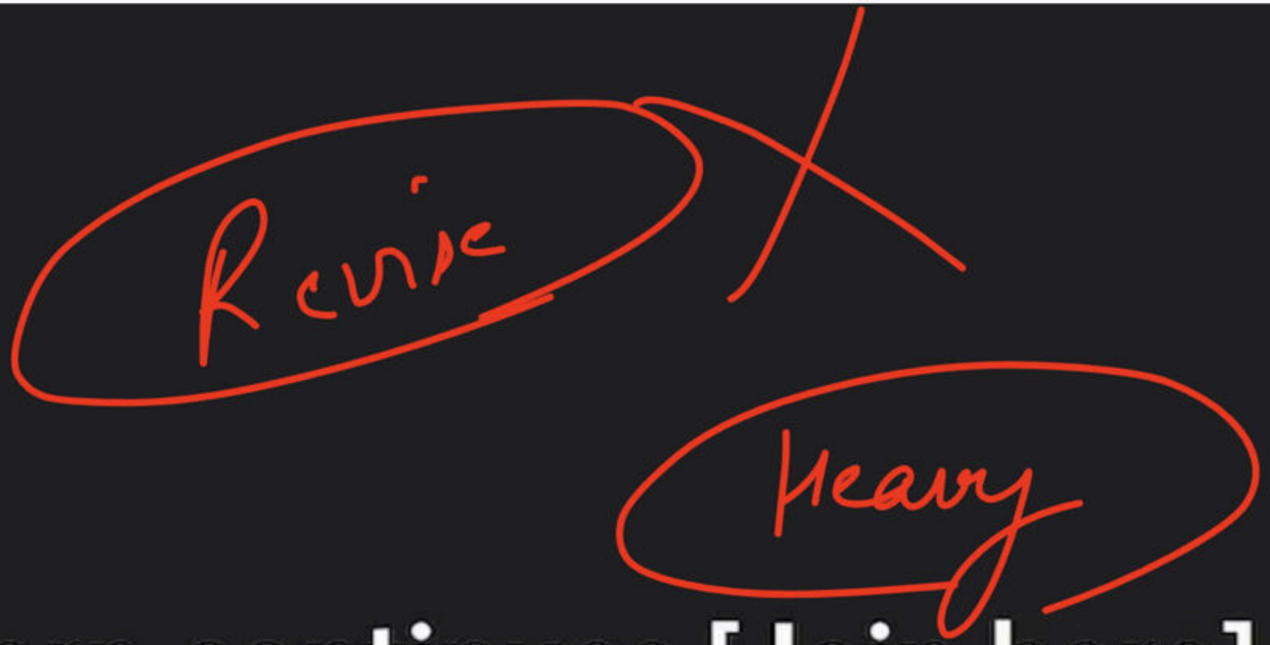
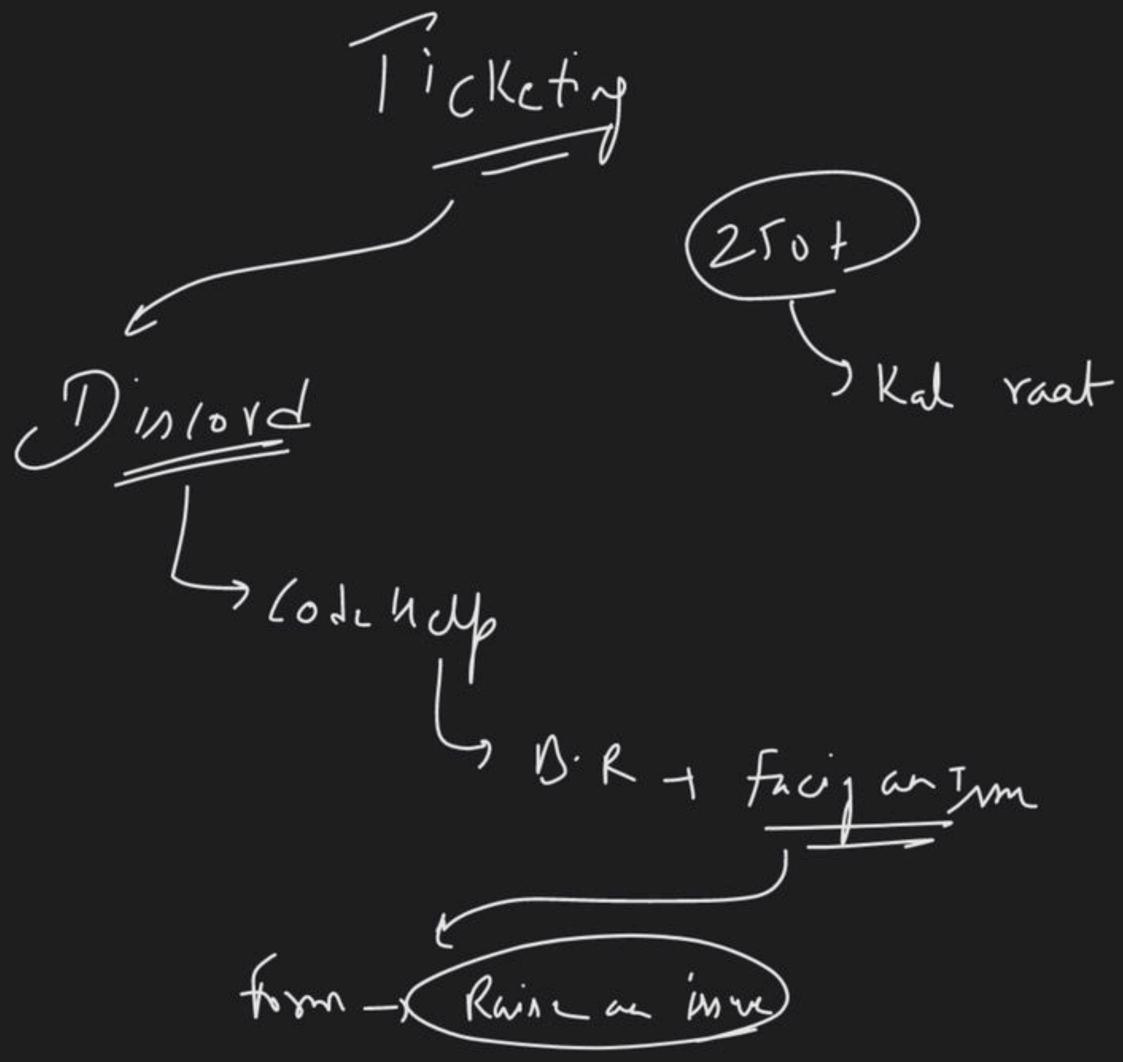


Pattern continues [Join here]

Special class

Love Babbar • Aug 31, 2023


Ticketing
2501
Kal raat
Discord
Code help
B.R + facilitation
form
Raise an issue

Full pyramid

n=5, r=2 → n-r-1 → 5-2-1 → 2 sp

n=5, r=3 → 5-3-1 = 1

1. rows = n = 5

2. row+1

r0 → 4 sp, 1 ★

r1 → 3 sp, 2 ★

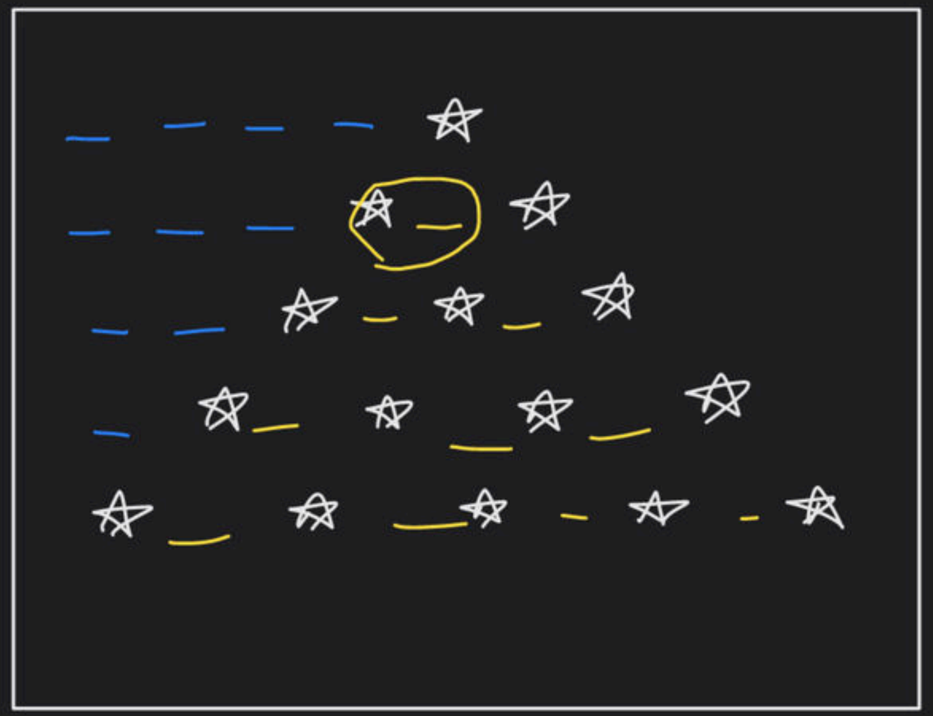
r2 → 2 sp, 3 ★

r3 → 1 sp, 4 ★

r4 → 0 sp, 5 ★

n=5, r=4 → 5-4-1 ⇒ 0

n=5, r=1 → n-row-1 → 5-1-1 = 3



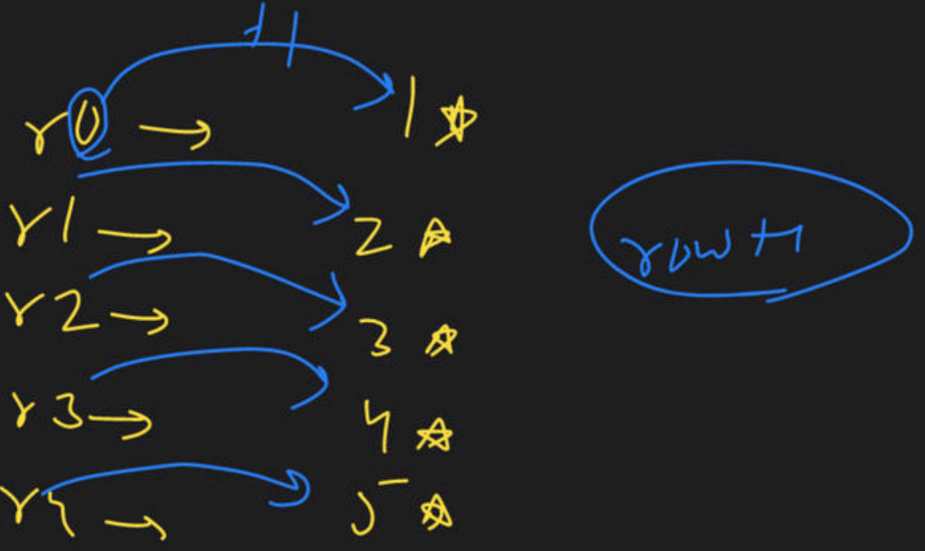
n=5, r=0

5-0-1 → 4

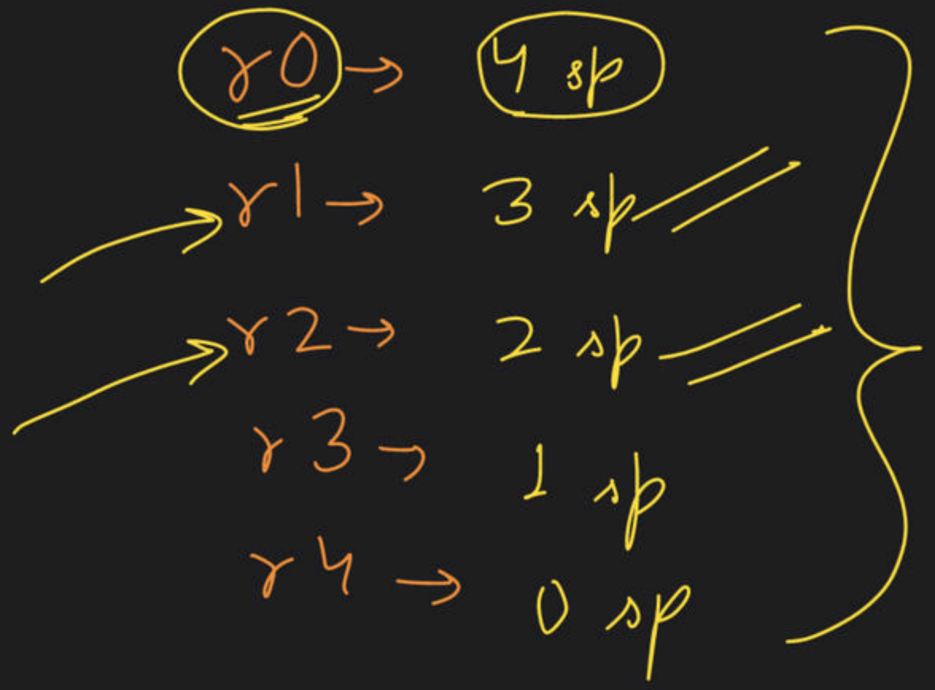
n-row-1

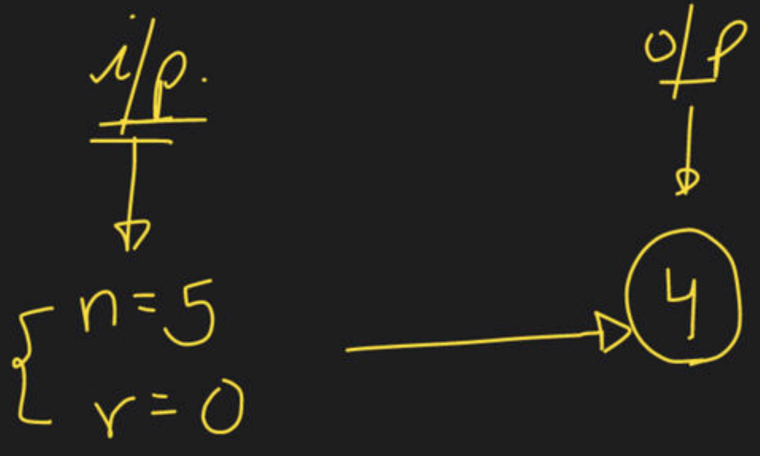
Rule (1) → rows = n = 5

Rule 2 → r0 → 4 space, 1 star
r1 → 3 space, 2 star
r2 → 2 space, 3 star
r3 → 1 space, 4 star
r4 → 0 space, 5 star



row → space, stars





$n - r = 5 - 0$

$n - r = 5$

(-1)

$n - r - 1 = 5 - 1$

$n - r - 1 = y$

n=5
r=1 → n - r - 1
5 - 1 - 1
= (3)

n=5
r=2 → n - r - 1
5 - 2 - 1
= (2)

Inverted F·P

① rows => n = 4

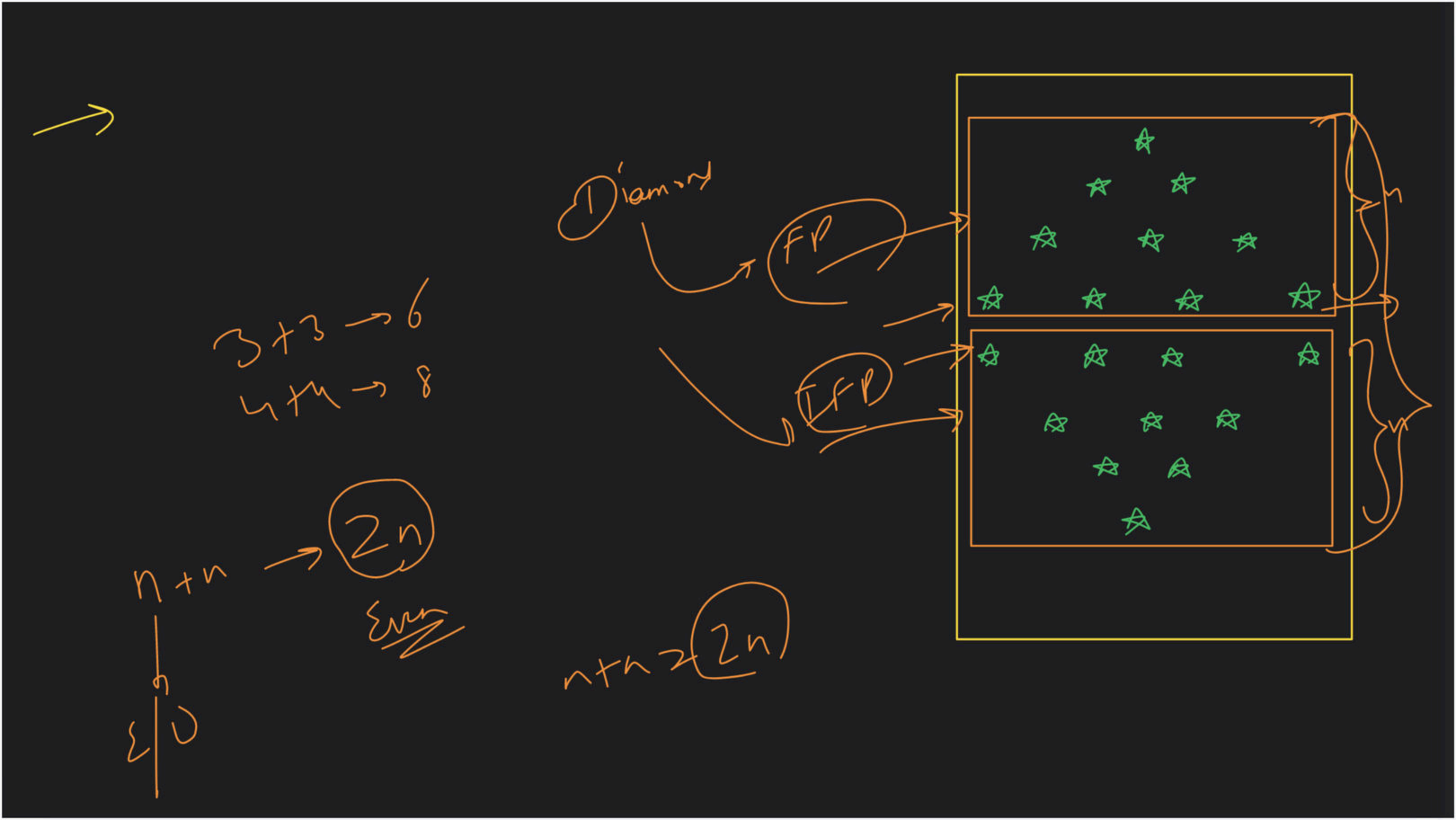
② r0 → 0 space, 4 ☆
r1 → 1 space, 3 ☆
r2 → 2 space, 2 ☆
r3 → 3 space, 1 ☆

n = 4, r = 3 → 4 − 3 = (1)
n = 4, r = 2 → 4 − 2 = (2)
n = 4, r = 1 → 4 − 1 = (3)

rows
n − r
n = 4, r = 0 → n − r = 4 − 0 = (4)

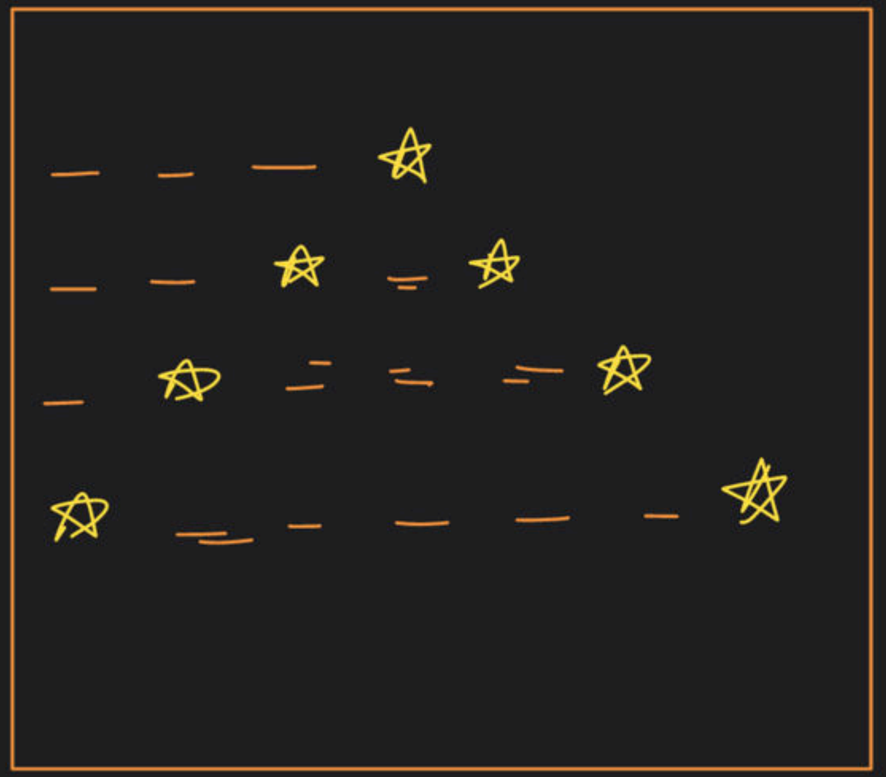
o/p → 4

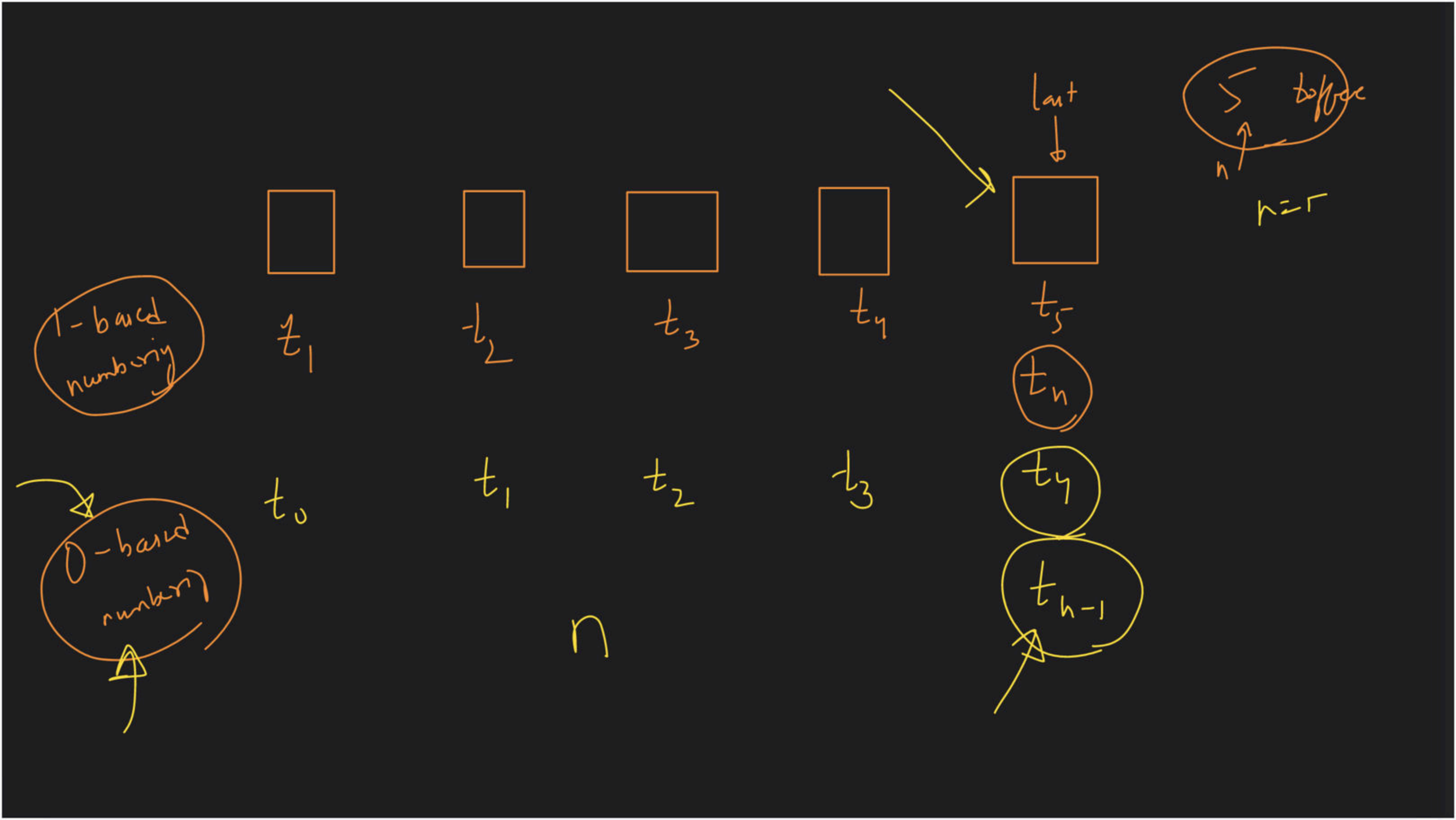
r → space
stars

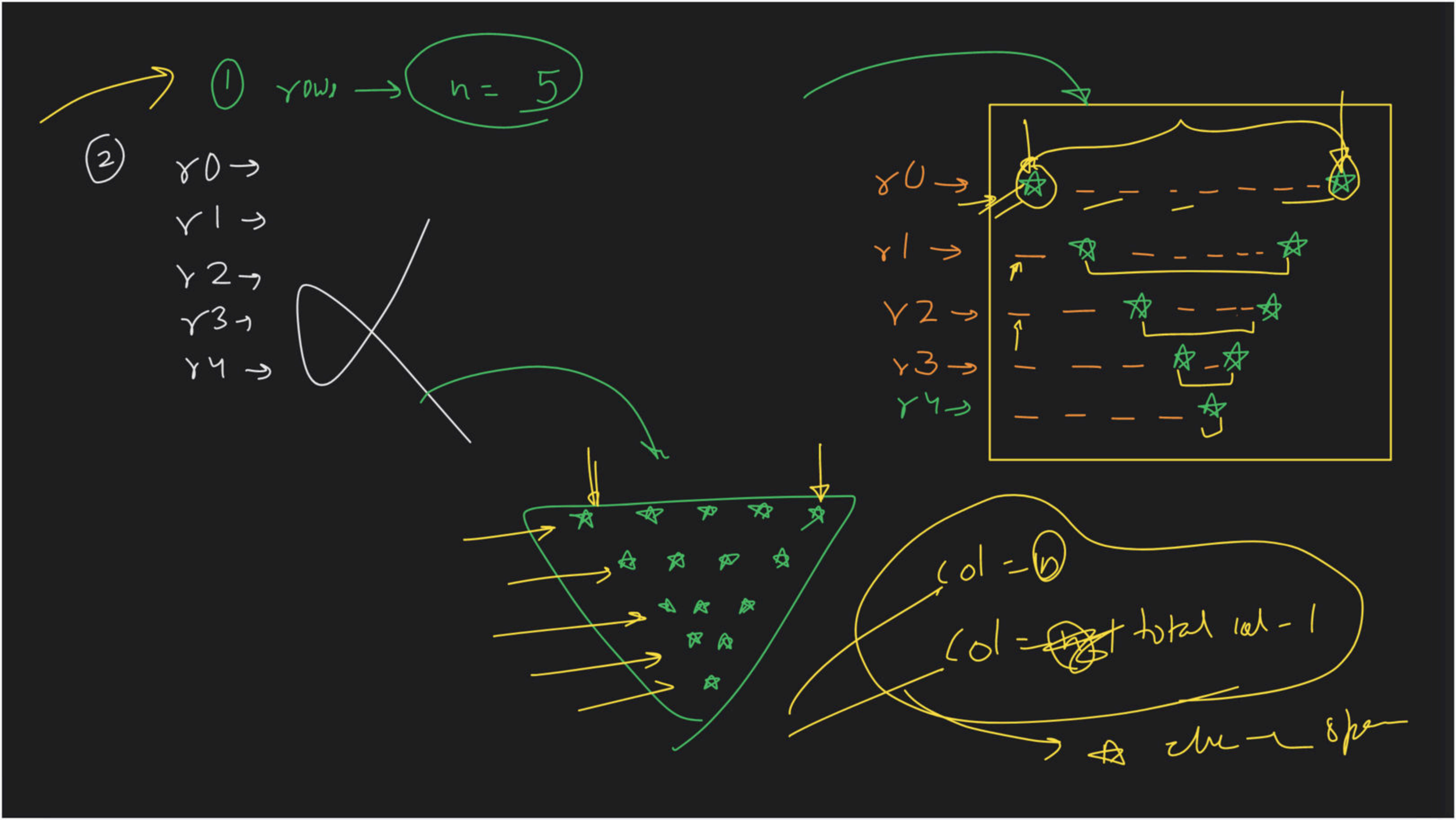

Diamond
FP
FP
3+3 → 6
4+4 → 8
n+n → 2n
Even
n | 2
n+n=2(2n)

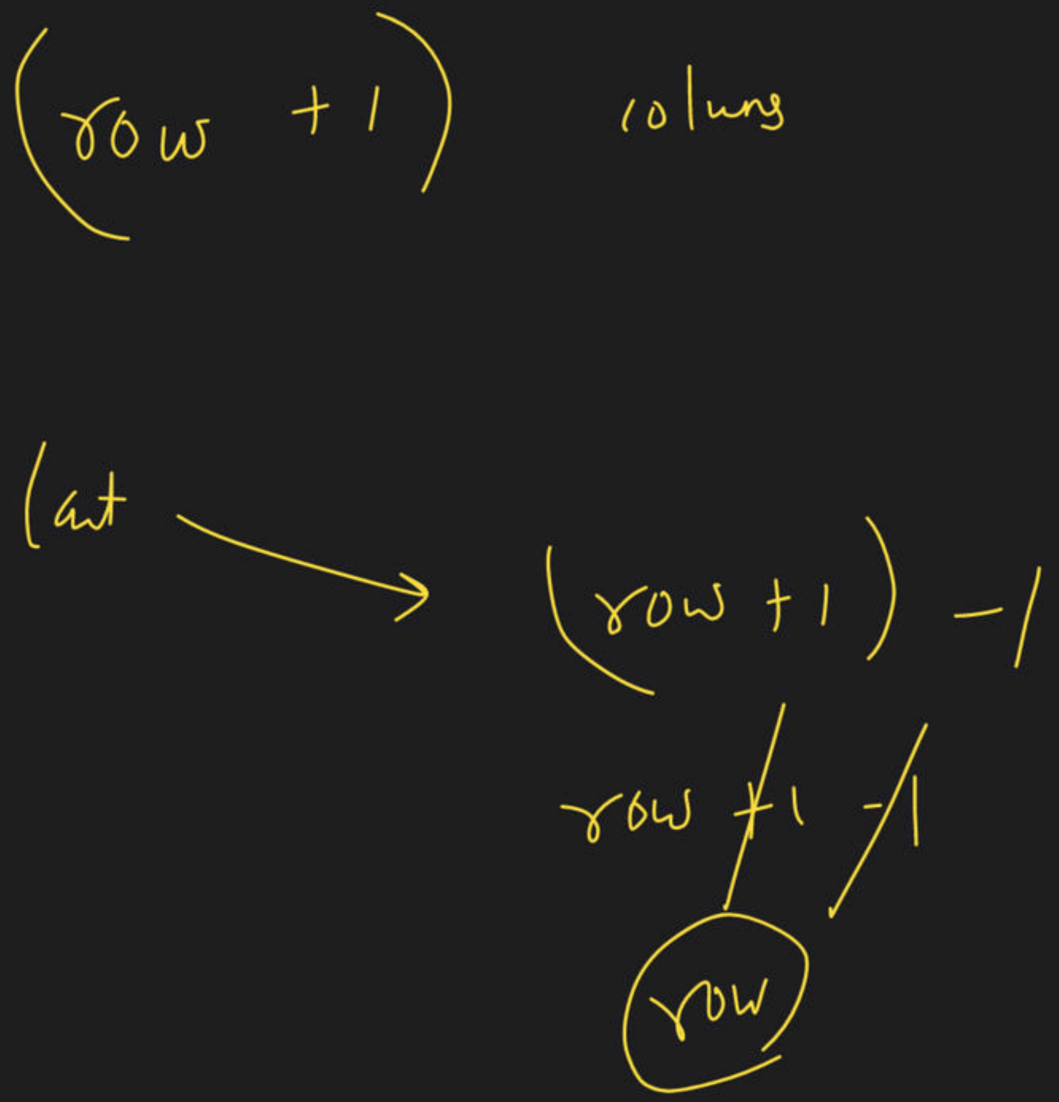
Hollow Pyramid

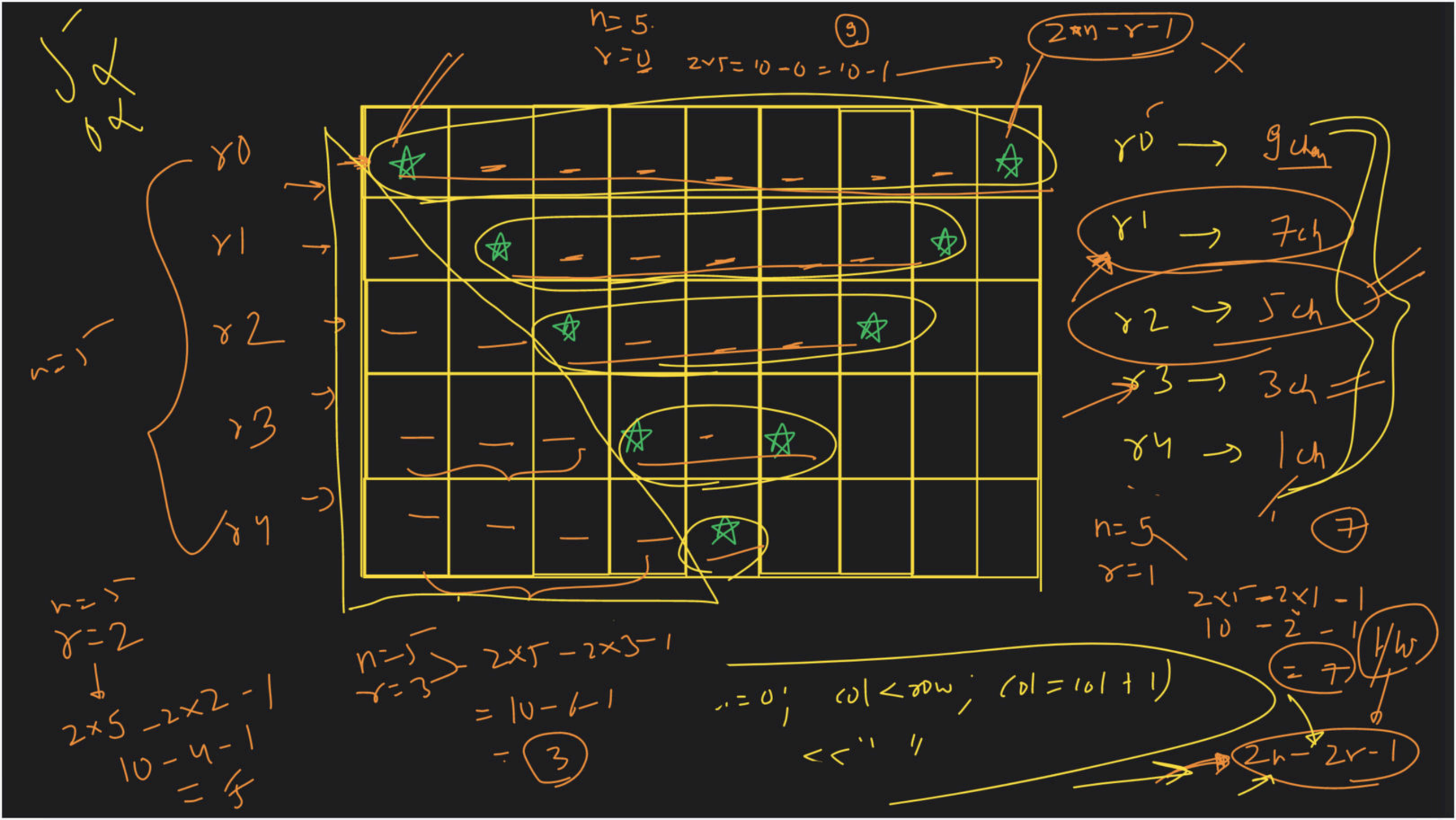
1 min

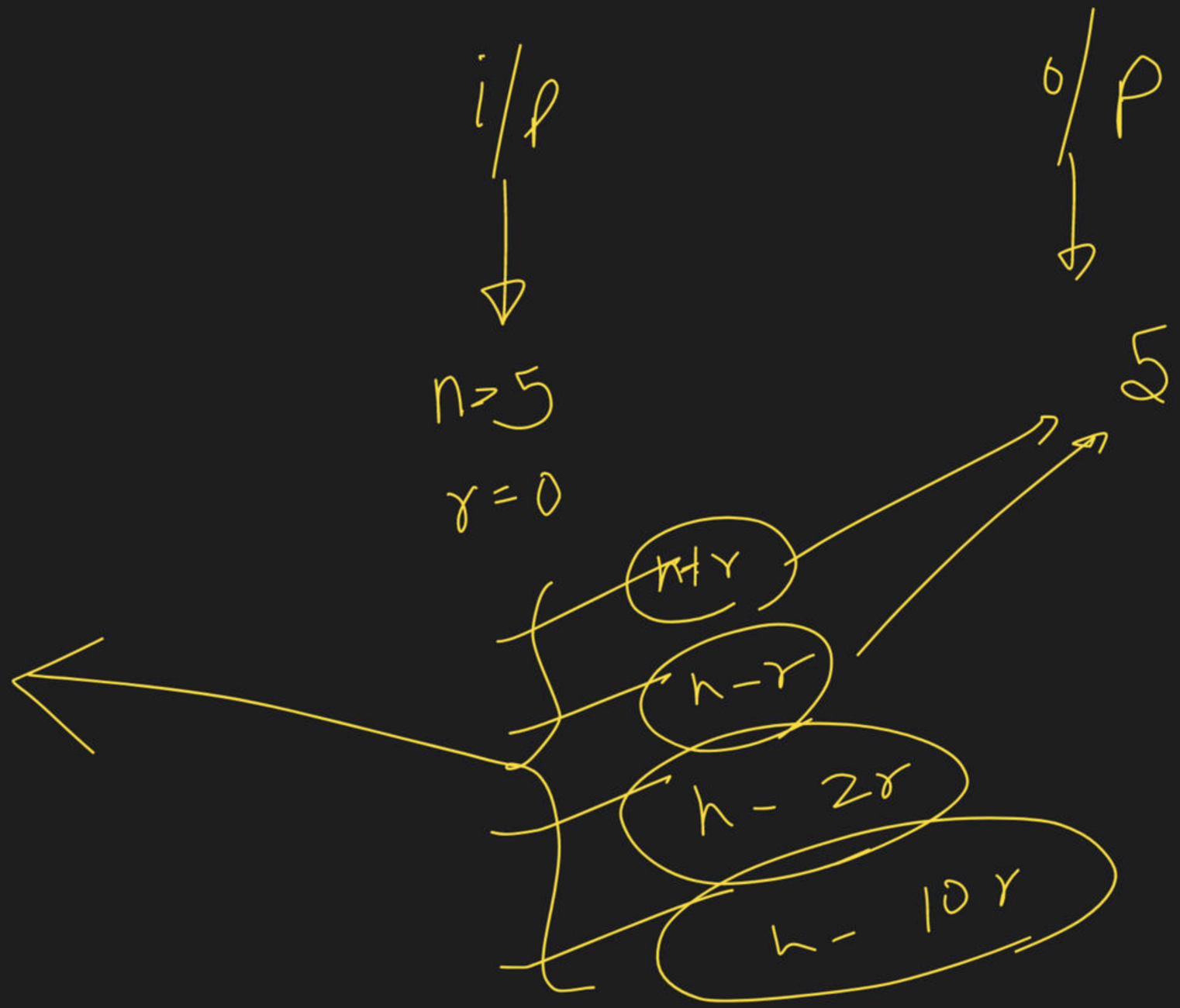


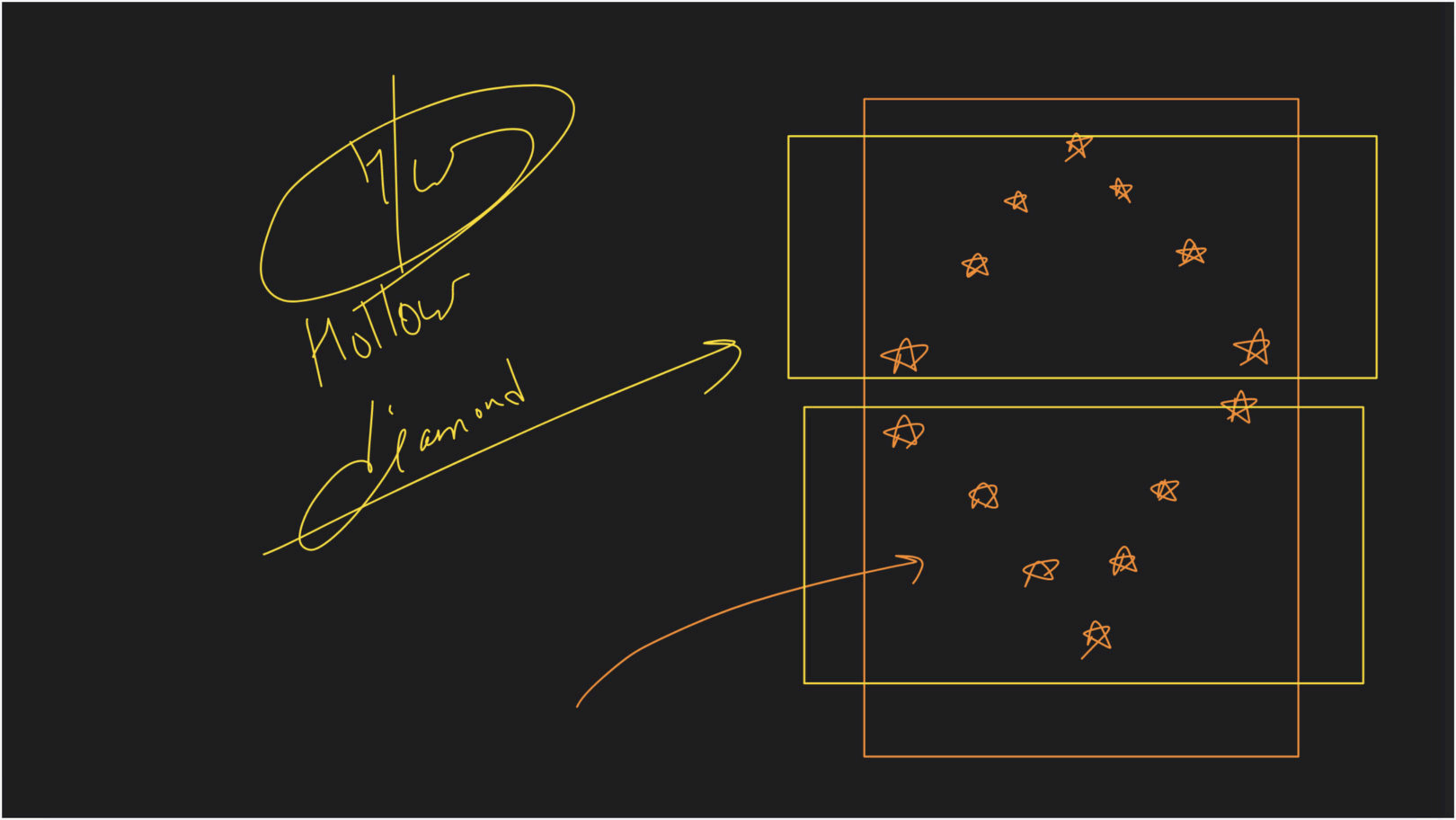

last
n
n=r
1-based numbering
t_1
t_2
t_3
t_4
t_5
t_n
t_0
t_1
t_2
t_3
t_4
t_{n-1}
0-based numbering
n

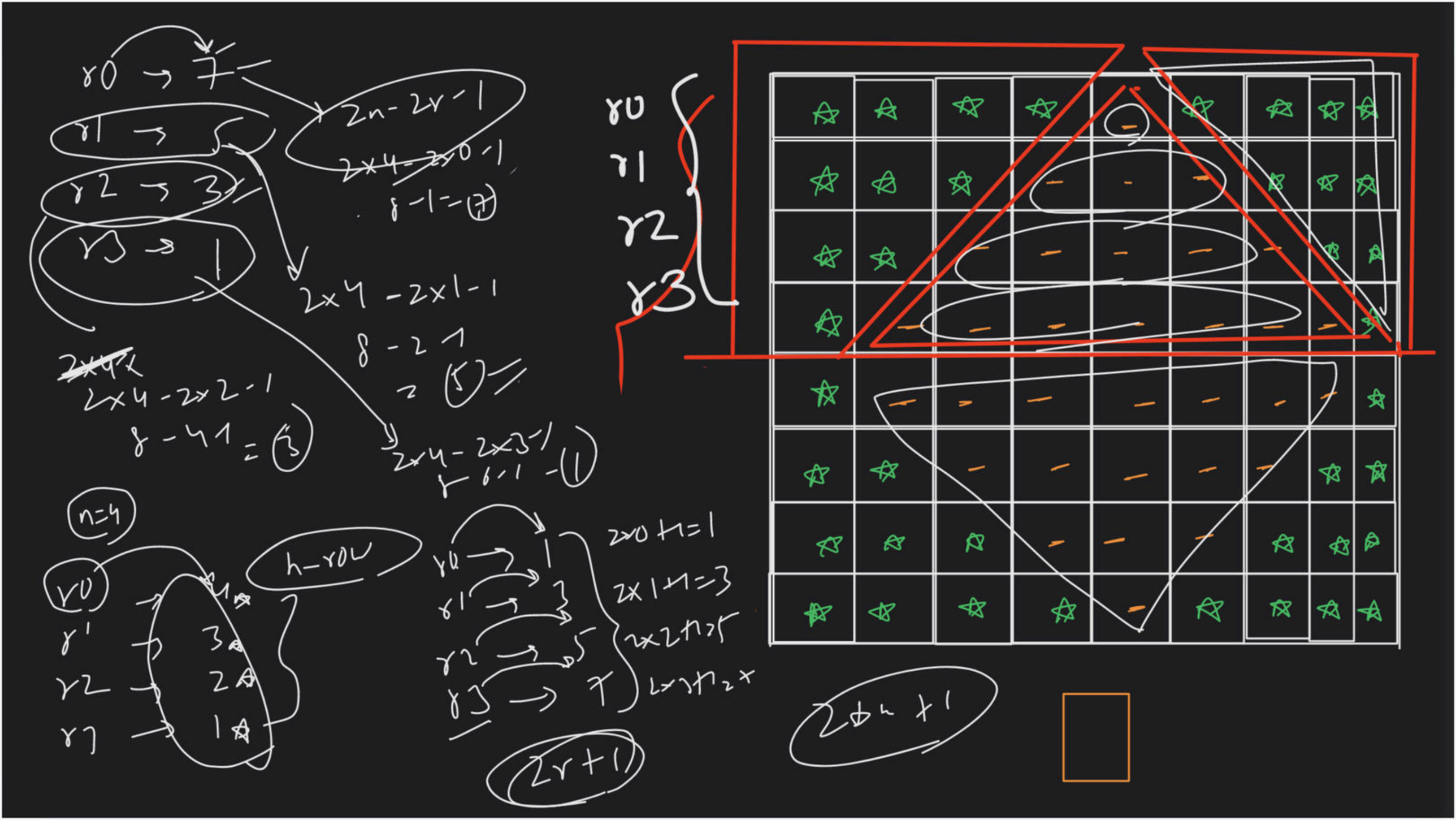

1
rows
n = 5
2
r0
r1
r2
r3
r4
col = 0
col = total col - 1
space

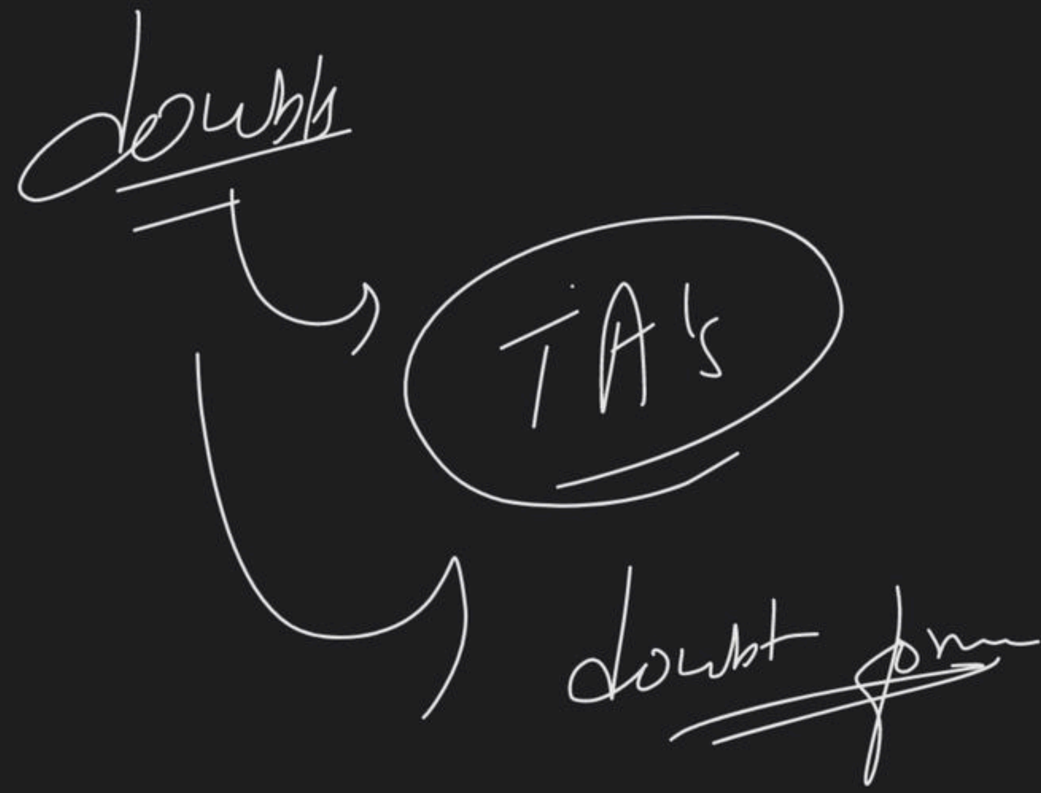

(row +1)
columns
last
(row +1) -1
row +1 -1
row

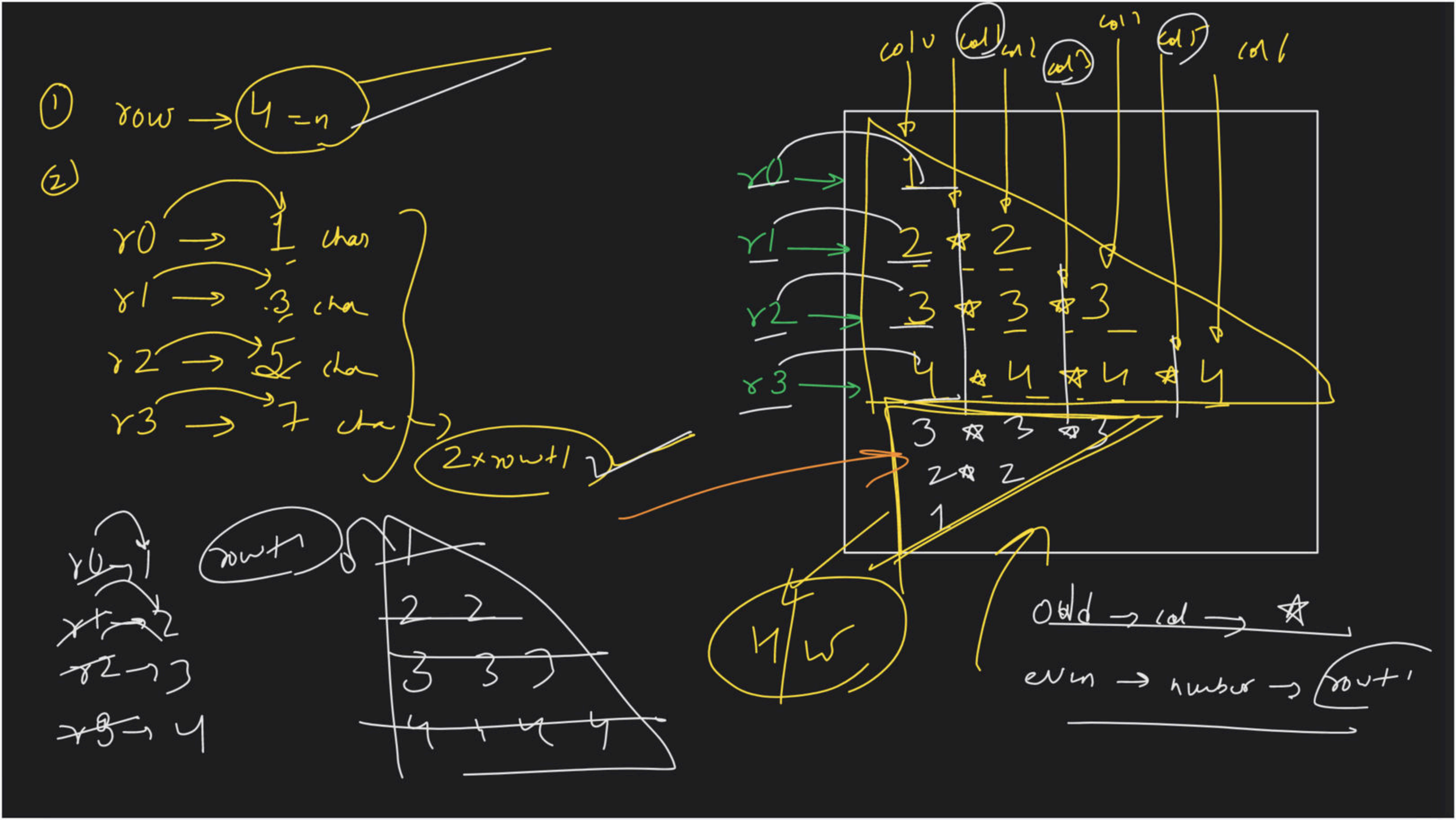

n=5
r=0
2*n-r-1
r0 → 9ch
r1 → 7ch
r2 → 5ch
r3 → 3ch
r4 → 1ch
n=5
r=1
2*n-2*r-1
n=5
r=2
2*5-2*2-1
10-4-1
= 5
n=5
r=3
2*5-2*3-1
= 10-6-1
= 3
2*n-2*r-1
10-2-1
= 7
H/W
2n-2r-1

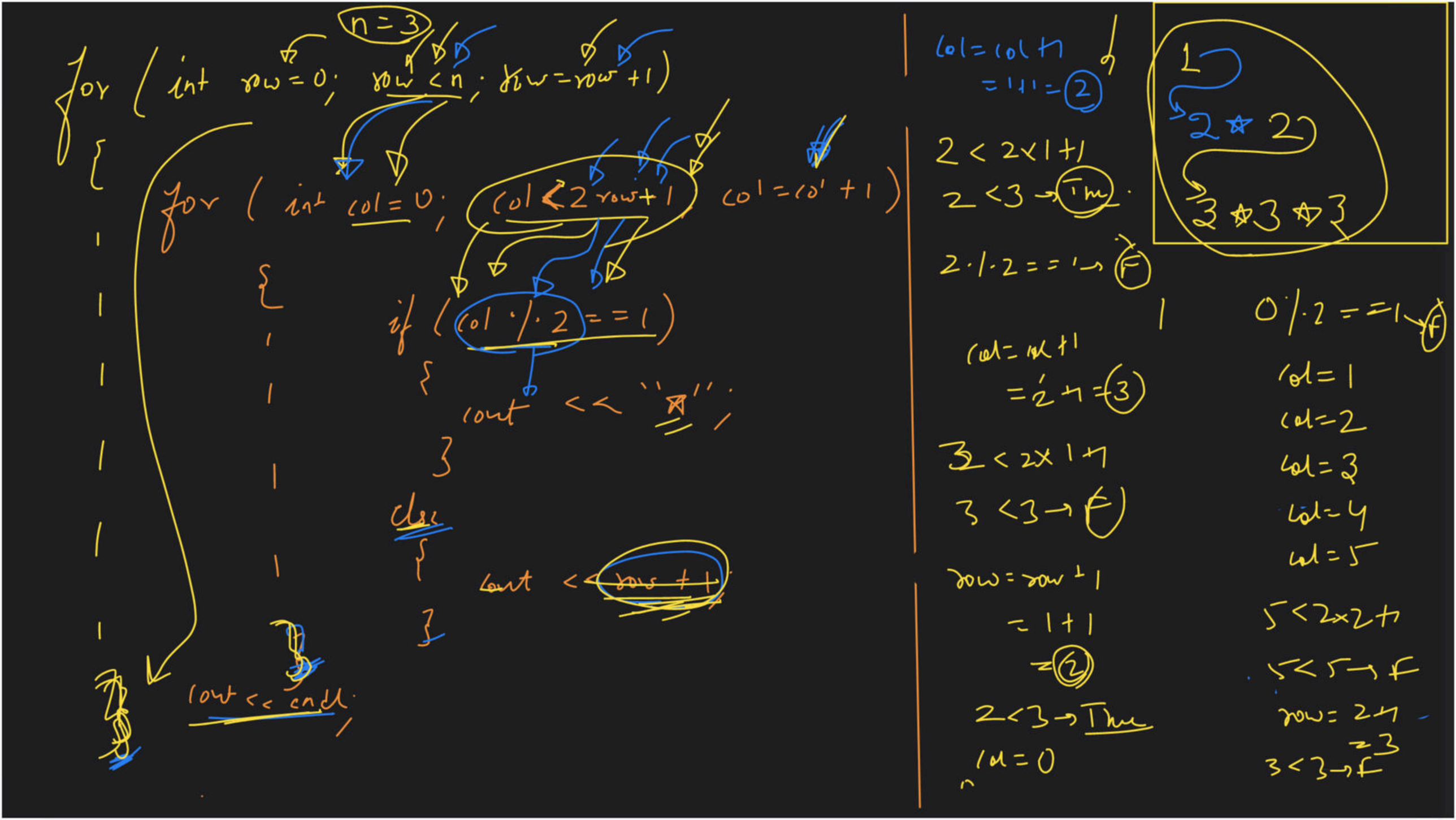

i/p
o/p
n=5
r=0
5
n-r
n-2r
n-10r

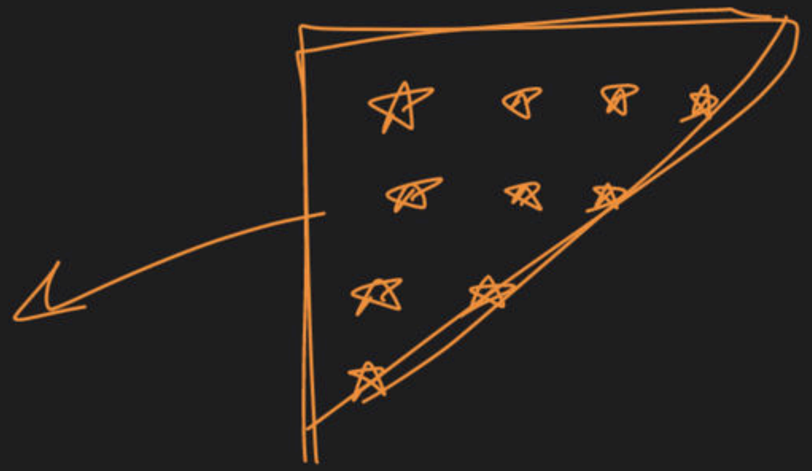

Nitrogen
Vacancy
Diamond

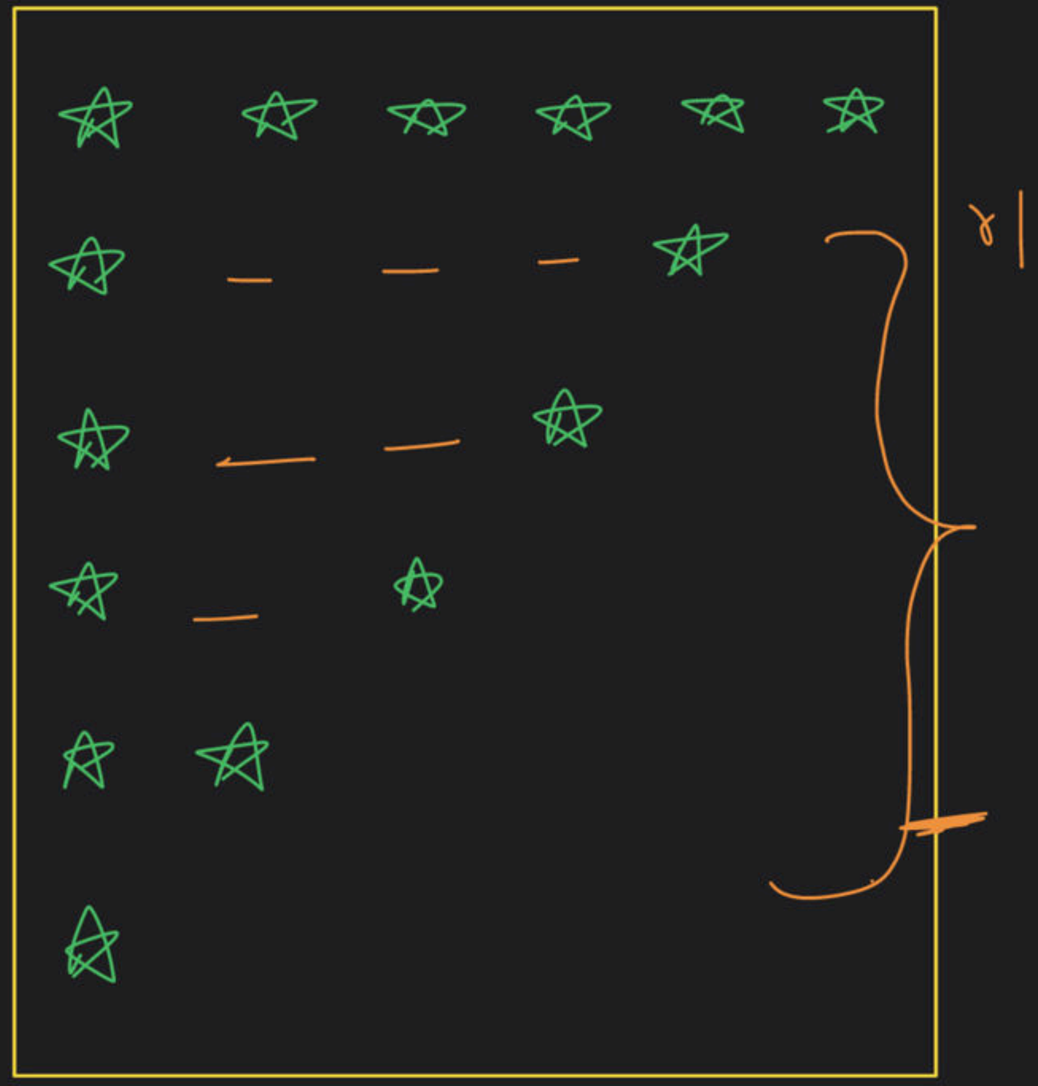

r0 → 7
r1 →
r2 → 3
r3 → 1
2n-2r-1
2×4-2×0-1
8-1=7
2×4-2×1-1
8-2=6
2×4-2×2-1
8-4=4
2×4-2×3-1
8-6=2
r0
r1
r2
r3
n=4
r0
r1
r2
r3
3
2
1
h-r0
r0 → 1
r1 →
r2 →
r3 → 7
2×0+1=1
2×1+1=3
2×2+1=5
2×3+1=7
2r+1
2h+1

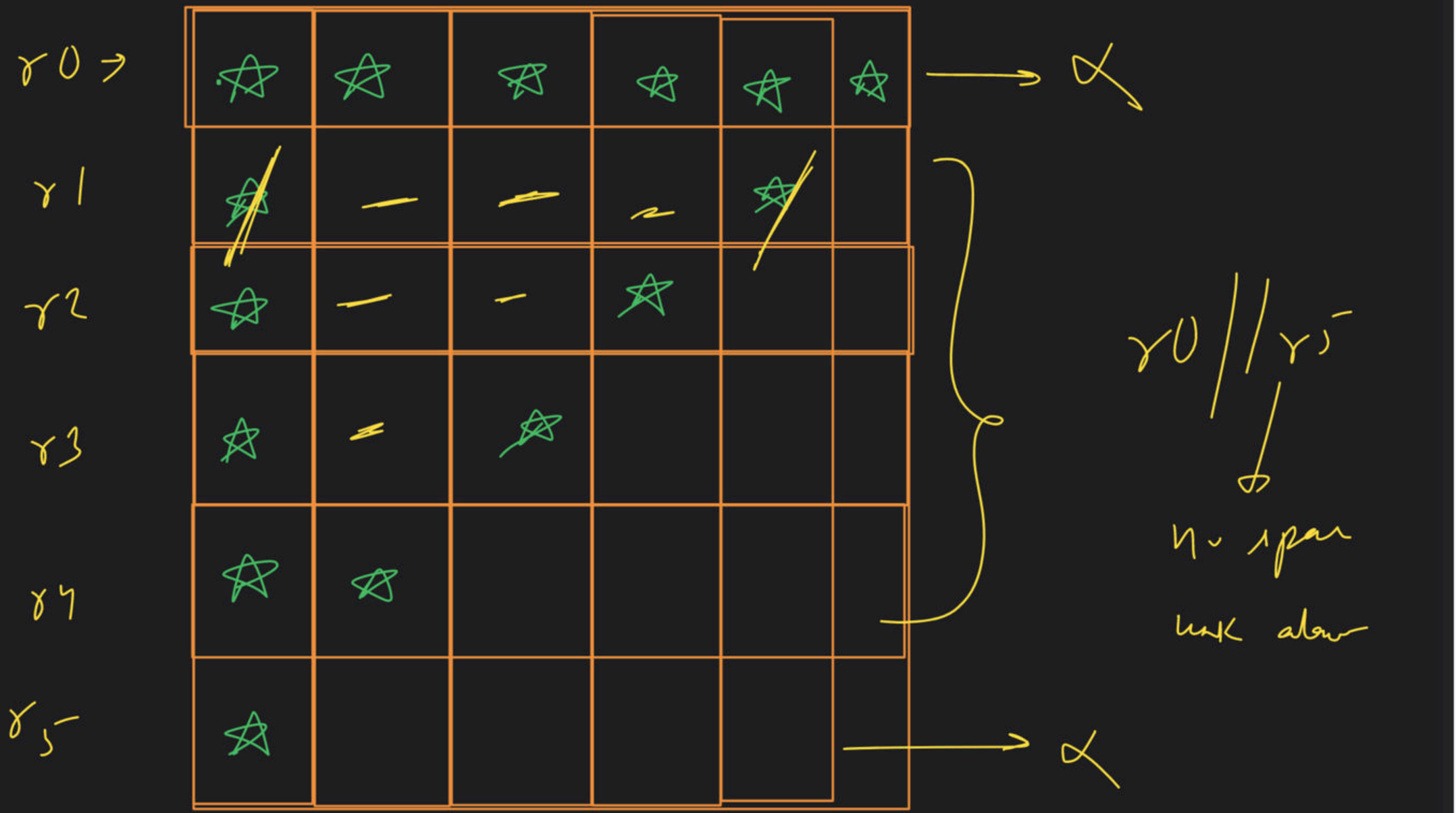

doubts
TA's
doubt form

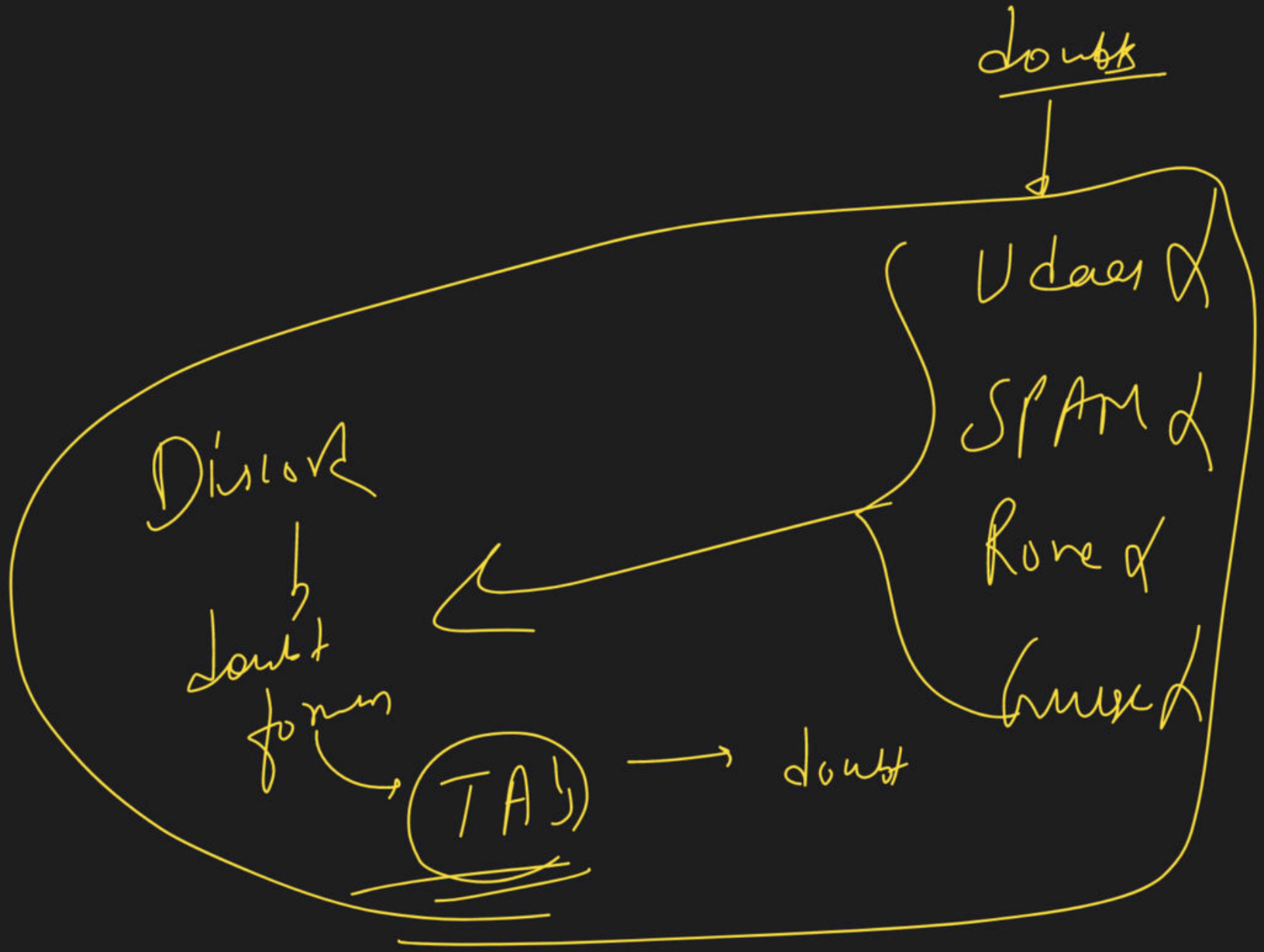

1) row → 4 = n
2)
r0 → 1 char
r1 → 3 char
r2 → 5 char
r3 → 7 char
2×row+1
row+1
col0 col1 col2 col3 col4 col5 col6
r0
r1
r2
r3
1
2 2 2
3 3 3 3
4 4 4 4
3 3 3
2 2
1
M/W
odd → col → ☆
even → number → row+1


n=3
for (int row=0; row<n; row=row+1)
{
for (int col=0; col<2*row+1; col=col+1)
{
if ((col+1)%2==1)
{
cout << "*";
}
else
{
cout << row+1;
}
}
cout << endl;
col=col+1
=1+1=2
2<2x1+1
2<3 → True
2+1-2==1 → F
col=col+1
=2+1=3
3<2x1+1
3<3 → F
row=row+1
=1+1
=2
2<3 → True
col=0
1
2 * 2
3 * 3 * 3
0%2==1 → F
col=1
col=2
col=3
col=4
col=5
5<2x2+1
5<5 → F
row=2+1
=3
3<3 → F






r0 →
r1
r2
r3
r4
r5
r0 // r5
No span
link allow

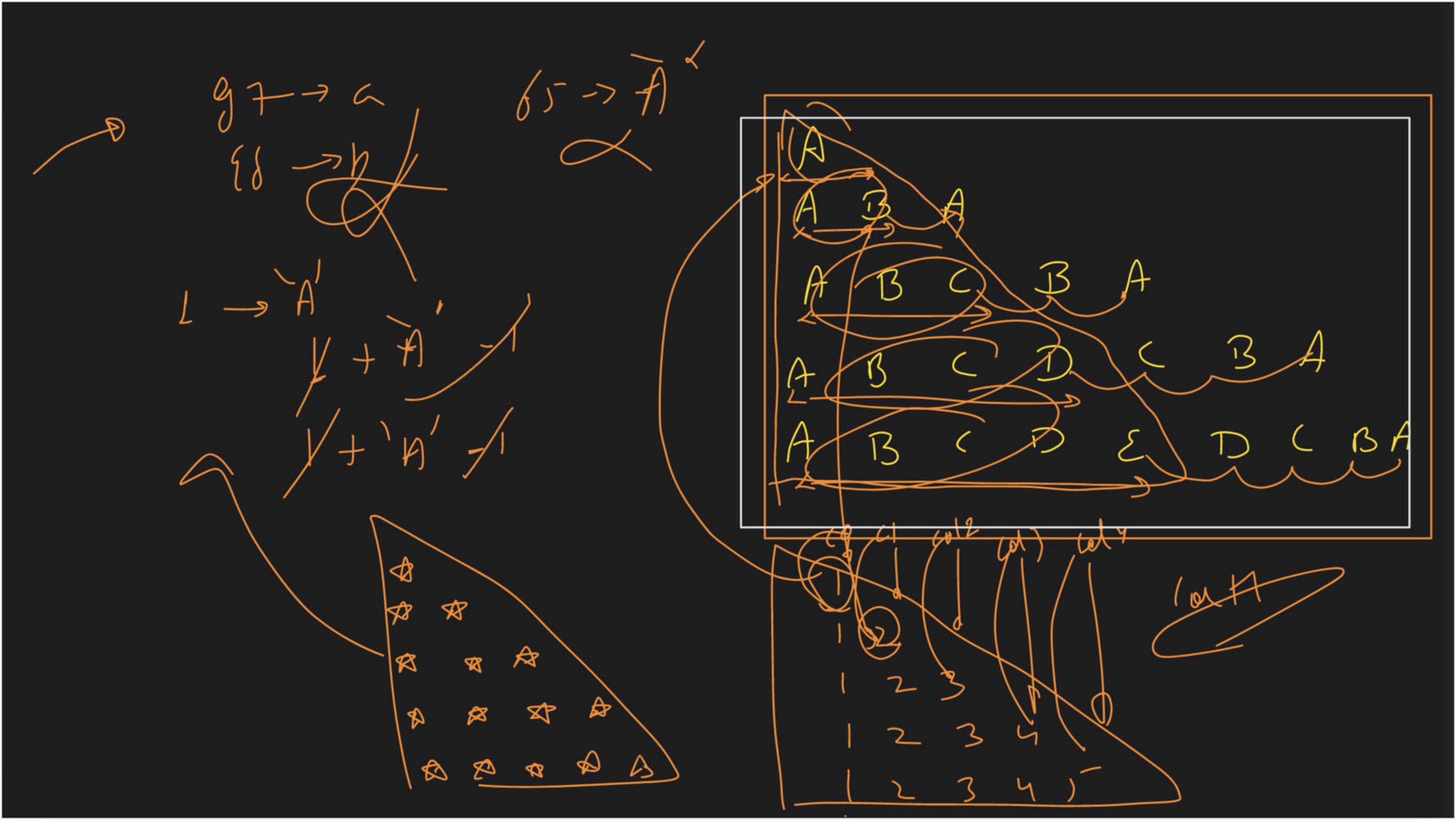

doubts
Udaan
SPAM
Rules
Discord
doubt forum
TA
doubt

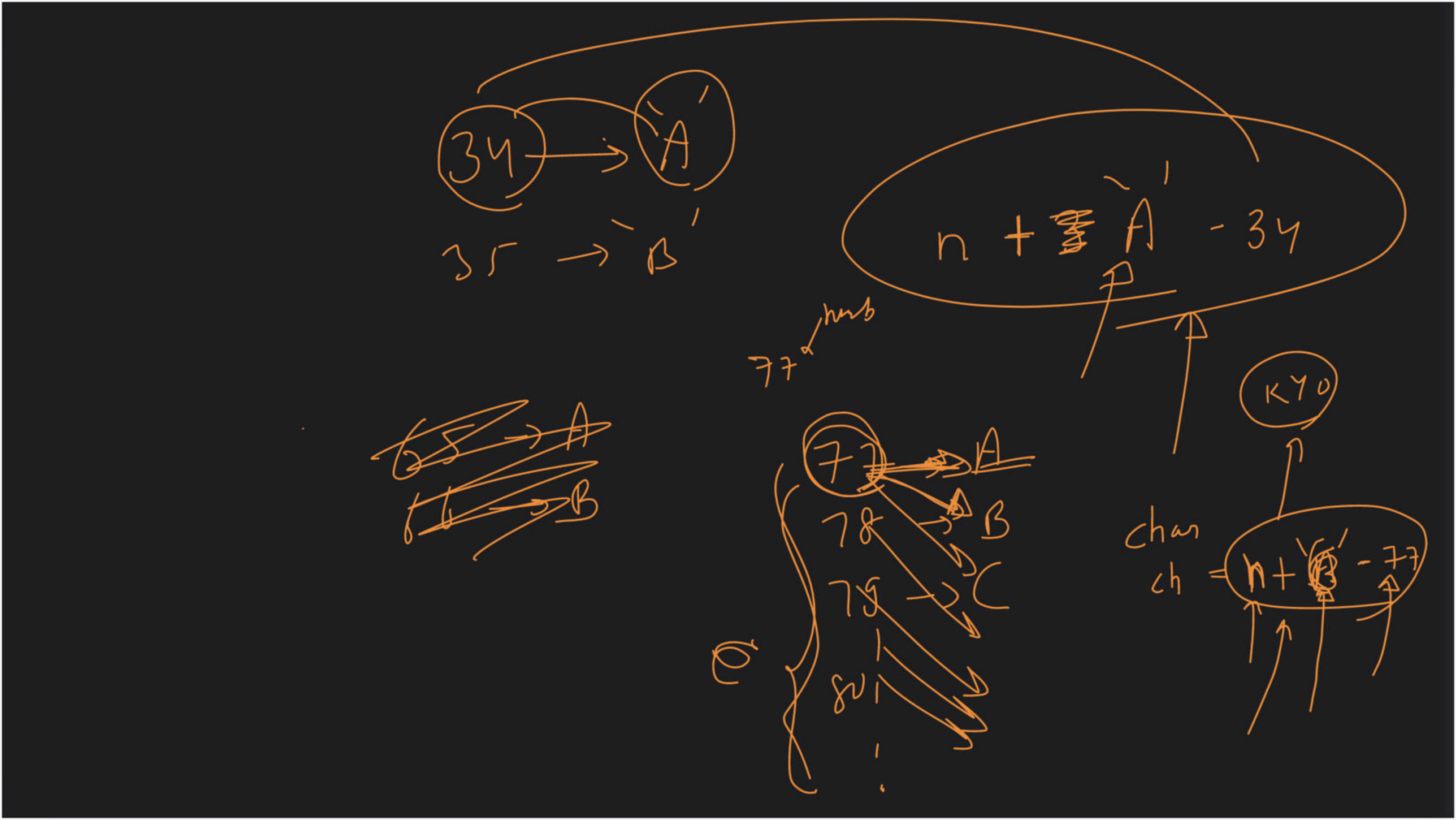
4/45

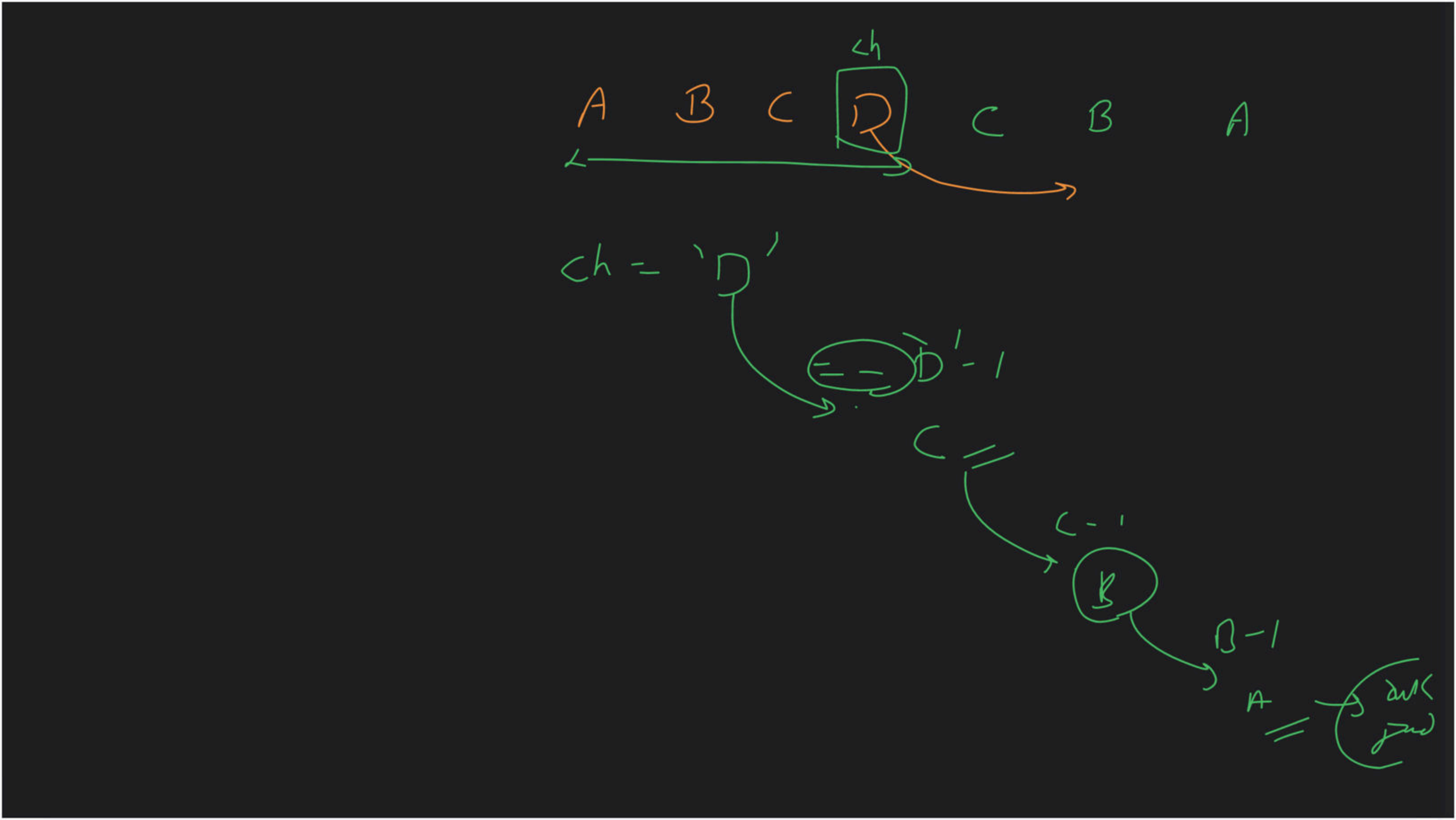
20 min

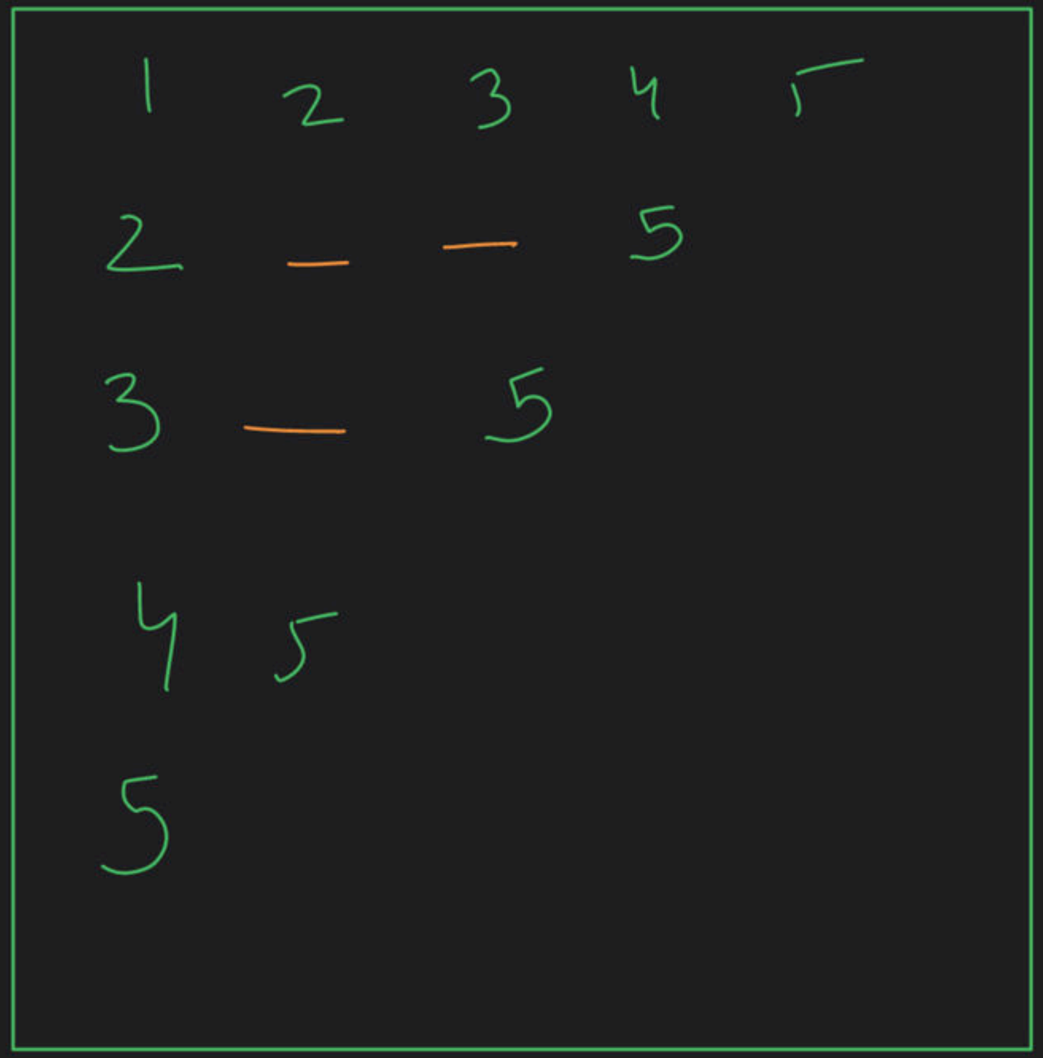
Error

```
1
1 _ 2
1 _ _ 3
1 _ _ _ 4
1 2 3 4 5
```


A
A B A
A B C B A
A B C D C B A
A B C D E D C B A


34
A'
35
B'
n+多A'-34
77
KYO
char
ch
n+多B'-77
78
79
80

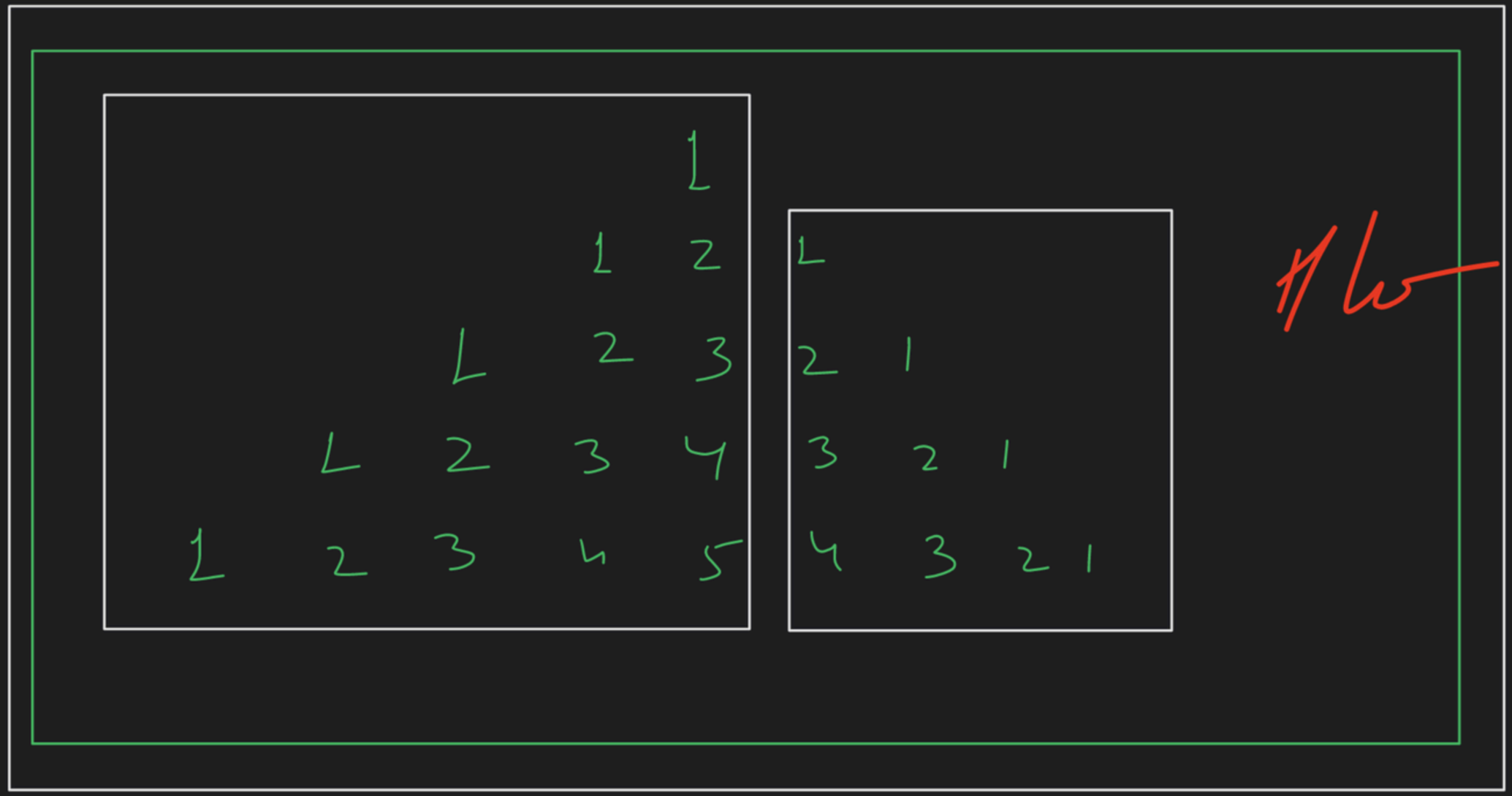

ch
A B C D C B A
ch = 'D'
D'-1
C
C-1
B
B-1
A

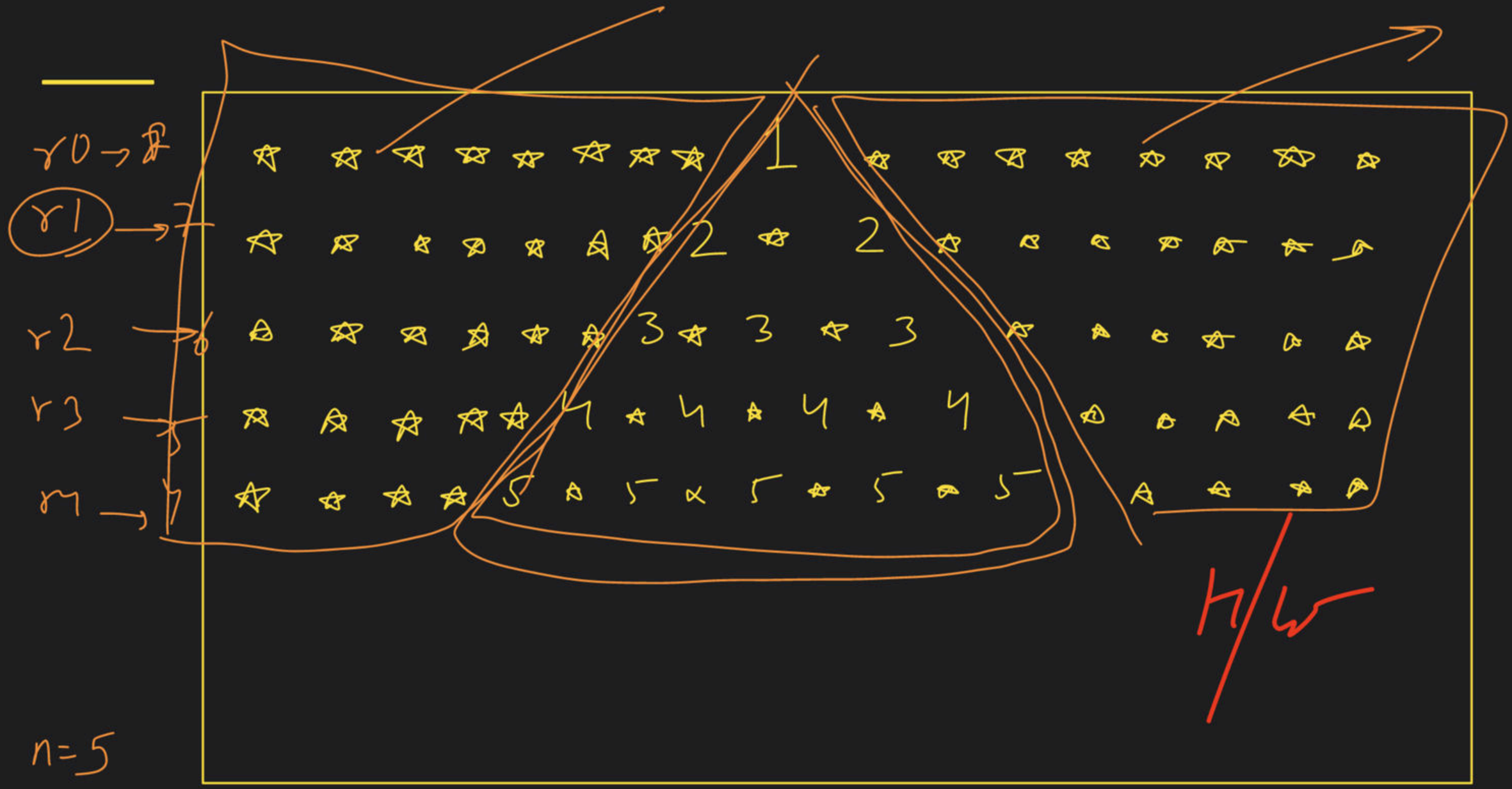


Numeric hollow inverted half Pyramid

4 5

Numeric Palindrome Equilateral Pyramid





$n=5$

$r=0$

$2\times1-0-2$

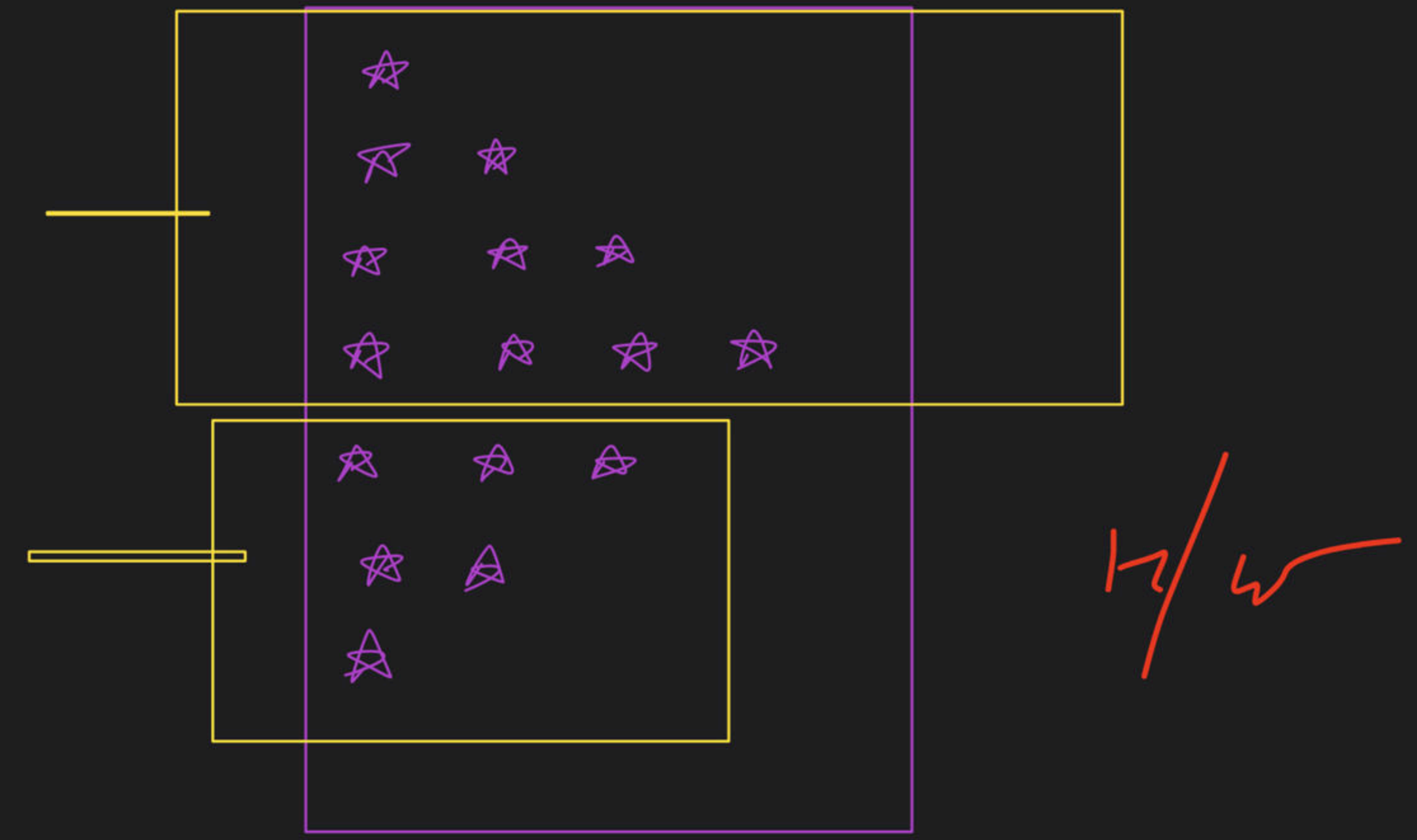
$2n-r-2$

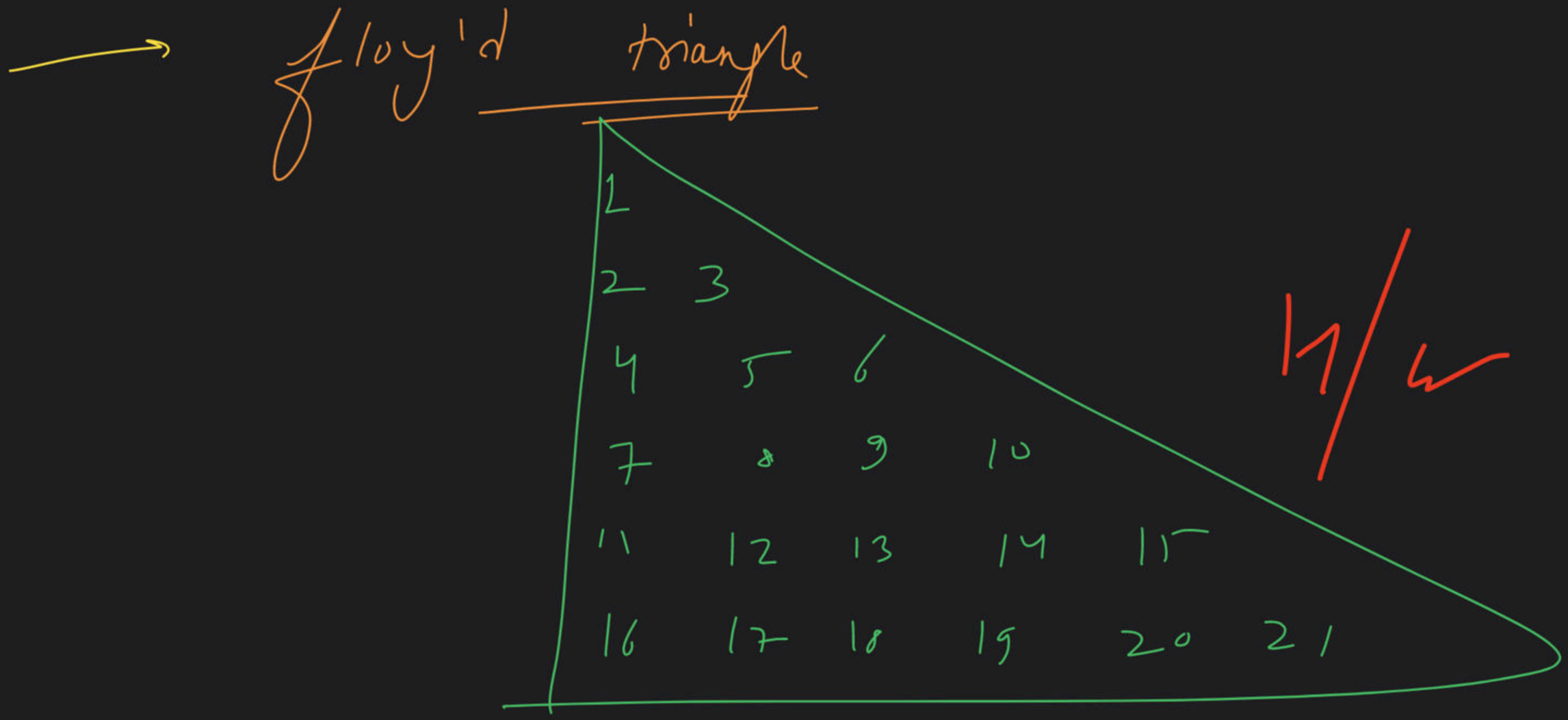
$0/\rho \to \delta$

$2\times 5-1-2$

$16-3\cdot 7$

Solid Half Diamond




floyd triangle
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
16 17 18 19 20 21
n/4

Butterfly Pattern

r0 → 6 — 2×4−2−2

r1 → 4 — 4

r2 → 2 — 2×4−4−2

r3 → 0 — 2×4−6−2

n = 4 → 6

r = 0

2n − 2r − 2

8 − 0 − 2 = 6


Doubts
Discord
TA's team
doubts
Possibly
Friday
Sat / Sun
1-3 pm
9