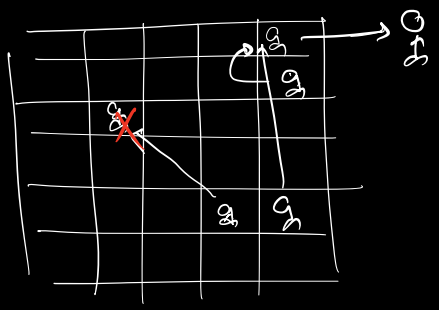
⇒ How will we implement UNDO ?

(1)



Chess board

Option 1 Remove the move from List<Move> and update the game state

Loved someone

They married someoneelse

Divorced

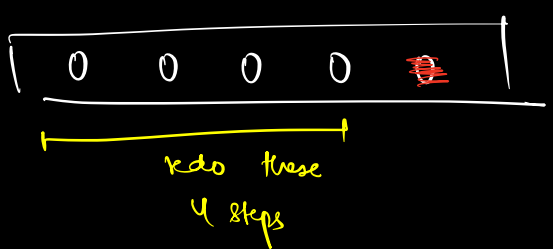
they got reunited

RKHH →

OSO →

Option 2

List<Move>



undo() {

Clear the current board state,

and redo all the moves except the last one

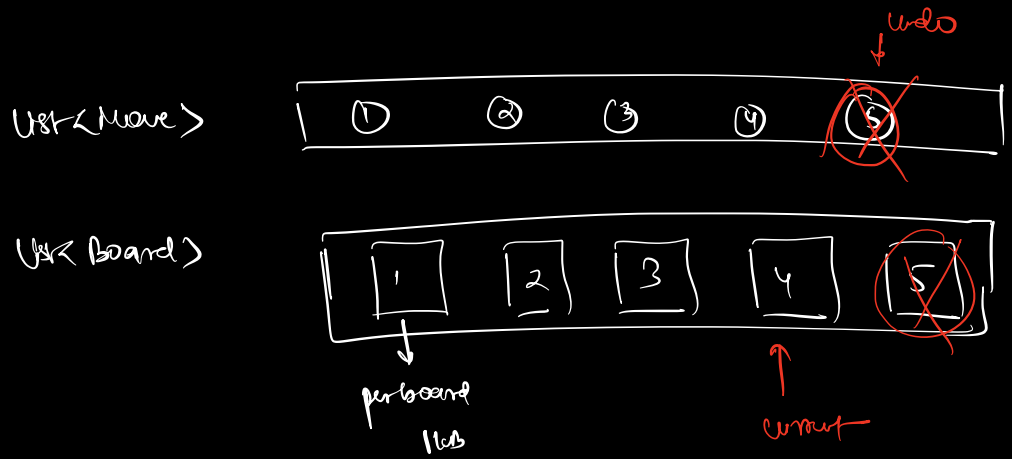
}

⇒ chess etc.

⇒ easy to implement

⇒ computationally expensive

Option-3



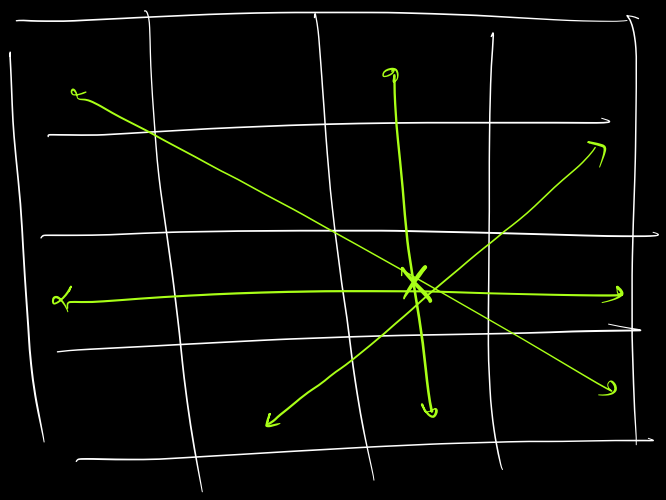
Pro ⇒ efficient & easy to implement

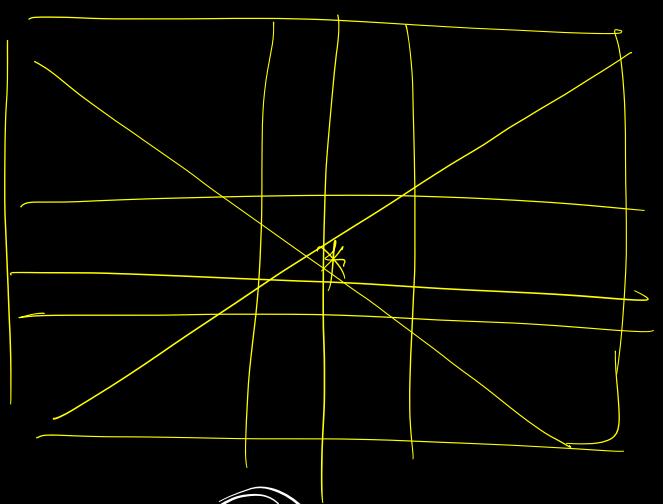
Con ⇒ needs too much space ← double

Stats

long user id ⟶ 8
boolean online ⟶ 1
⟶ $9 \times 2 \times 10^8 \Rightarrow 18$ GB

$10k \times 1kB \Rightarrow$ 10 MB





n^2 → to check for winner

↓

H.W = O(1)

↓

depends on the last move that was made