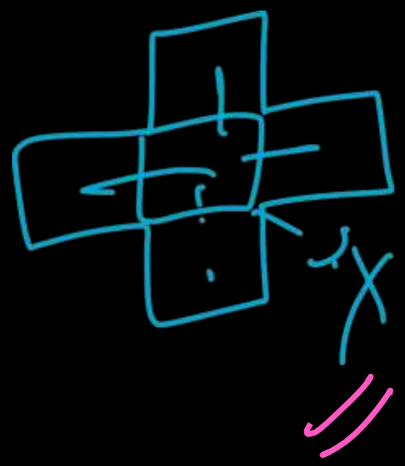
Graphs 03
Problem on Bids

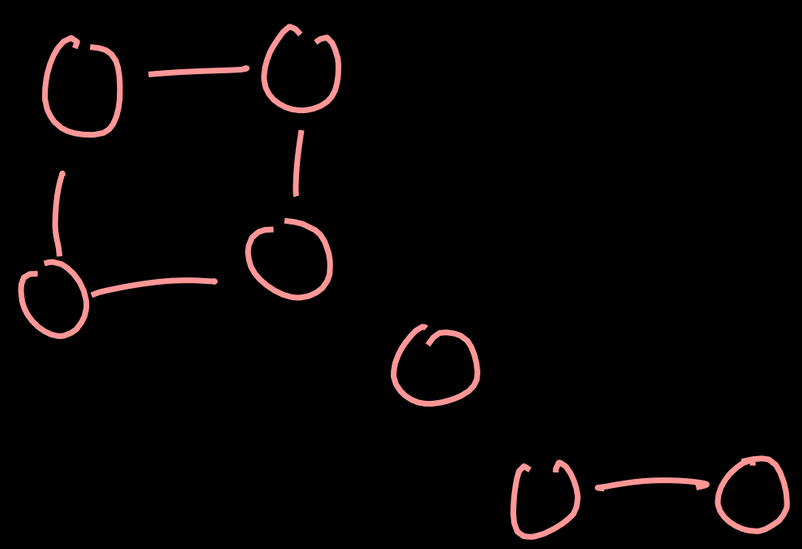


1 + 1 = 1

1 ✓	1 ✓	0	0	0
1 ✓	1 ✓	0	0	0
0	0	1 ✓	0	0
0	0	0	1 ✓	1 ✓

3 island

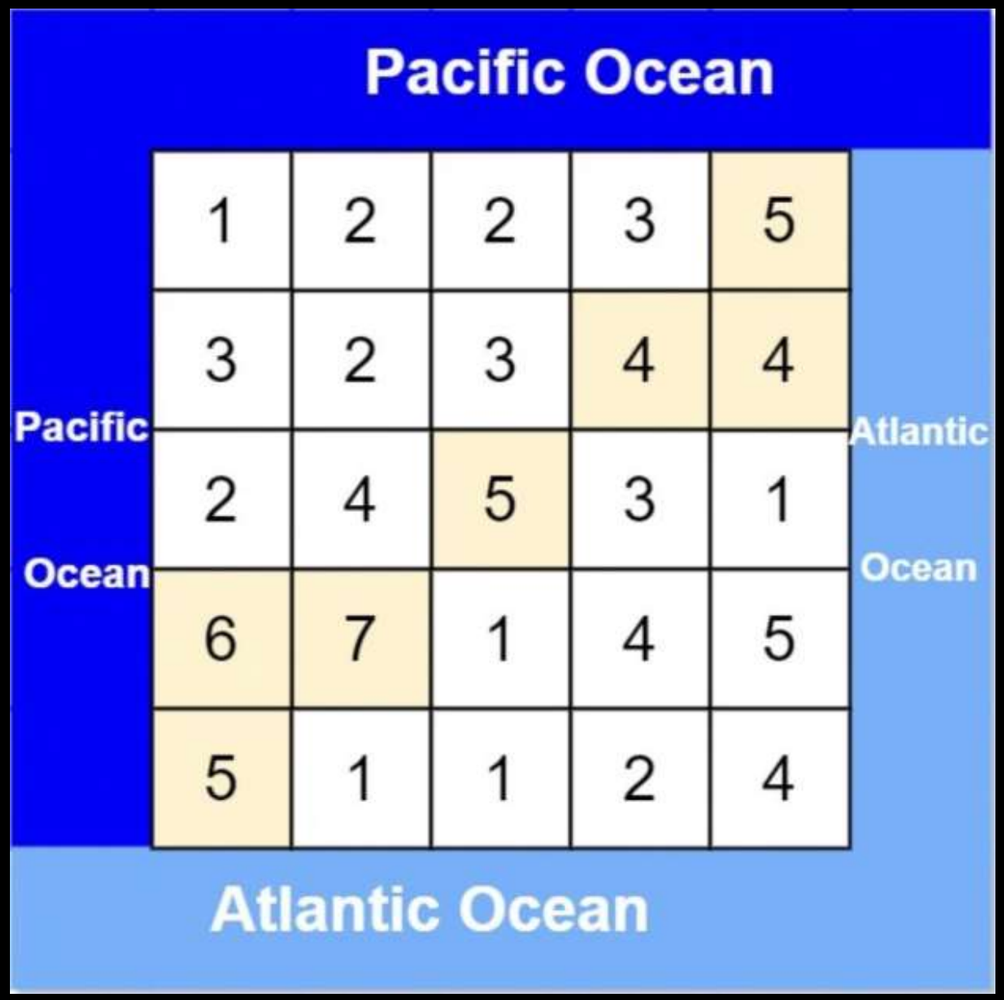
O (m · n)



BFS
DFS

go to every cell of the grid.
Skip the 0 cell., only consider 1 valued cell

JOIN THE DARKSIDE



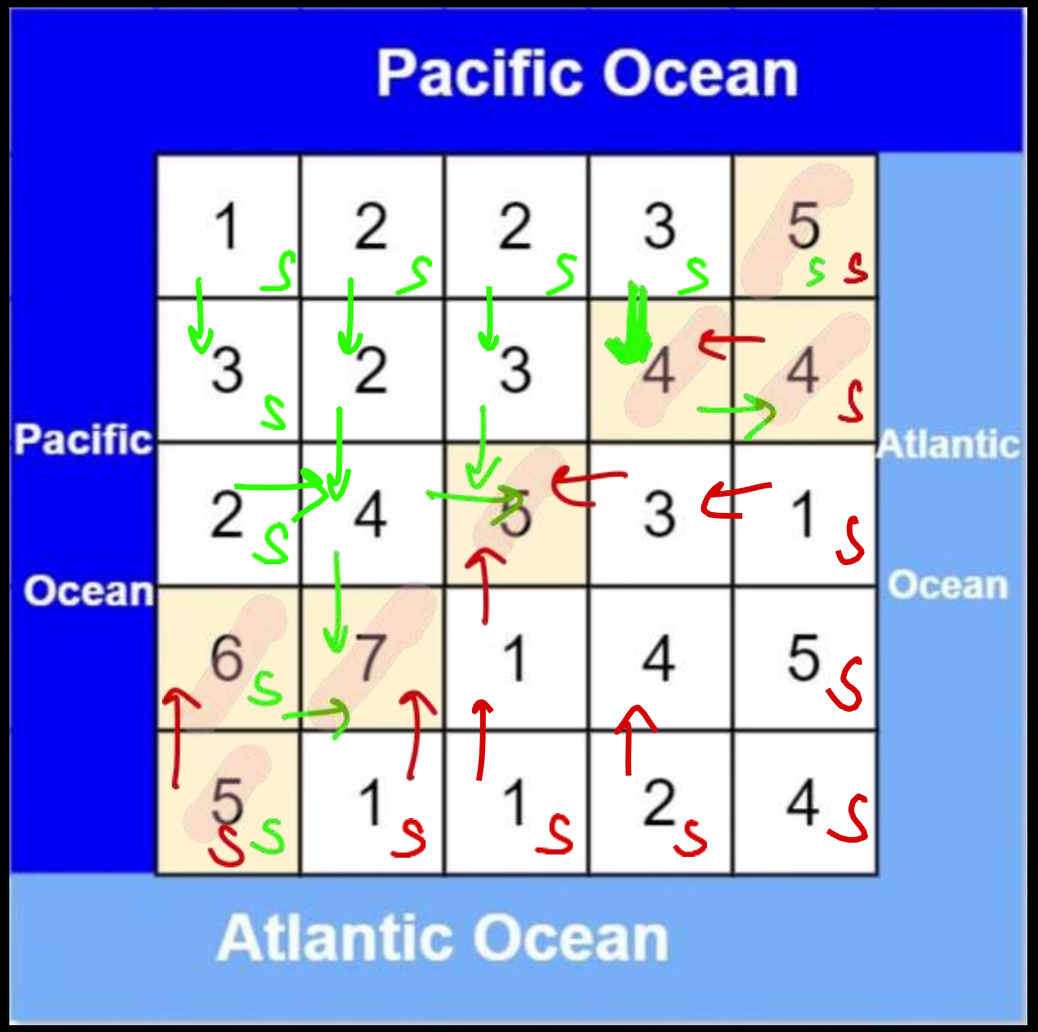
$400 \times 4 \times 20$

1600×20

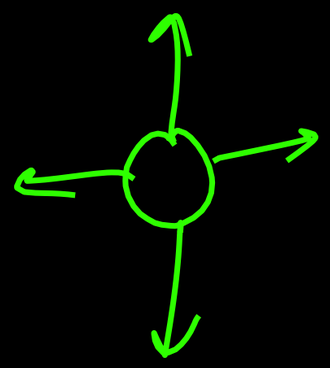
$32000 \approx 3 \times 10^4$

Matrix BFS-DFS , multi source BFS DFS

JOIN THE DARKSIDE



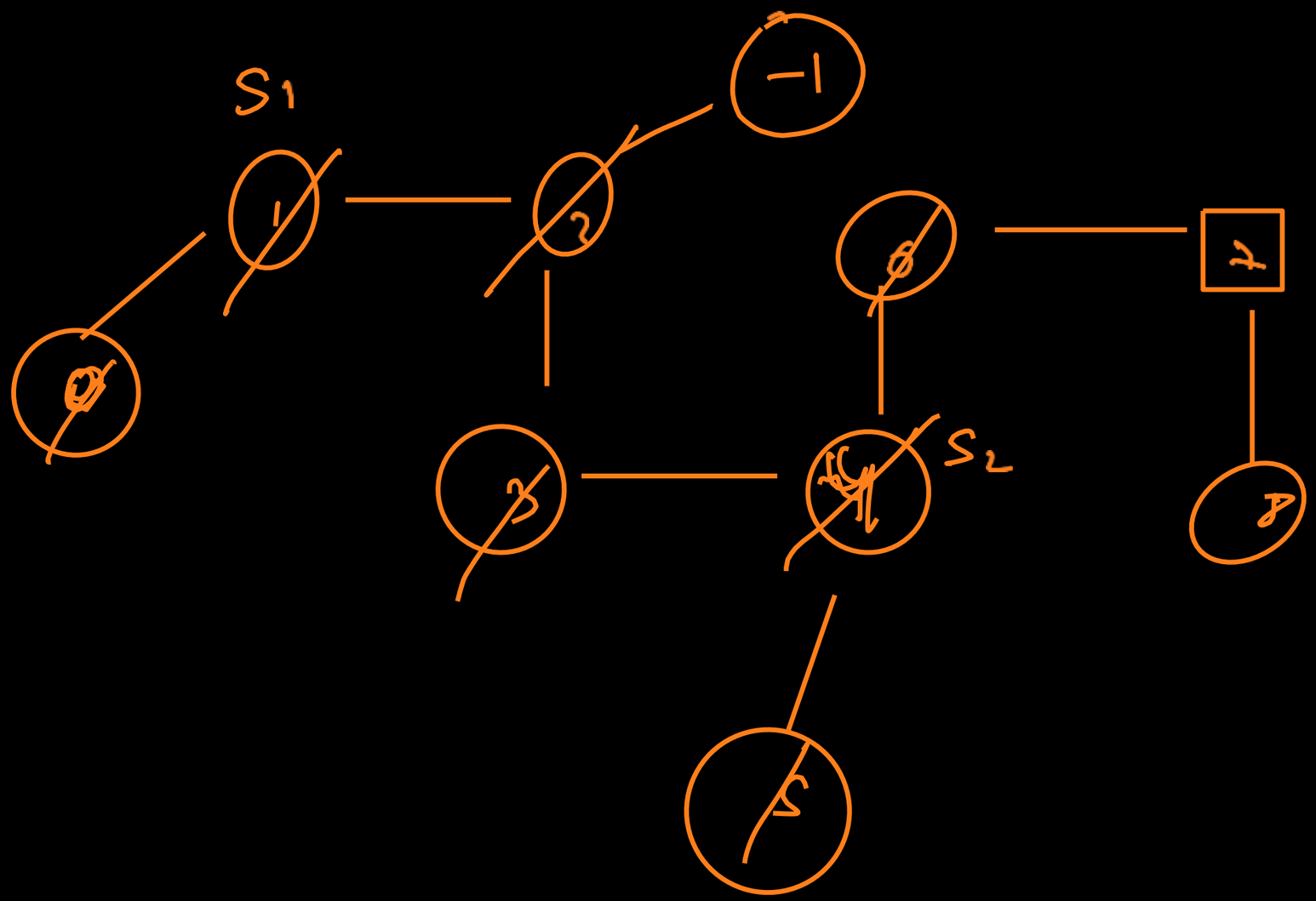
graph algorithms



$M N + M N$

$O(MN)$

JOIN THE DARKSIDE



		2	10	6	4	5	

JOIN THE DARKSIDE

35

5 - intro

5 - problem → understey

5 → thinking

5 → explain

15 → code

10

5 → problem 2

5 → then explain

10 → code

→ 5 → exit

45

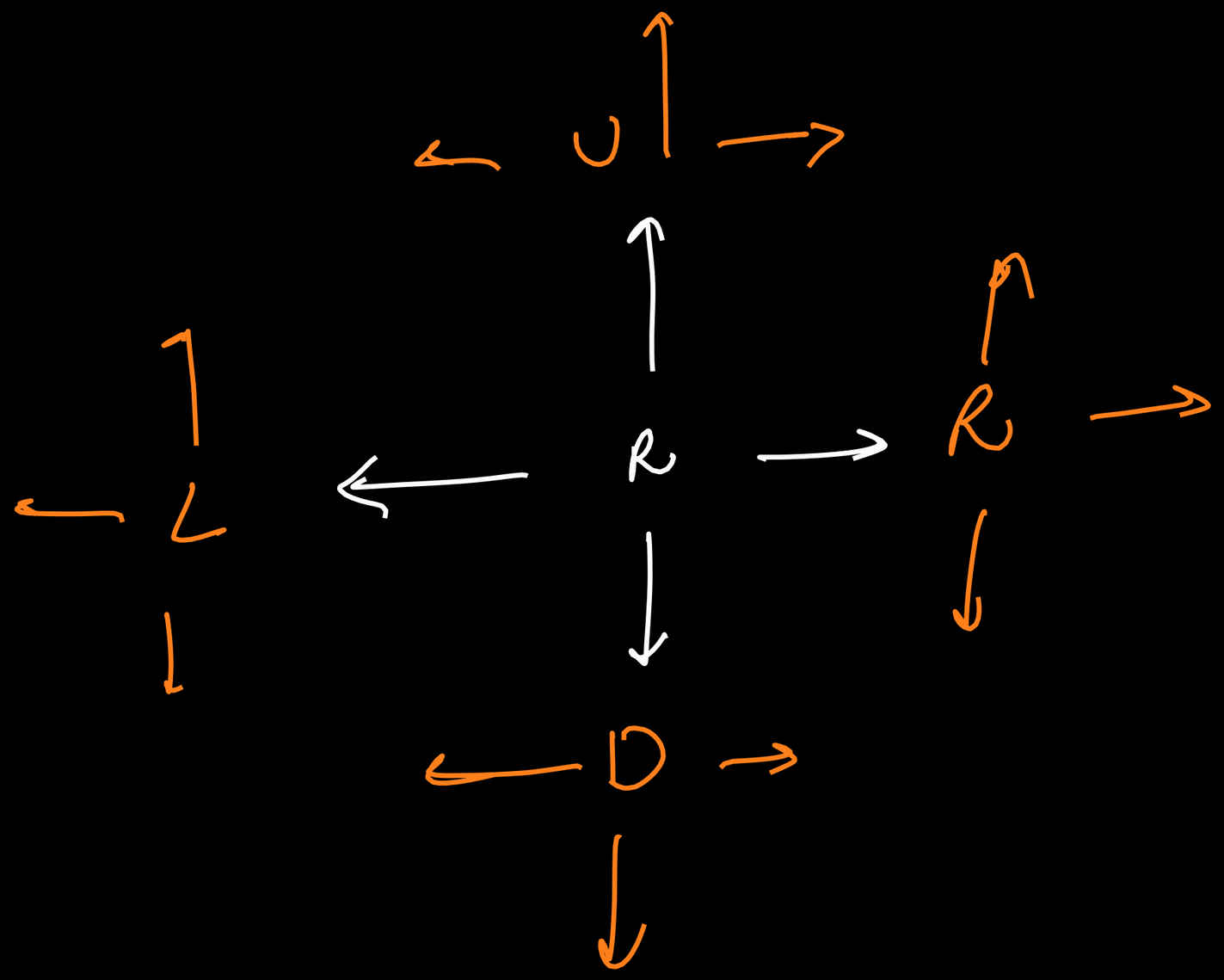
1 hr

JOIN THE DARKSIDE

1 min 1 min 1 min 1 ms

R	R	R
0	0	0
0	0	F

JOIN THE DARKSIDE



BFS

JOIN THE DARKSIDE

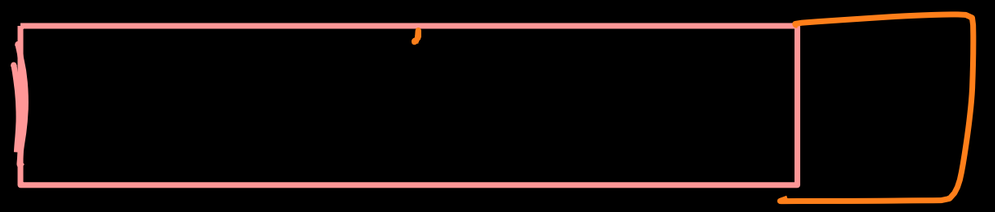
min mute

1 min

	0	1	2	3
0	R	RF	0	0
1	0	RF	FR	
2	0	R	R	0
3	0	0	0	0

multisource BFS

queue.push



mins = 0 1 2

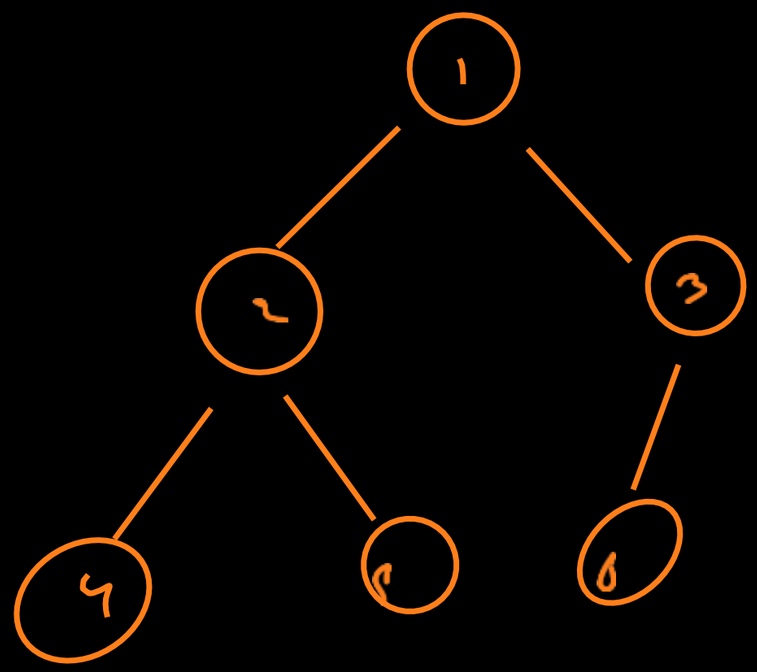
min-1

(0,0) (2,1) (2,2) (-1,-1) (0,1) (1,1)

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

{-1,-1}

JOIN THE DARKSIDE



1 null

JOIN THE DARKSIDE

Rent → 30,000 → 15,000

Maintainence → 3400 → 1700

Maid → 3500 →

Cook → 5500 →

Electricity → 1450 →

~~[illegible]~~ → Transpalchin → 3k - 4k

gym → 10,000

outside → 10k

Subscription → reffue, amazon, cloud

2K

cut down

JOIN THE DARKSIDE

2

fixed expense

→ Rent
→ Maintainence
↳ cook
↳ maid
↳ groceries

investment

→ google stocks
→ stocks
→ M.F
→ liquid
→ FD

variable expense

→ gym
→ movie
→ trips
→ shopping
→ flights to home

one time expense

→ Moving to a new city
→ 1 time setup cost

JOIN THE DARKSIDE

→ electricity

(major)

→ utensils

→ bike/car (optional)

→ study table

fixed

Rent + Main → 16 - 18 k

Cook → 2k

Maid → 1 k

groceries → 4k

electricity → 1 k

26 k

variable

→ gym → 10 k

→ trips → 10 - 20 k (Domestic)

→ 80 - 90k (Intn)

→ shopping → 10k

→ flights → 10k per trip

JOIN THE DARKSIDE

one Time

→ Setup cost → 15-20 k

→ study table → 10 k

JOIN THE DARKSIDE

PW SKILLS

THANK YOU