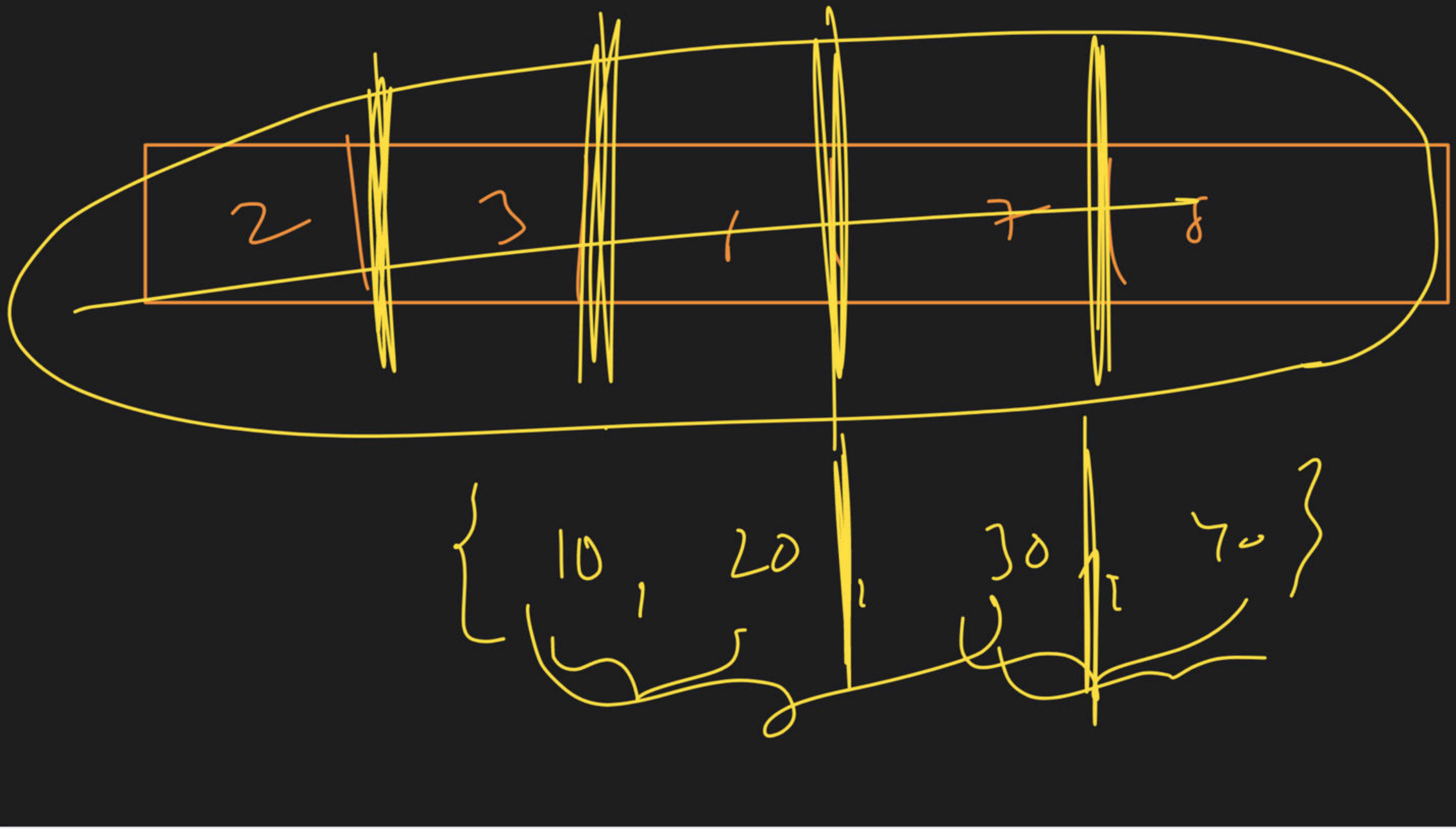
Love Babbar • Jan 19, 2024

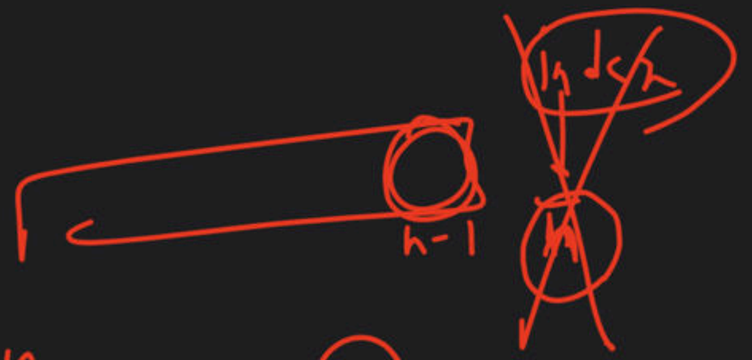

Partition Equal Subset Sum
Subset sum
[1, 5, 11, 5]
Total Sum = 22
Even
Yes
[1,5,5]
[11]
22/2 = 11

[1, 5, 9, 11, 2, 5]

11


target = 11


2
3
1
7
8
10
20
30
70



ind = n

n-1

?

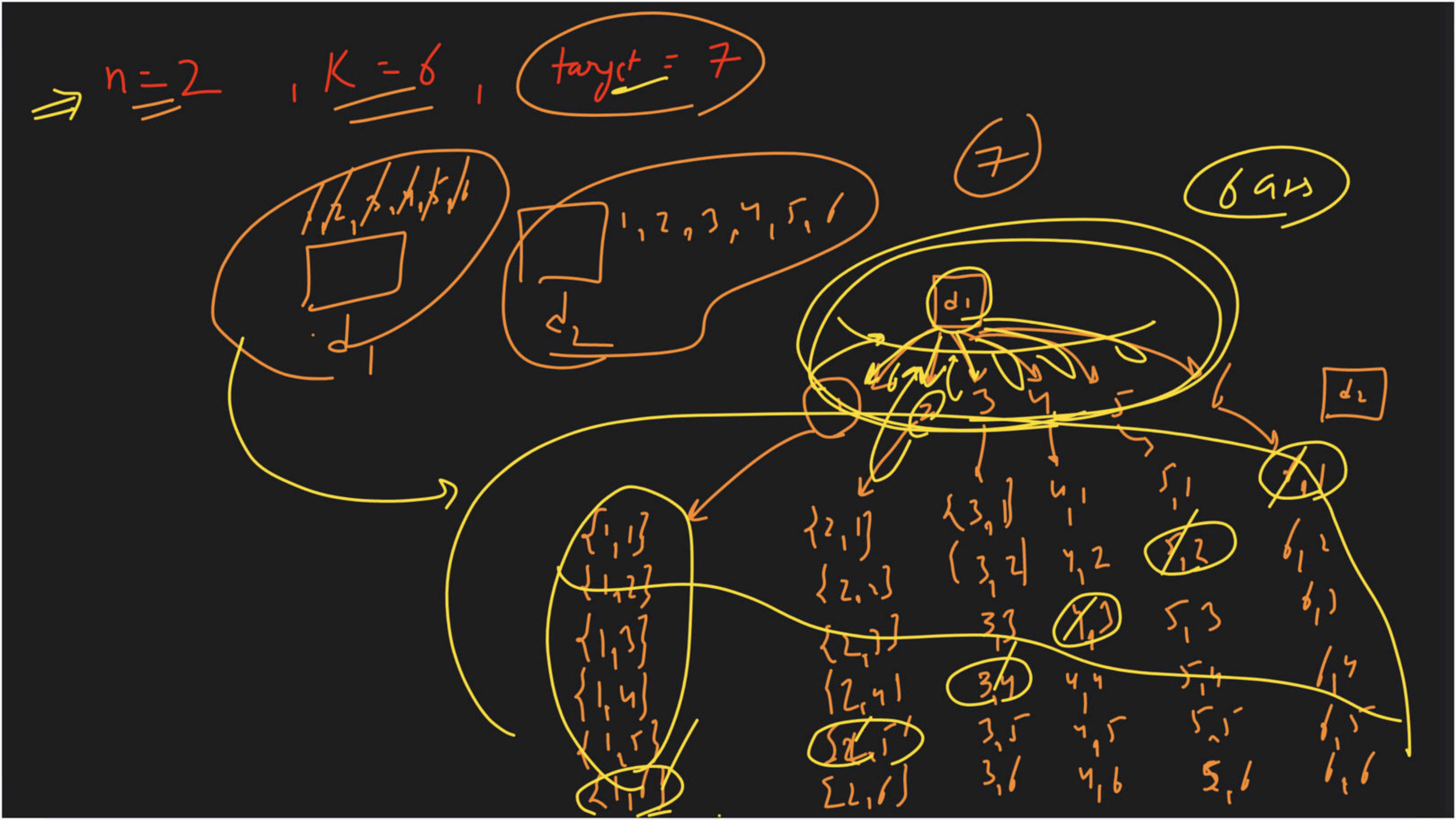
YCC

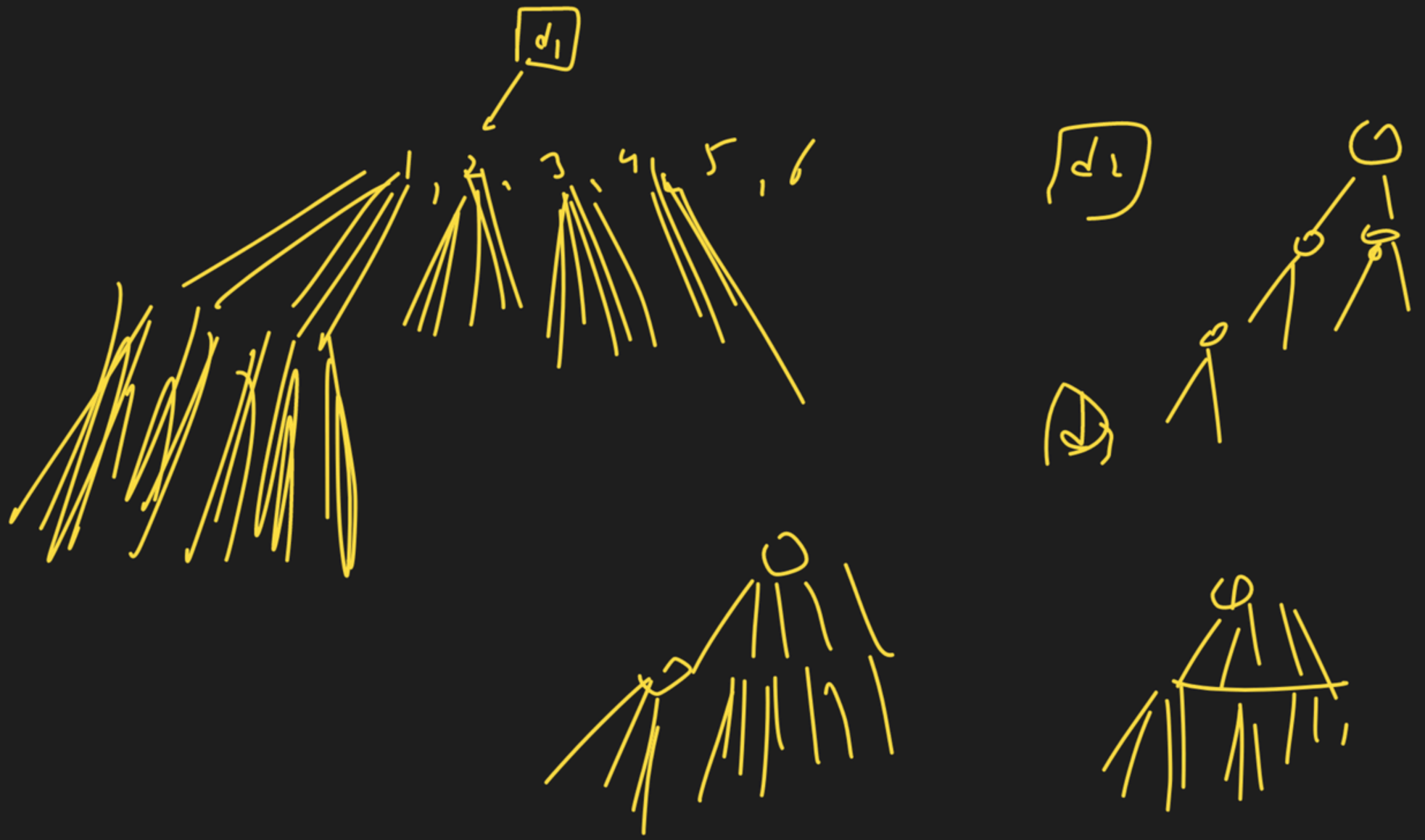
↓

index → 0 → n

Lab

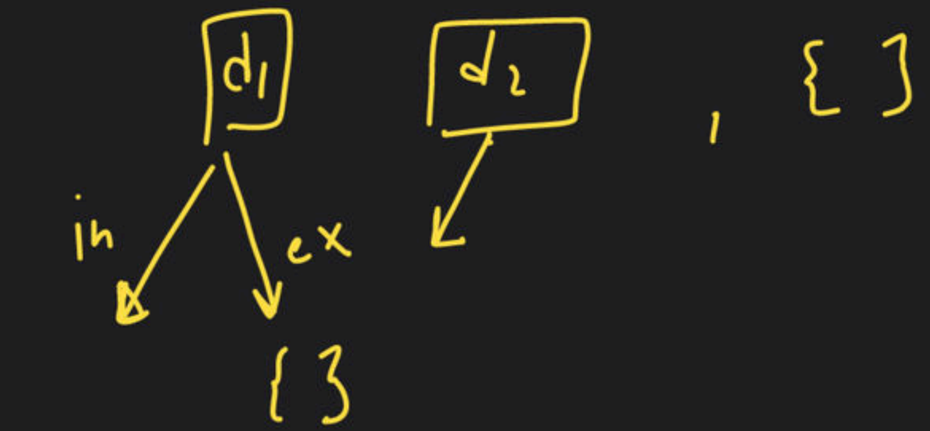
ind = n-1 →


n = 2 , K = 6 , target = 7
d1
d2
7
6 ways

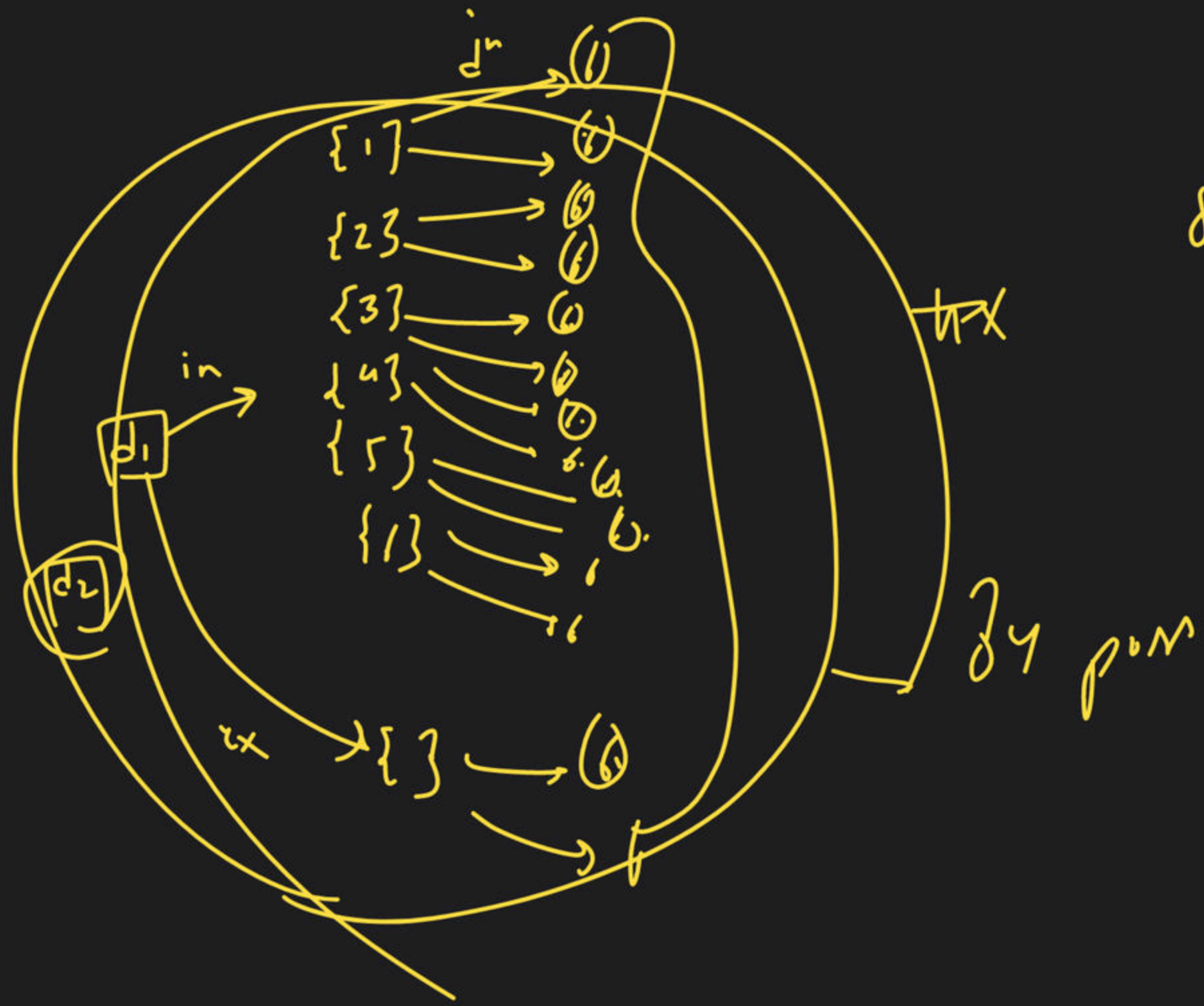

d_1
1
2
3
4
5
6
d_1

incl / excl

all possible ways



{1}
{2}
{3}
{4}
{5}
{}


in
d1
d2
{1}
{2}
{3}
{4}
{5}
{}
{}


{1,2}
{}
{1}
{3}
{4}
{6}

coin change

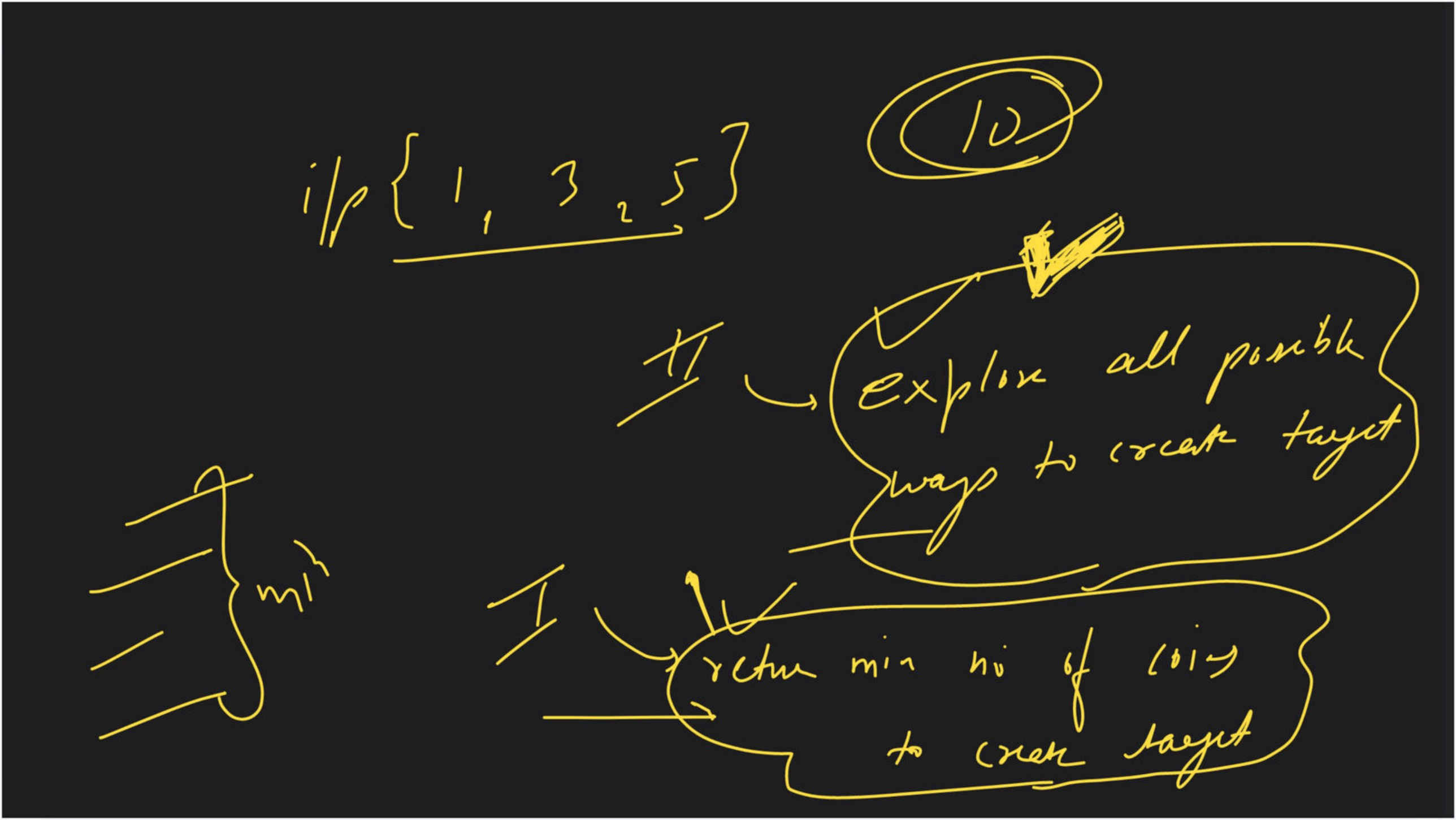
Explore all ways

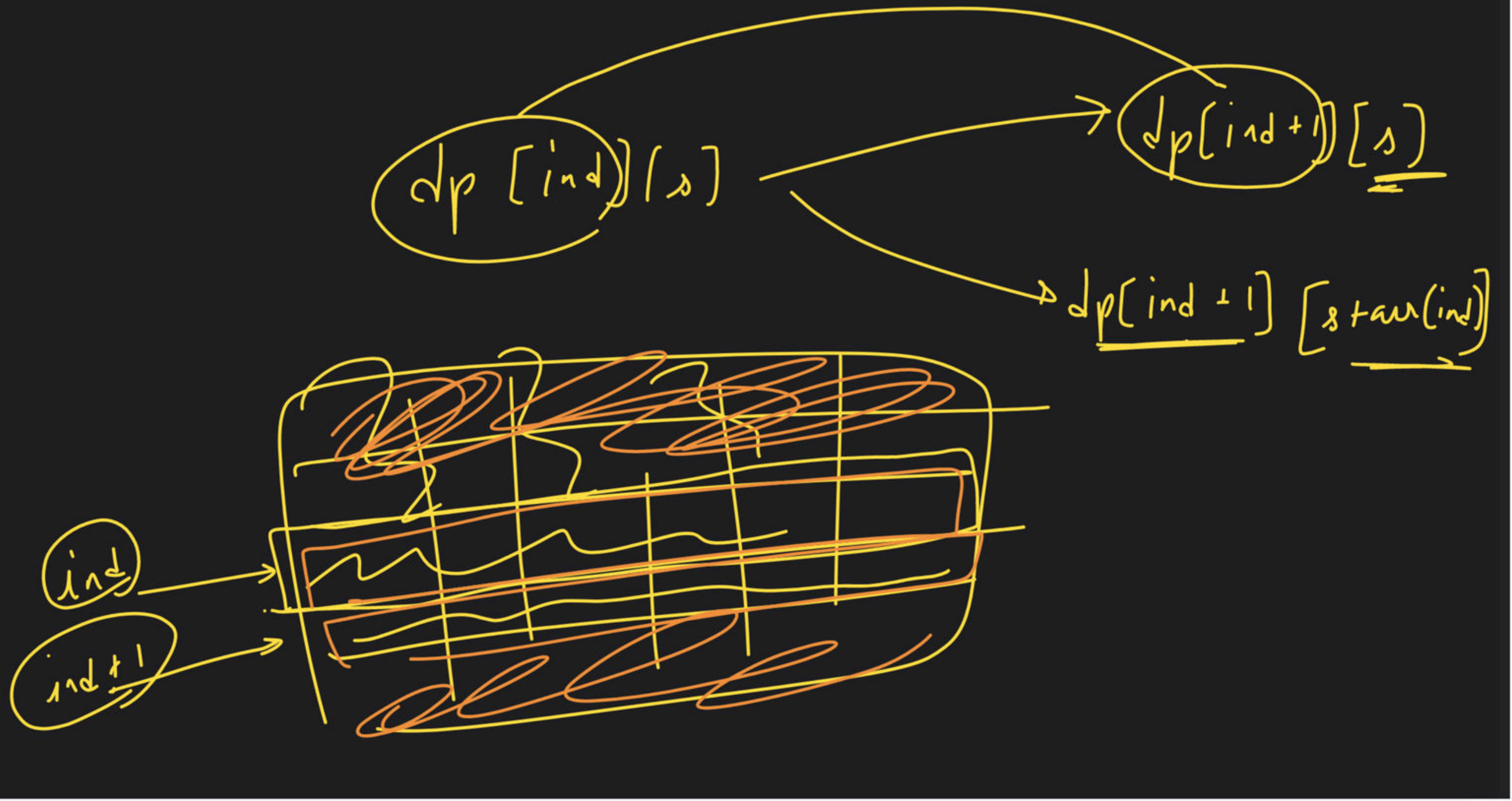
for ( )

{

ans +=

}


i/p {1, 3, 2, 5}
10
II
explore all possible ways to create target
I
return min no of coins to create target


dp [ind] [s]
dp[ind+1] [s]
dp[ind+1] [s+arr(ind)]
ind
ind+1