



COORDINATE COMPRESSION

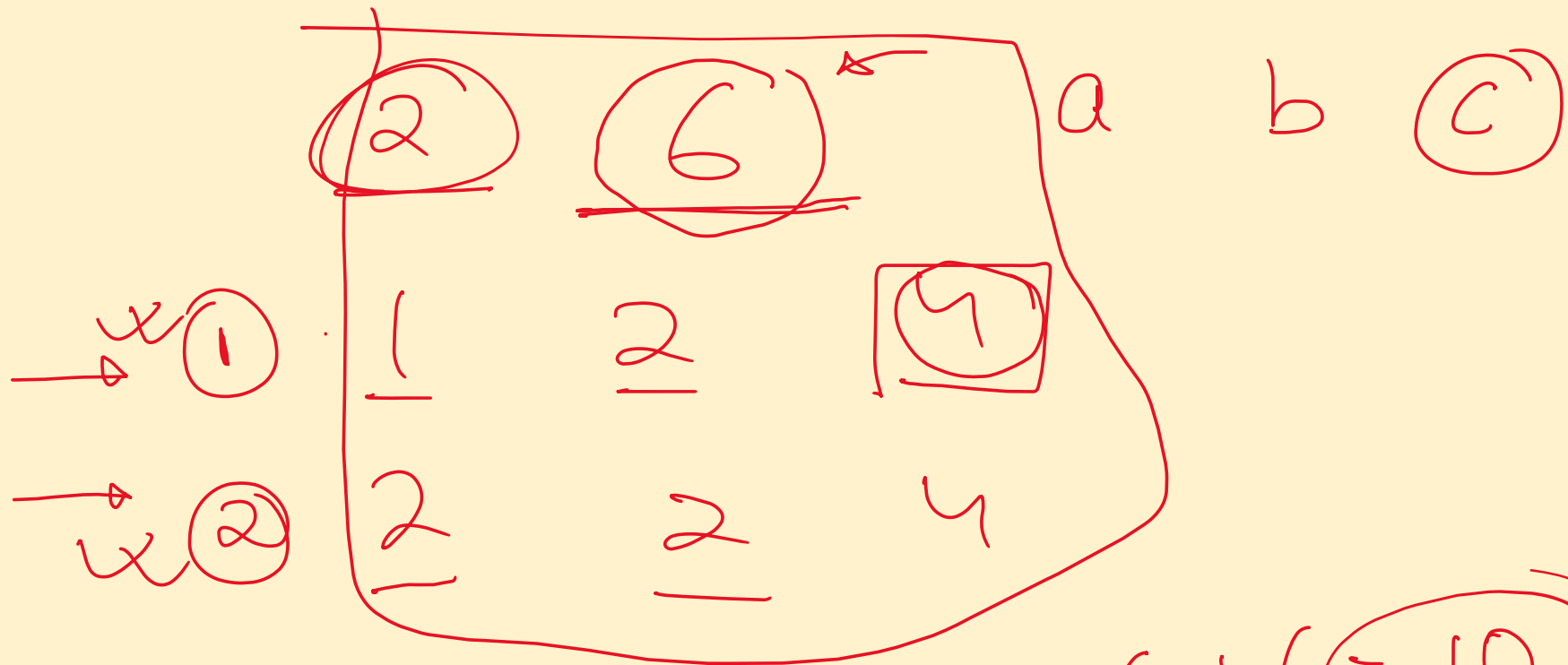
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What is Coordinate Compression ???

Why COORDINATE COMPRESSION ??



SNUKE PRIME



$$4 + 6 = 10$$



2 6

① 1 2 4

② 2 2 4

— — —

~~4~~
④ / 6
4 + 6 = 10

6 / (4 + 4)
= 10

Assuming $\underline{a_i}, \underline{b_i} \leq \underline{1e6}$

C → particular days — you can get all services for that day.

a_i	a_j			b_i	b_j
c_i	c_i	c_i	c_i	c_i	c_i
	c_j	c_j	c_j	c_j	c_j

$$\rightarrow \underline{1}$$

$$\rightarrow \underline{3}$$

day 1

$$6$$

$$\underline{\hspace{1cm}}$$

$$6$$

$$\boxed{38} = \underline{6}$$

$$\underline{5}$$

$$\underline{4}$$

day 2

$$6$$

$$\underline{\hspace{1cm}}$$

$$6$$

$$\underline{6}$$

$$\underline{6}$$

$$\underline{10}$$

day 3

$$6$$

$$10$$

$$\underline{\hspace{1cm}}$$

$$16$$

$$\underline{10}$$

subscription x

$$\otimes \cdot C = 10$$

day 4

$$6$$

$$10$$

$$\underline{\hspace{1cm}}$$

$$16$$

$$\underline{10}$$

day 5

$$6$$

$$\underline{\hspace{1cm}}$$

$$6$$

$$\underline{6}$$

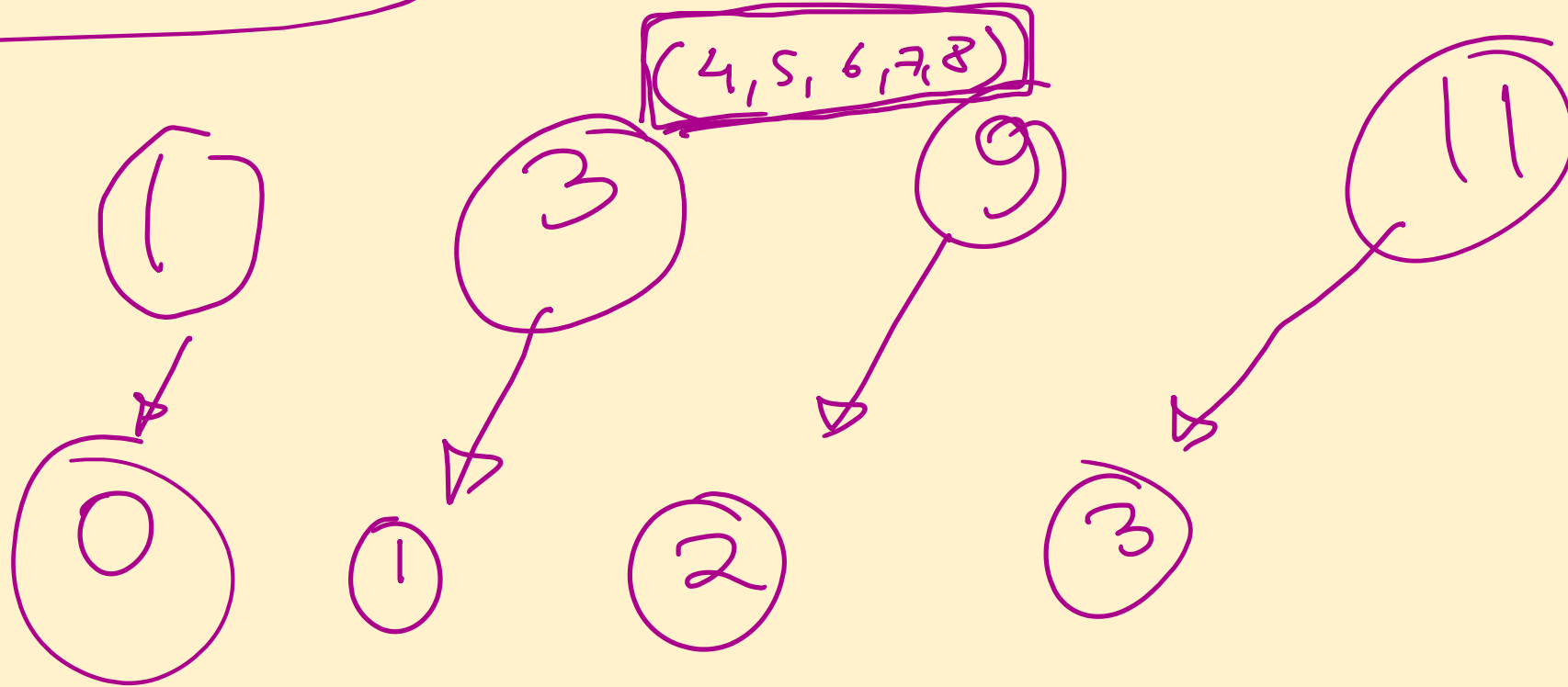
	1	5	<u>6</u>			
	3	4	<u>10</u>			
↓					↓	
1	2	<u>3</u>	<u>4</u>	5	6	
+6		10		-10	-6	
↘	↘	↑	↘	↘	↑	
→	<u>6</u>	<u>6</u>	<u>16</u>	<u>16</u>	<u>6</u>	<u>0</u>

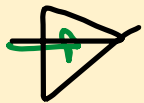
$\text{Ans} = \min(\text{value}, C) \rightarrow 6 + 6 + 10 + 10 + 6$

coordinate

compression

2 4 5 6 7 8 10 ...





1

1

4

8

7

6

3

2

day 4

5

Subscription X

4

8

day 5

5

day 6

5

day 7

3

day 1

3

day 2

3

day 3

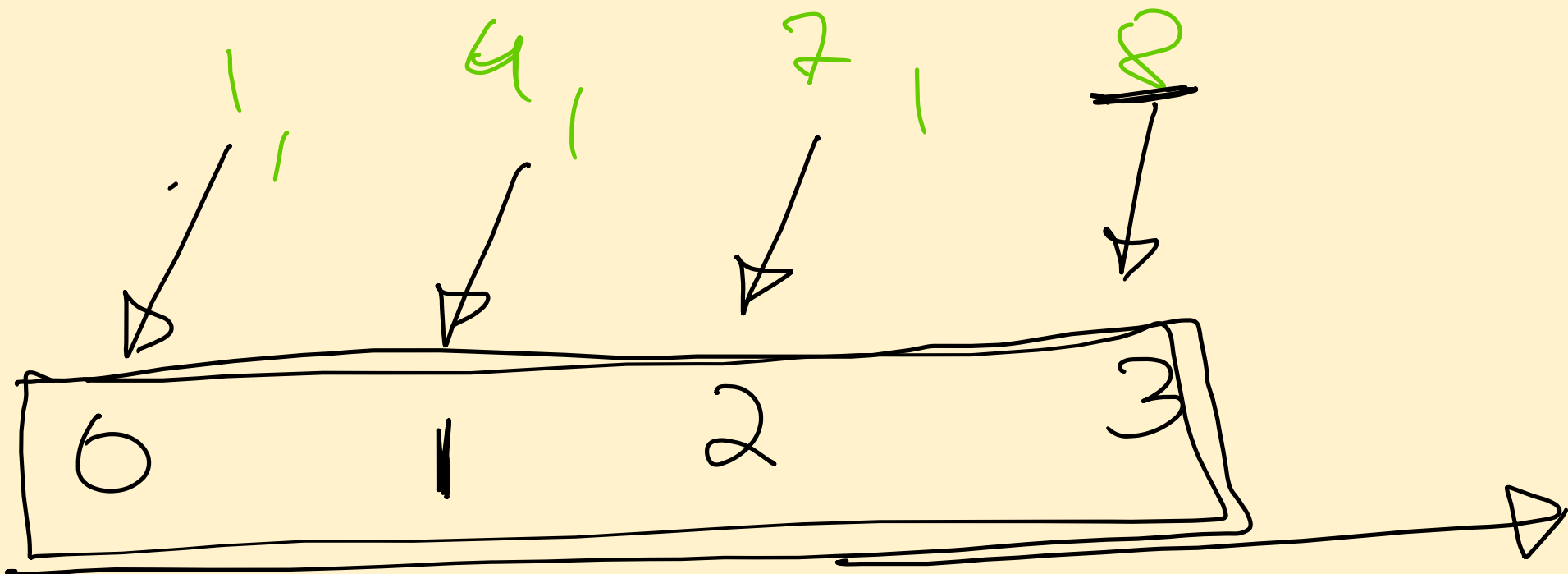
3

1, 8, 4, 7

1, 4

day 8

0



$$2 \times 10^5 \times 2$$

$$4 \times 10^5$$

diff ?

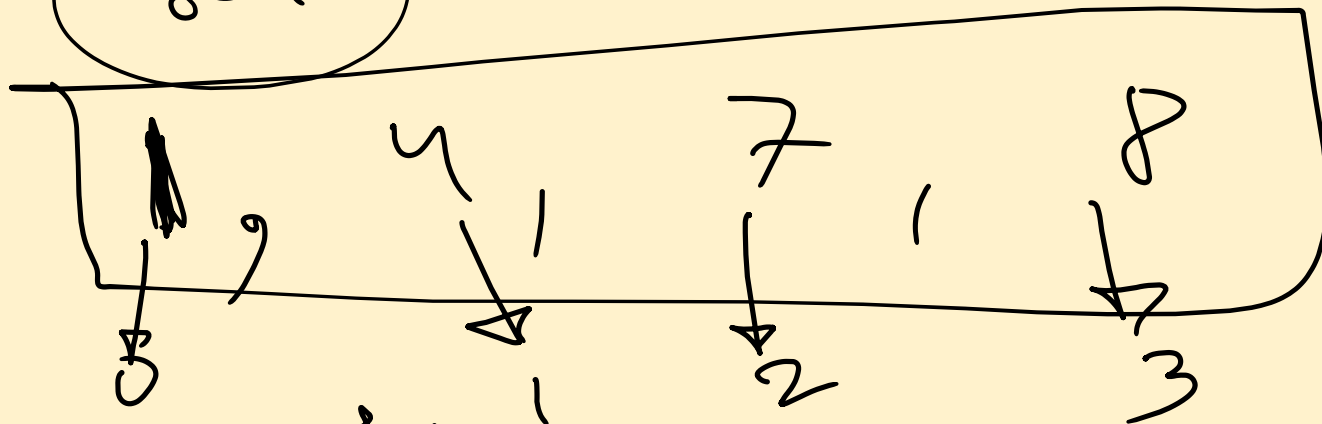
① Figure out imp points

② map the points

x ③ Now apply diff array

x ④ Get the answer

set



idx = ~~0~~ ~~1~~ ~~2~~ 3

1 ,

4 ,

~~7~~ ,

8

1 ~~7~~ 3

4 6 2

0

1

2

3

+3

-3

+2

-2

cost

3

5

3

0

2, 3

1 2 3 4 5 6 7

8 9 10 11 12

3

5

3

0

2

4

(3×3)	$(x \times 3)$
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