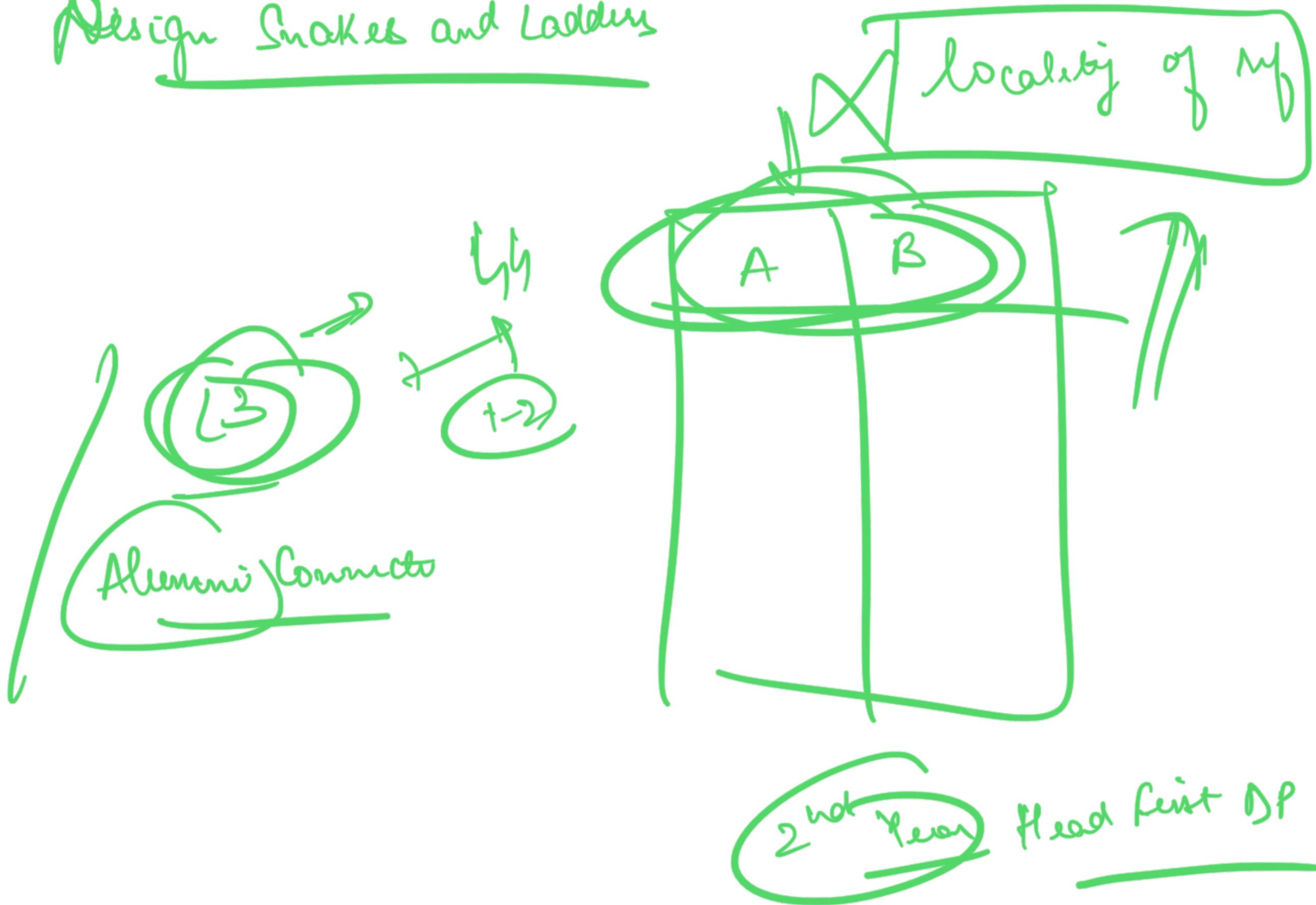


Design Snakes and Ladders



Design Snakes and Ladders

→ Only Class Diagram

→

① Overview

ⓐ

What type of appⁿ I have to build

Web App

Lapis

Entity

Pen

Command Line APP



Game

Game Controller. move (game)



One turn

(1 - 6)

or

(1 - 8)

(1 - 100)

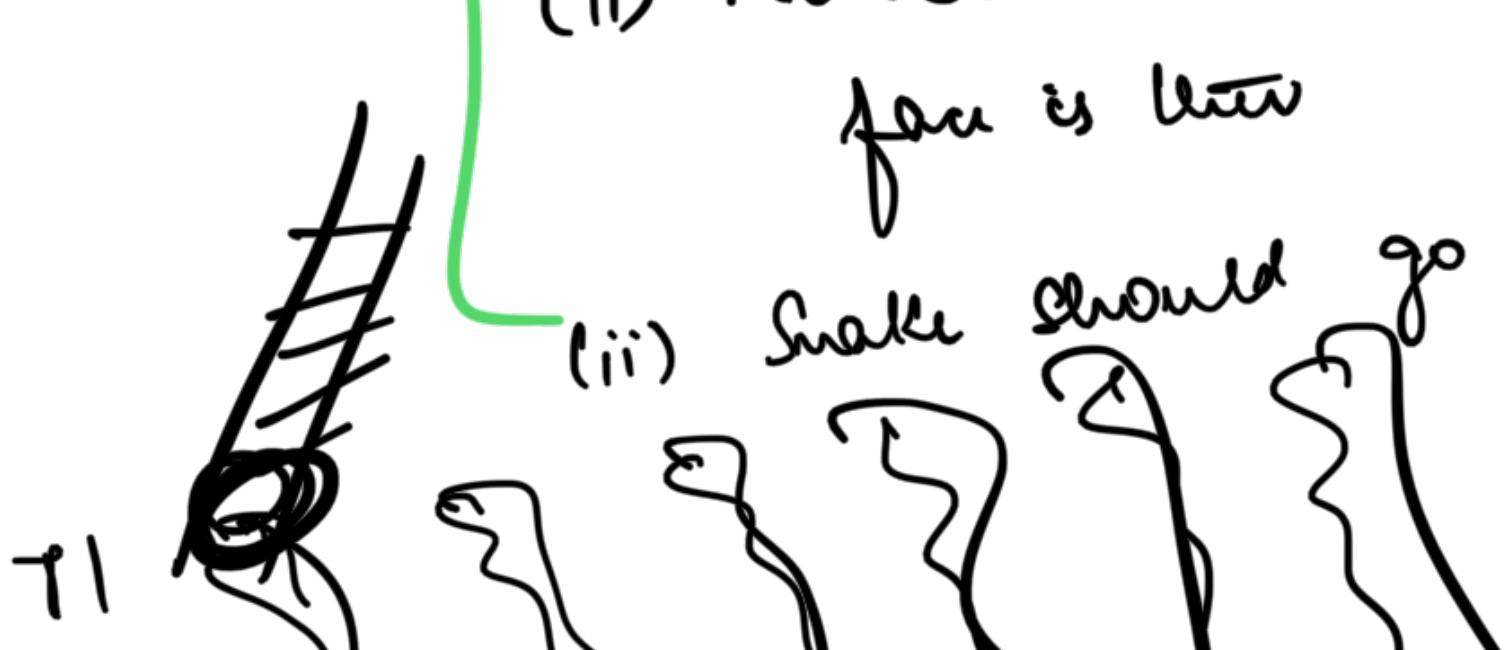
party turns
→ Dice. roll()

⇒ Any # of Snakes and Ladders

(i) game should be solvable

(ii) No ladder ~~can~~ starts where a snake face is here

(iii) Snake should go down. Ladder should face up.



71

Y D I } D'

⇒ frogs can also come in future

⇒ Game automatically decides the posⁿ of snakes, ladders and other special entries

Game.Builder()

. setBoardSize(100)

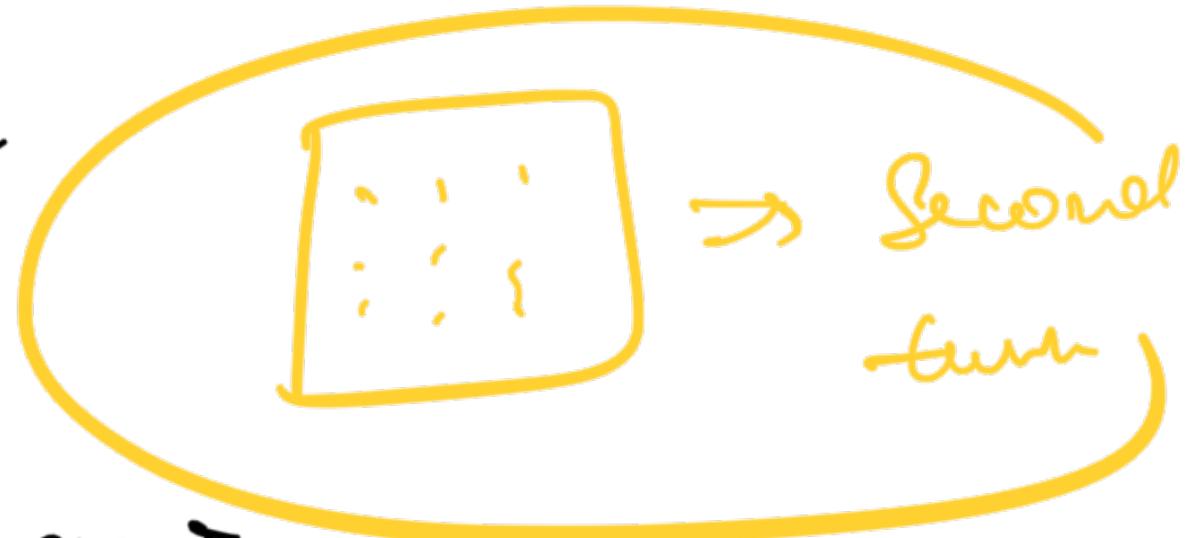
• id()

Move deciding
strate gy

U

→ Always ask about edge

Cases



① How will a game start

② How will a game end

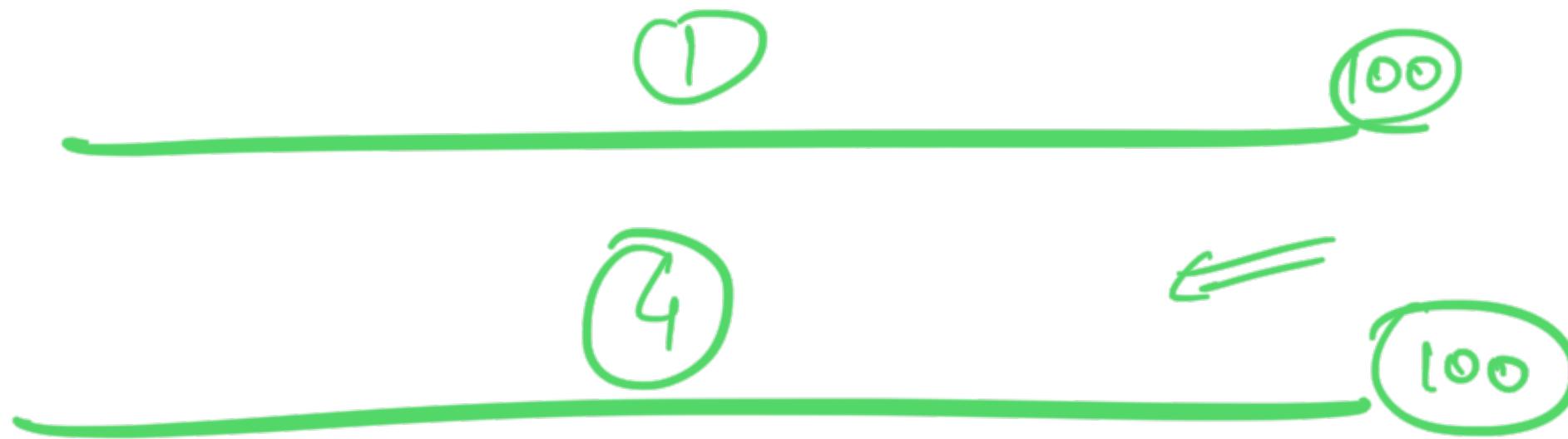
96 → 5

100



when will game end

5 players



Features

- ① Game will be played amongst multiple Human Players.
- ② Every player uses a third-party dice and ... can return any number.

③ Board can be of any size.

④ There can be diff types of special char:

① Snake

② Ladder

③ Frog

⑤ The posⁿ of special char is ~~given not given by~~
the Client but decided ~~randomly by opp~~

~~at start of game.~~

Condition the comⁿ of posⁿ of diff
characters is valid.

⑥ Next Move can be decided based upon
the multiple ways that exist

∴

- ① When will game start for a player
- ② When will game end for player

③ Every player will have multiple pawn/pieces on the board

→ Snake & ladder can be rep as a simple array

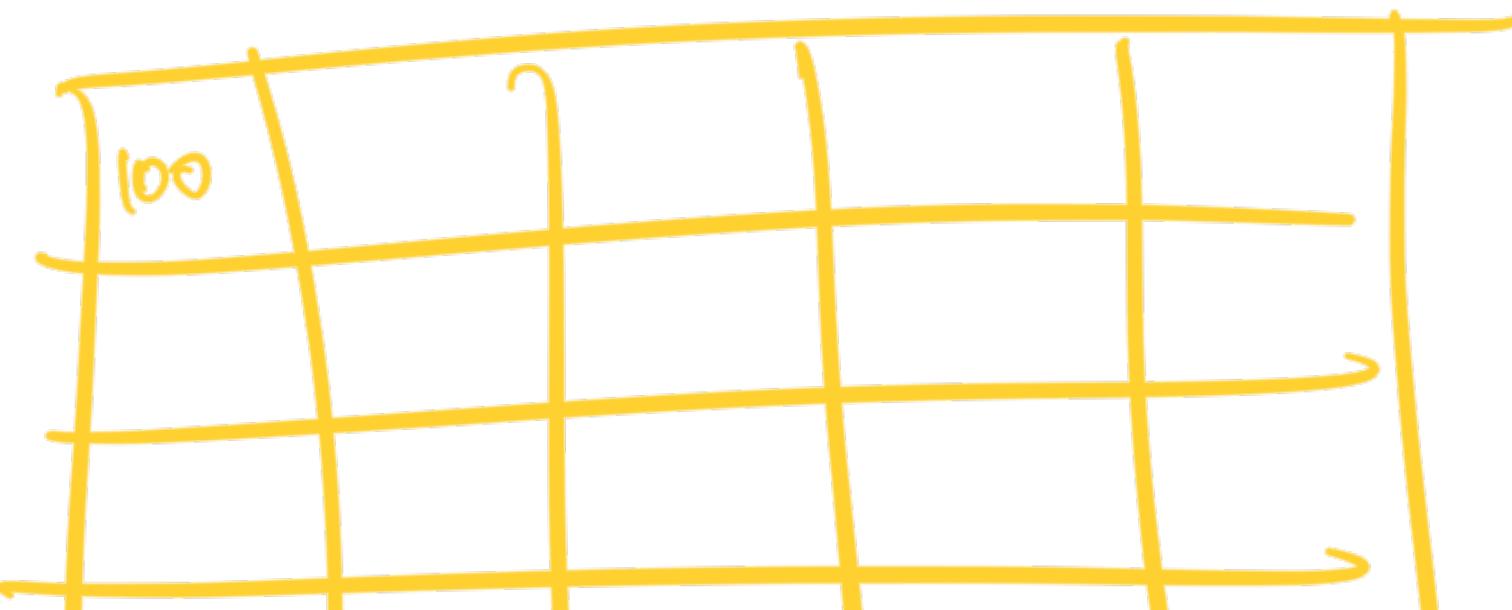
- ④ Dice will be a 3rd party service.

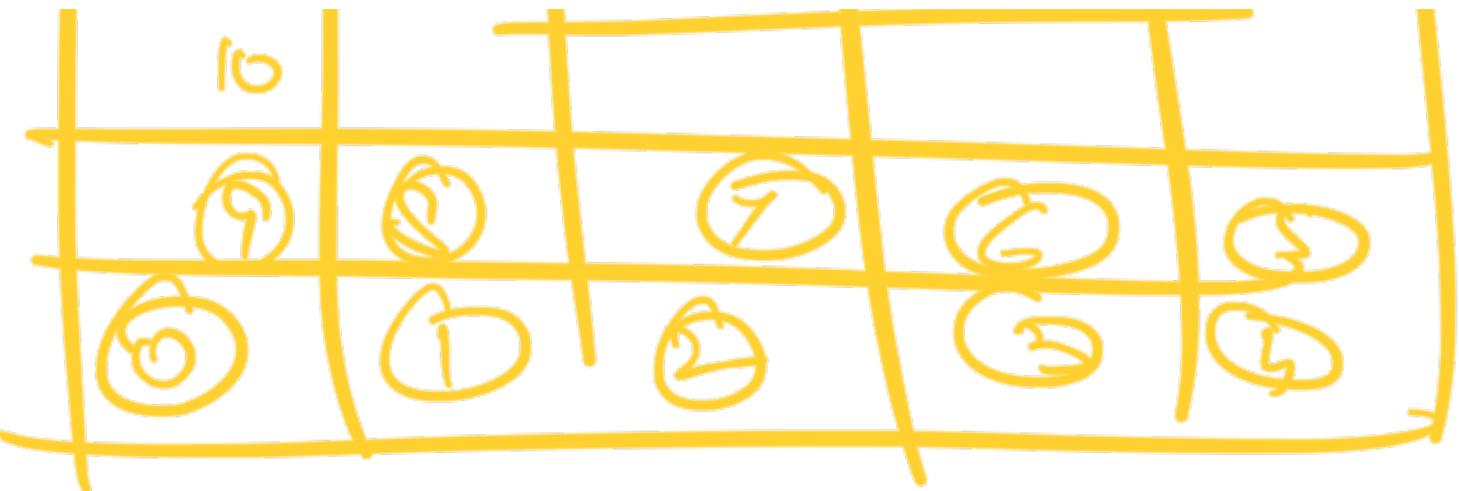
Whenever you call it
you get a random
number

→ Nouns

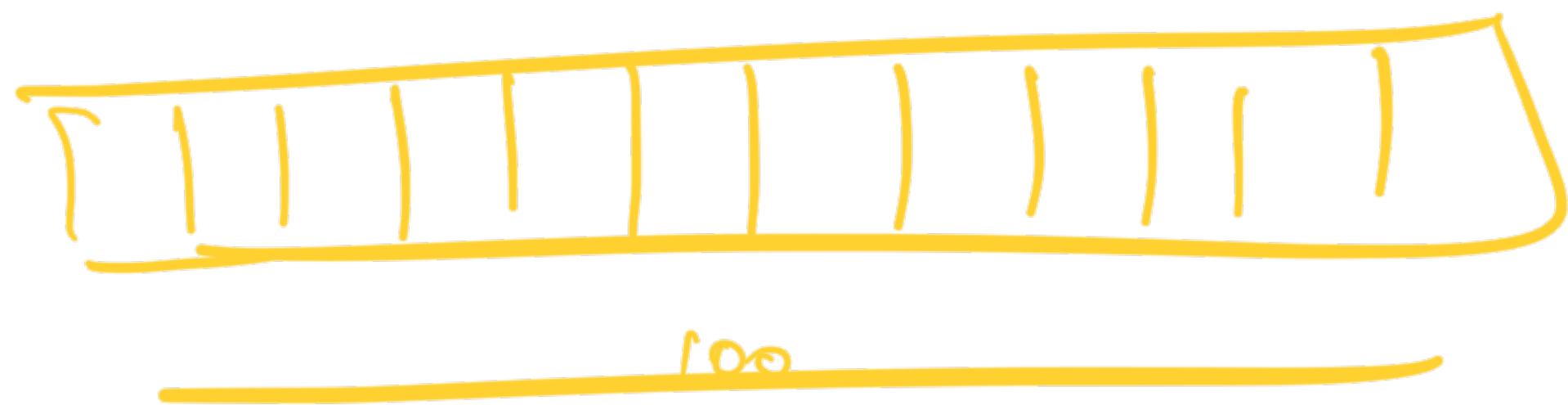
→ Visualization

Class Diagram





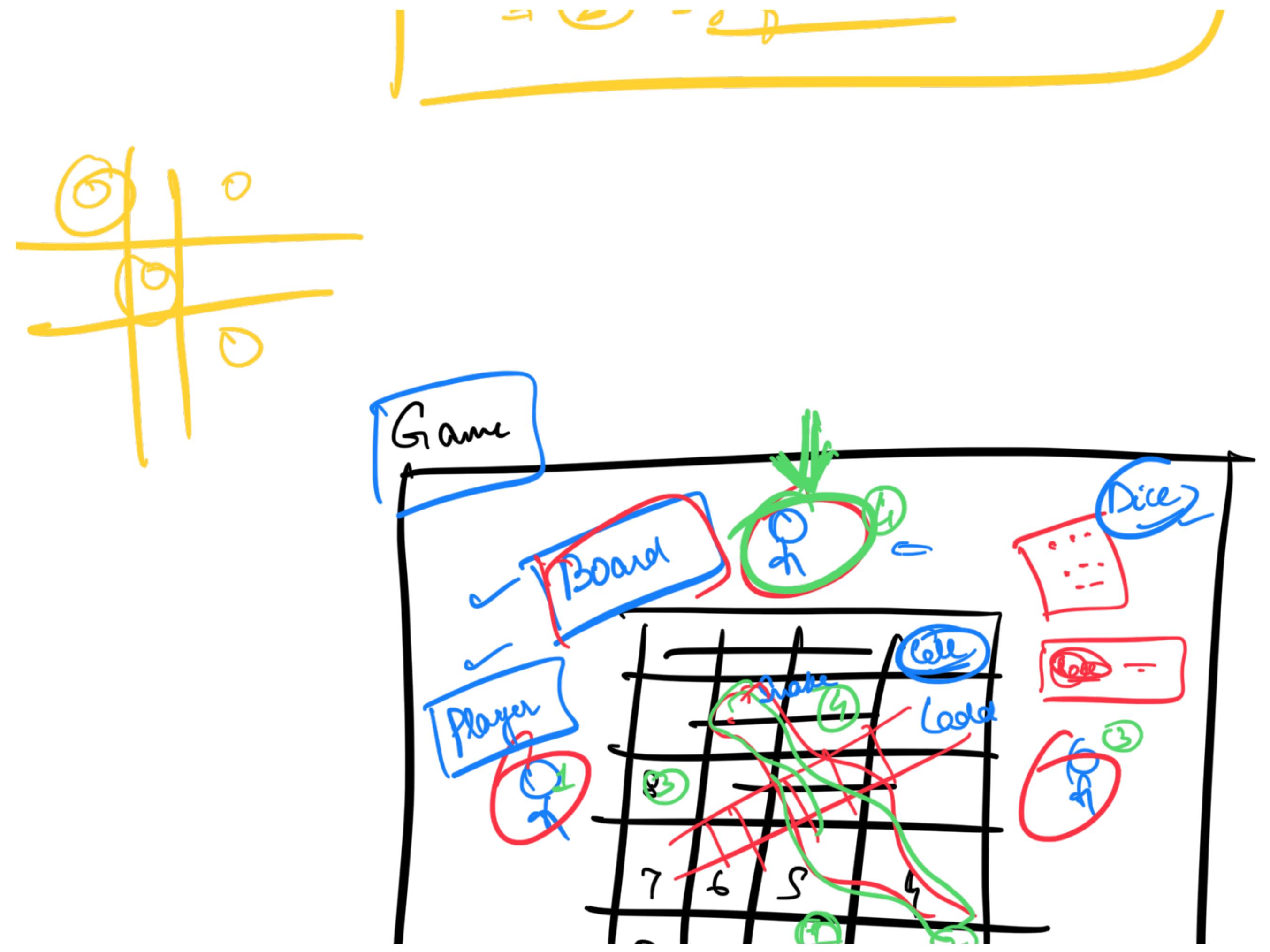
board →

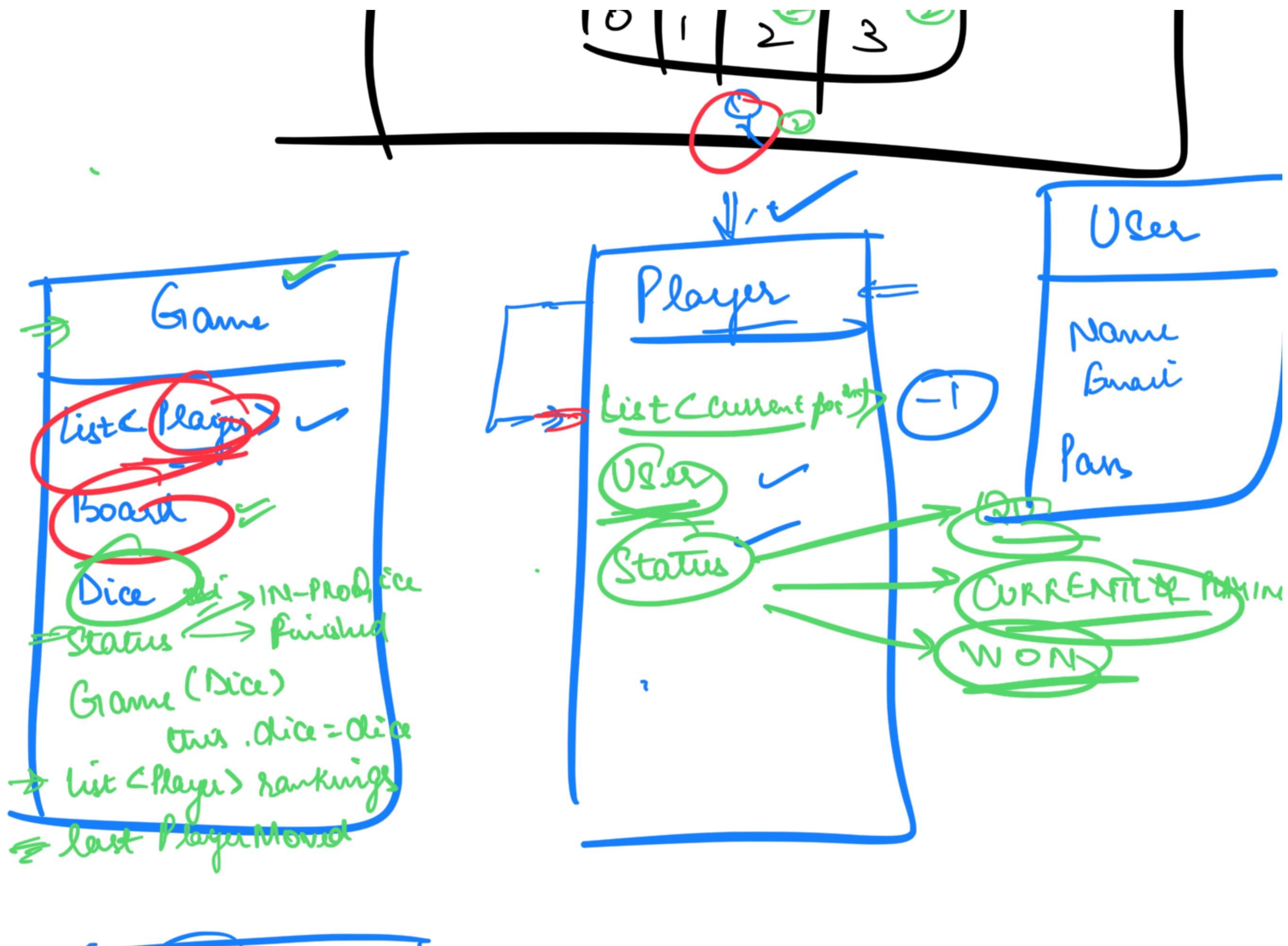


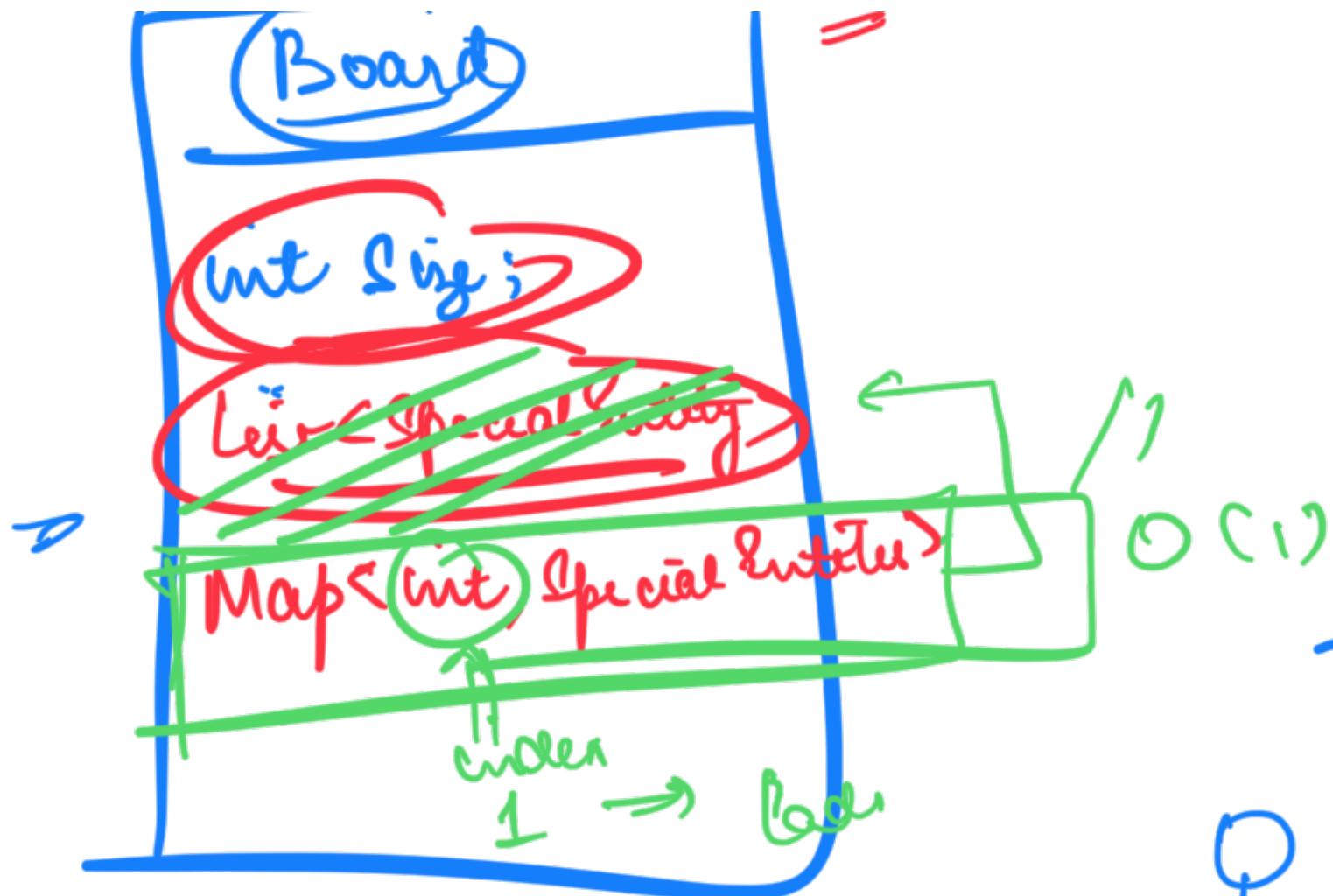
→ ① posⁿ of every player → Num

→ ② posⁿ of every Snake & ladder
(start, end)

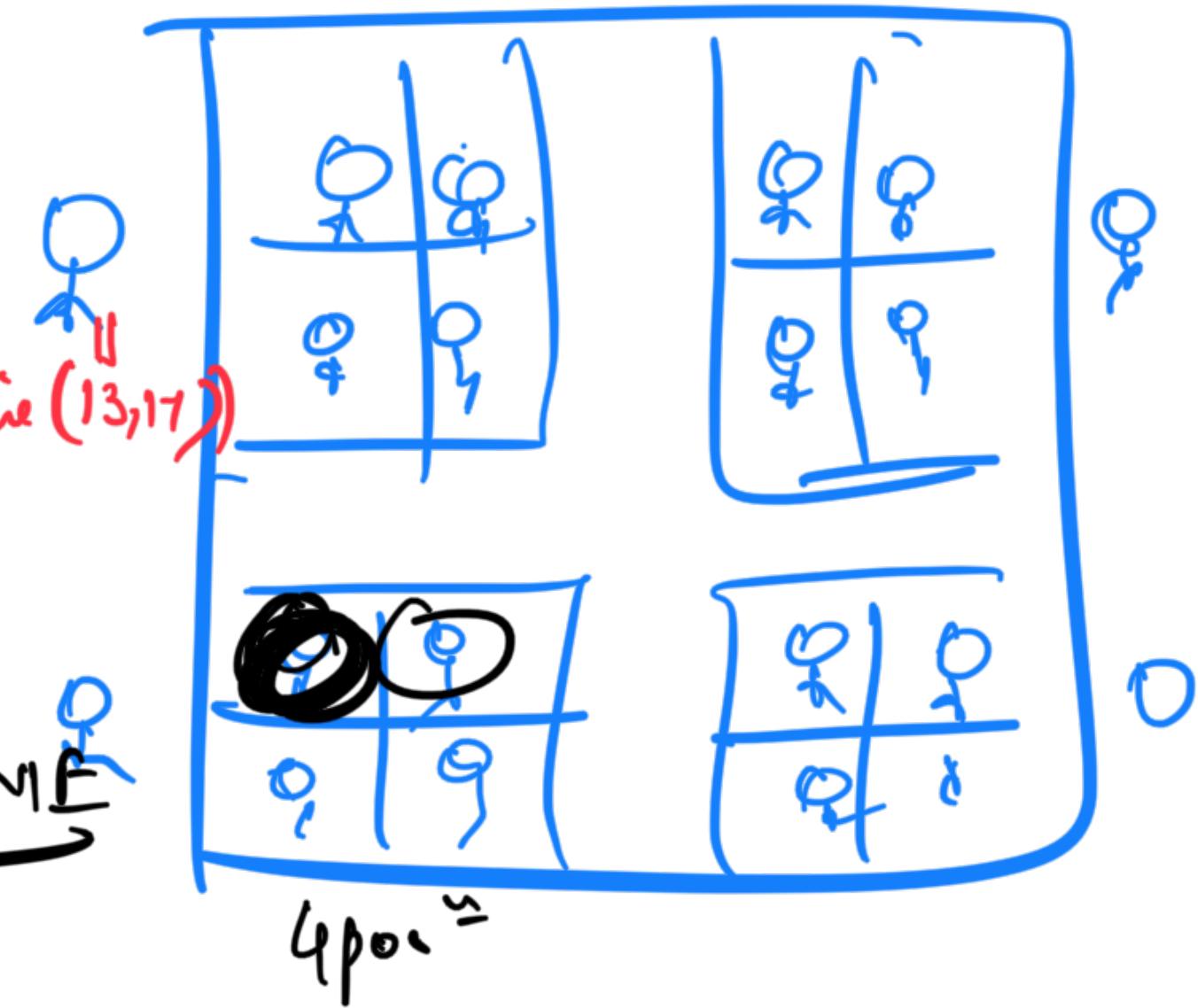
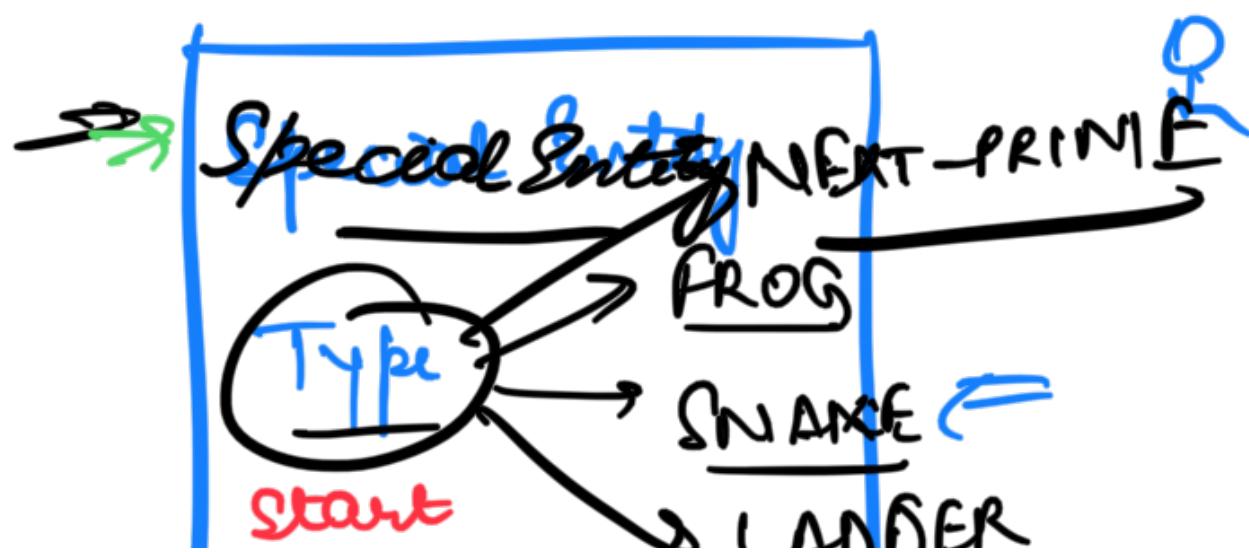
→ ③ size of Board



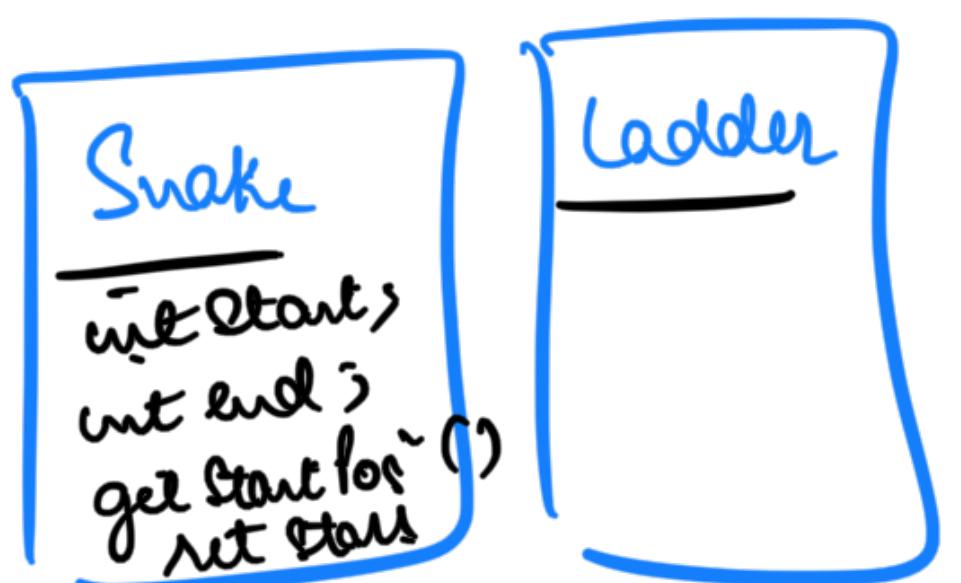




Special Entities: odd (new NextPrime(13,17))



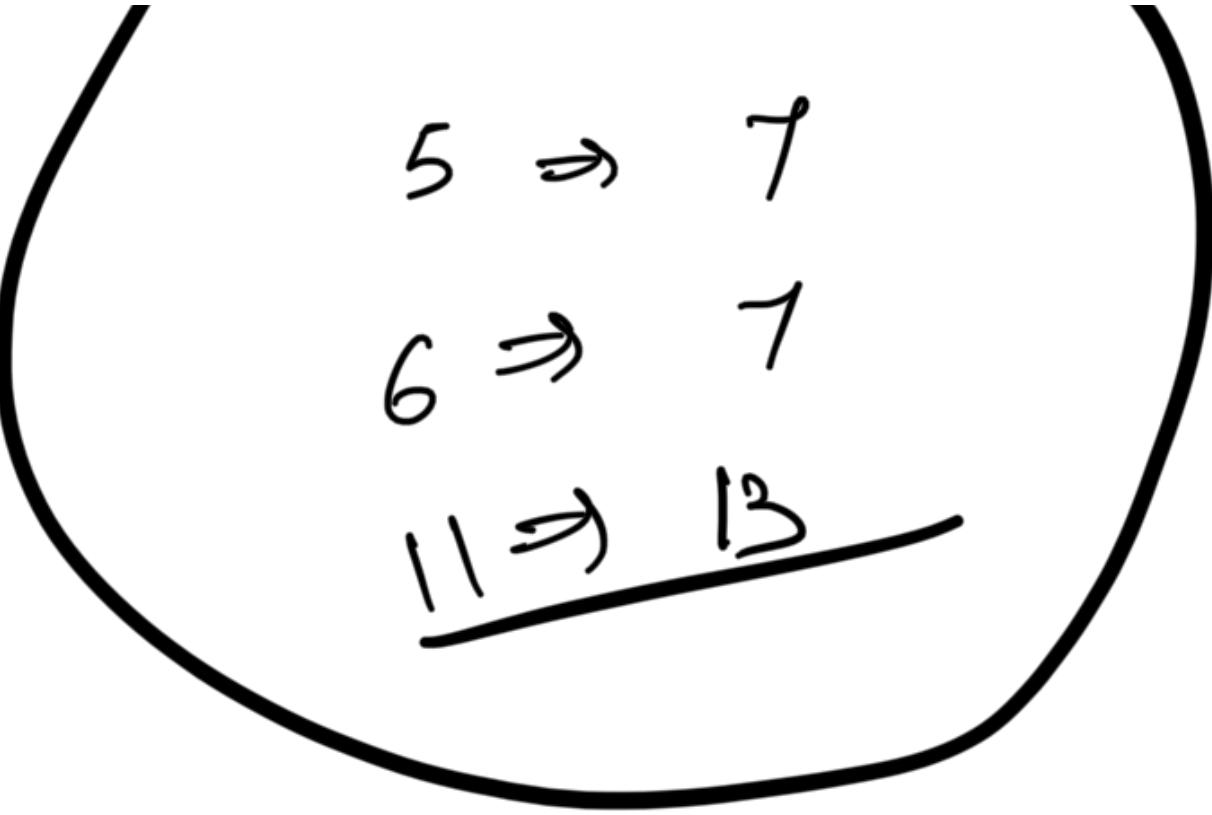
\Rightarrow get Start Pos~();
 \Rightarrow get End Pos~();
 Special Entity (Types)



Snake(start, end)
 Super (SNAKE)
 $this.start = start$
 $this.end = end$



Next Prime
 $start =$
 NextPrime (start)
 $this.start = start$
 $getStart()$
 getEnd()



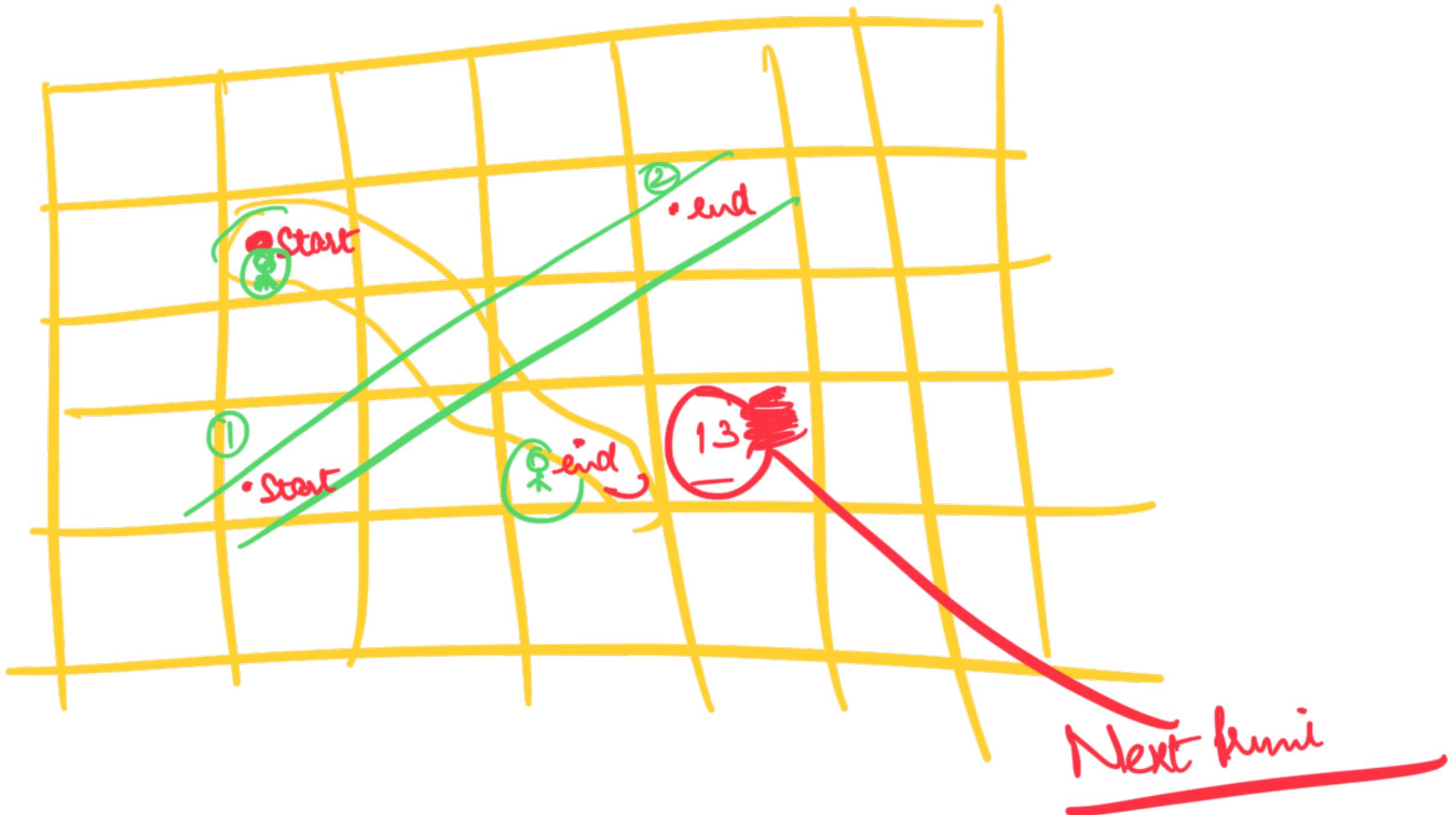
for i = 0; i < 10; ++i

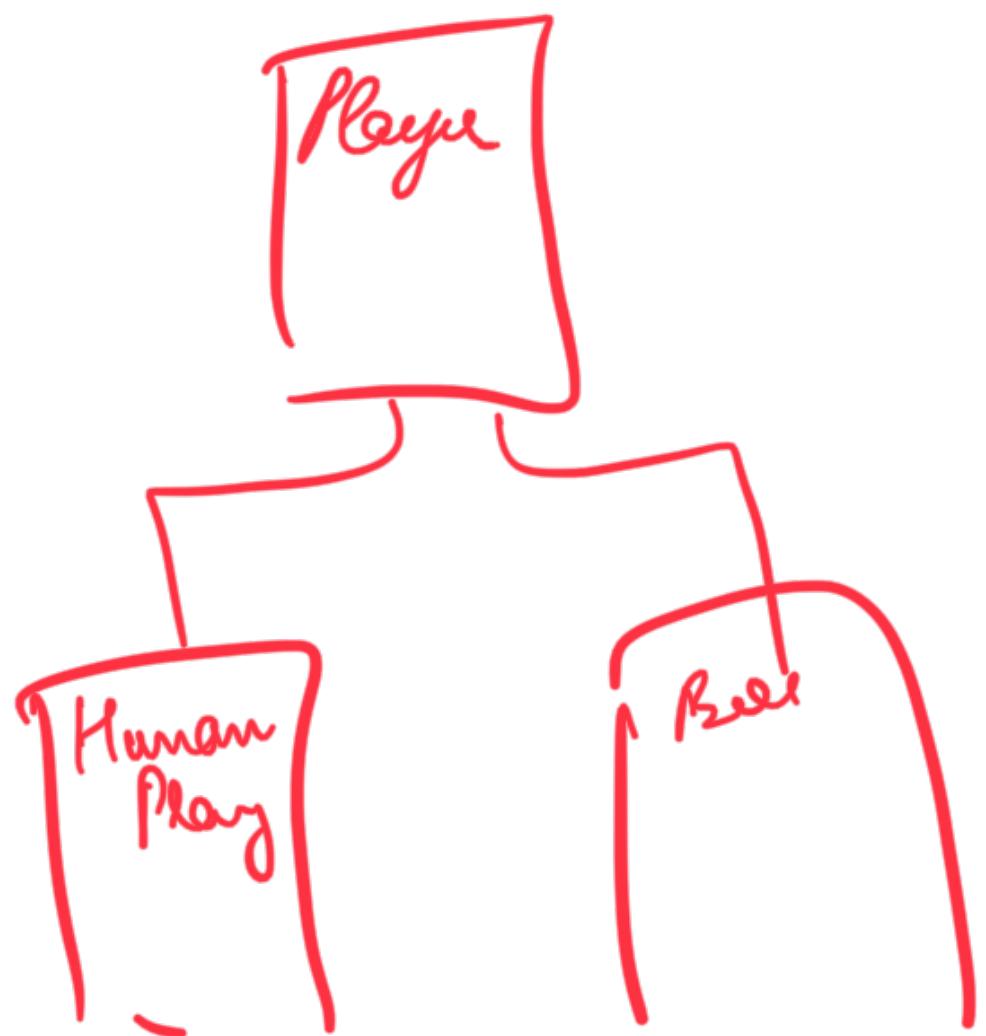
Special entries add / new NeutPrime(4, B)

(5, T)

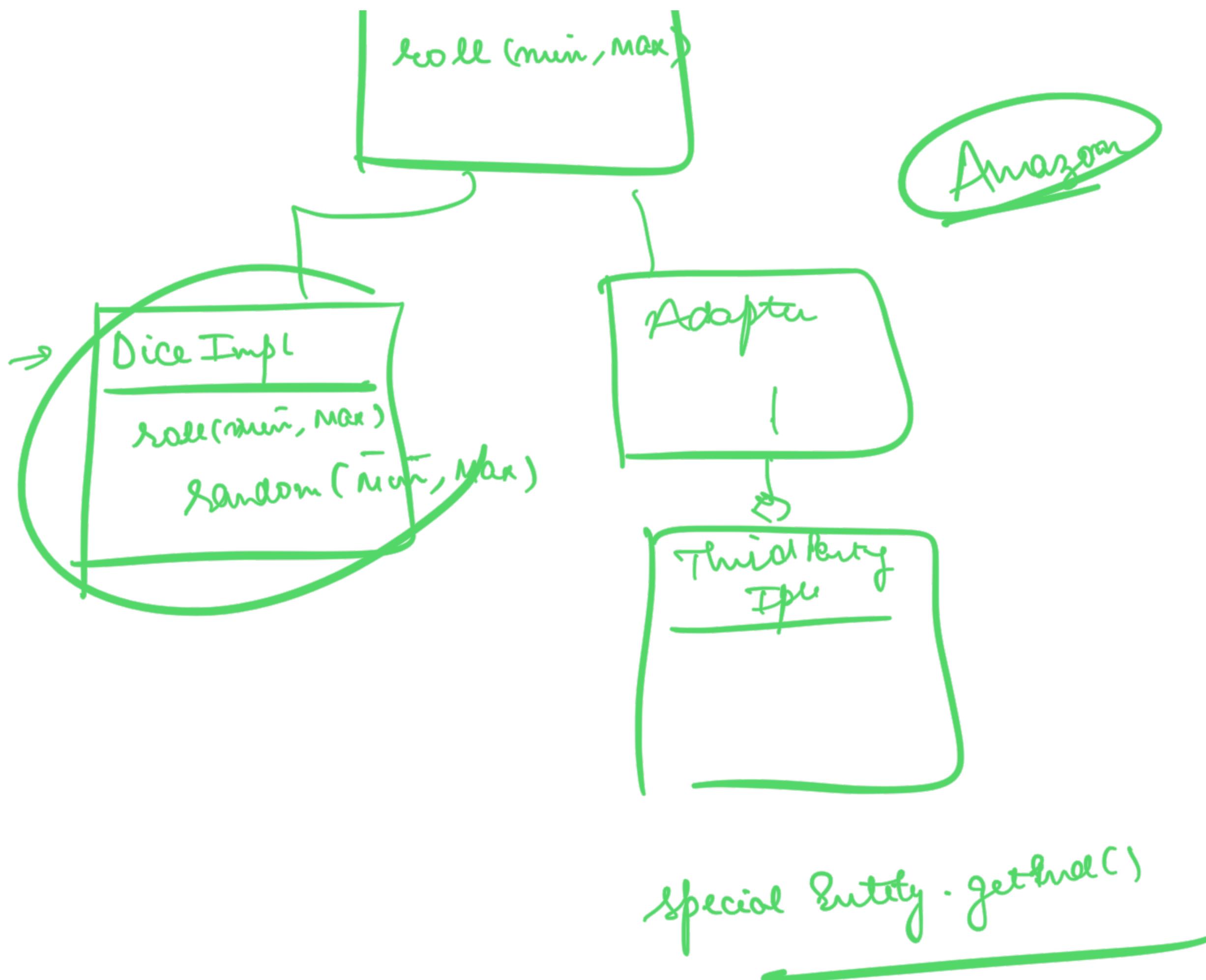
(9, 11)

new Neathuri (5)



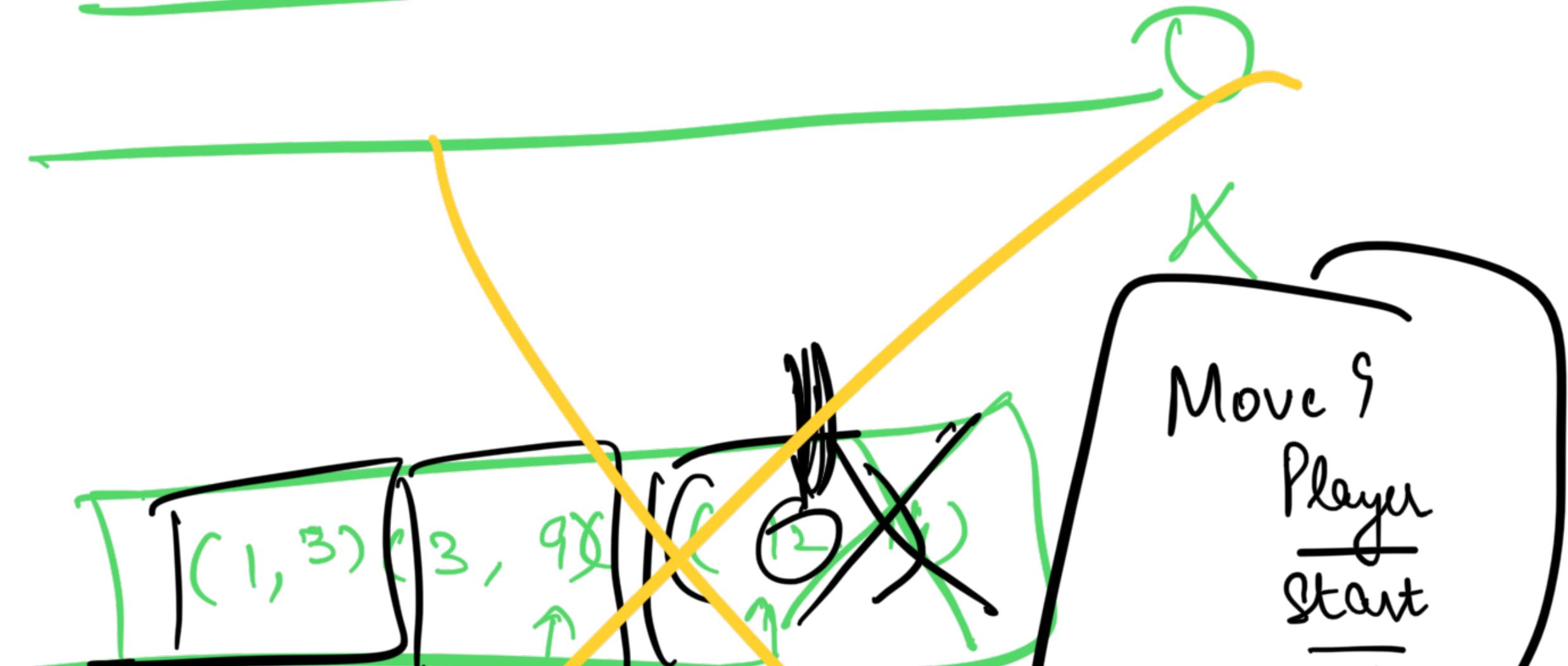


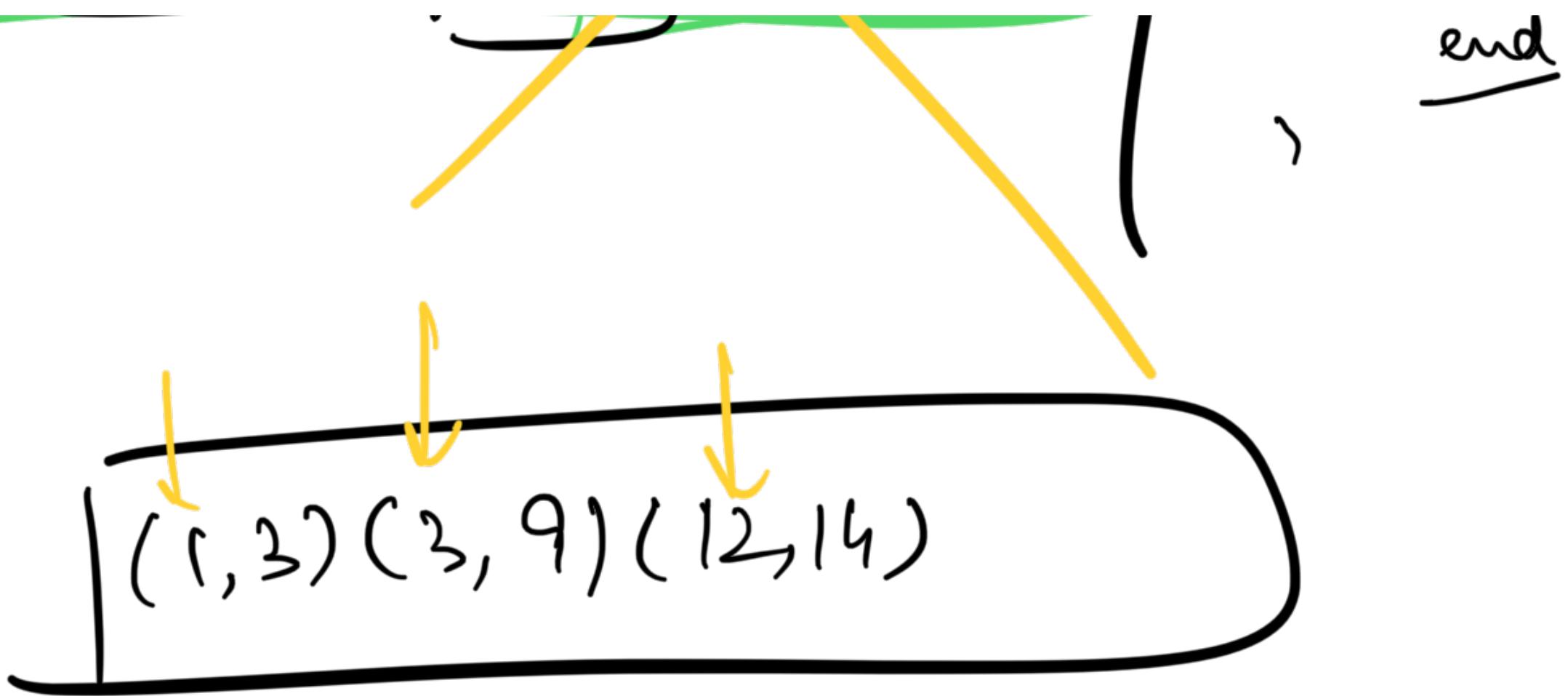
<<Dice>>



How to unp undo in LSL

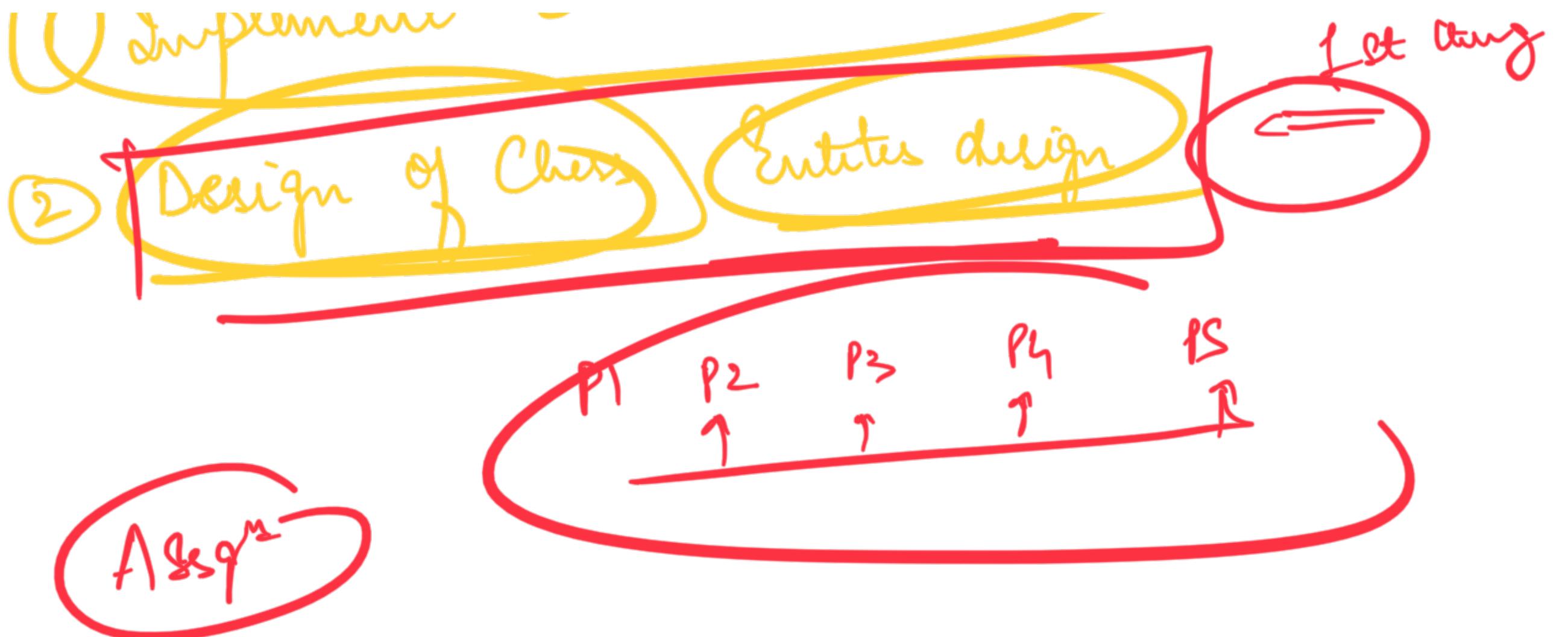
List < Move>





Ends Twice





① Go through Kishore's code

② Identify problems (if any)

< Move Strategy?

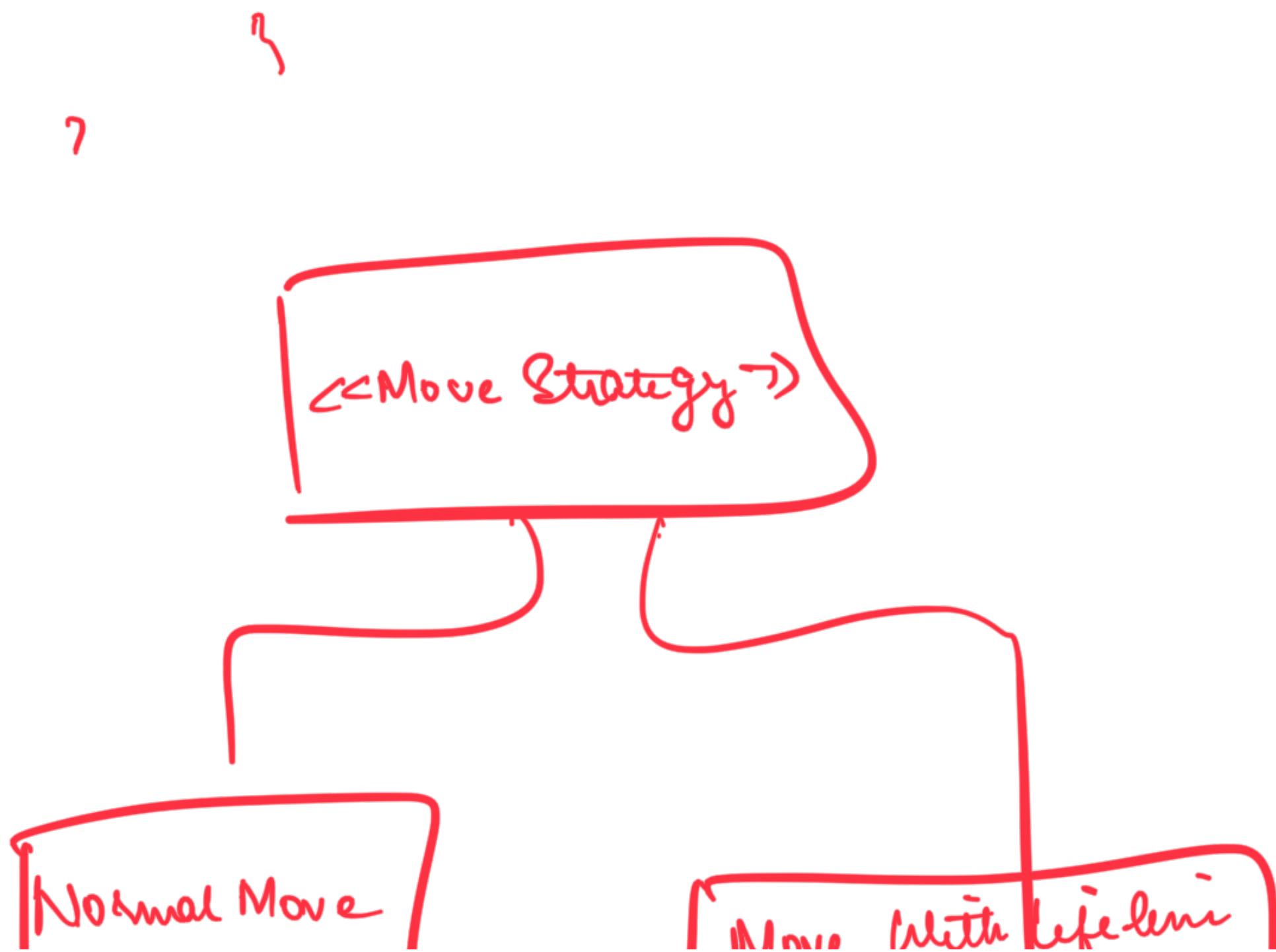
Game 9

→

↑

move (Player, curPos, diceValue)

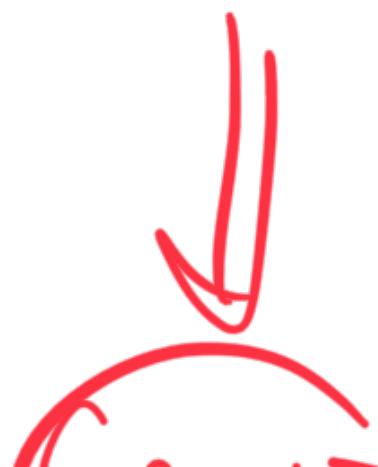
Move Strategy.Move (Board, Player, curPos,
diceValue)





Main

⇒ GameController.move(Game, player,
computer, value)



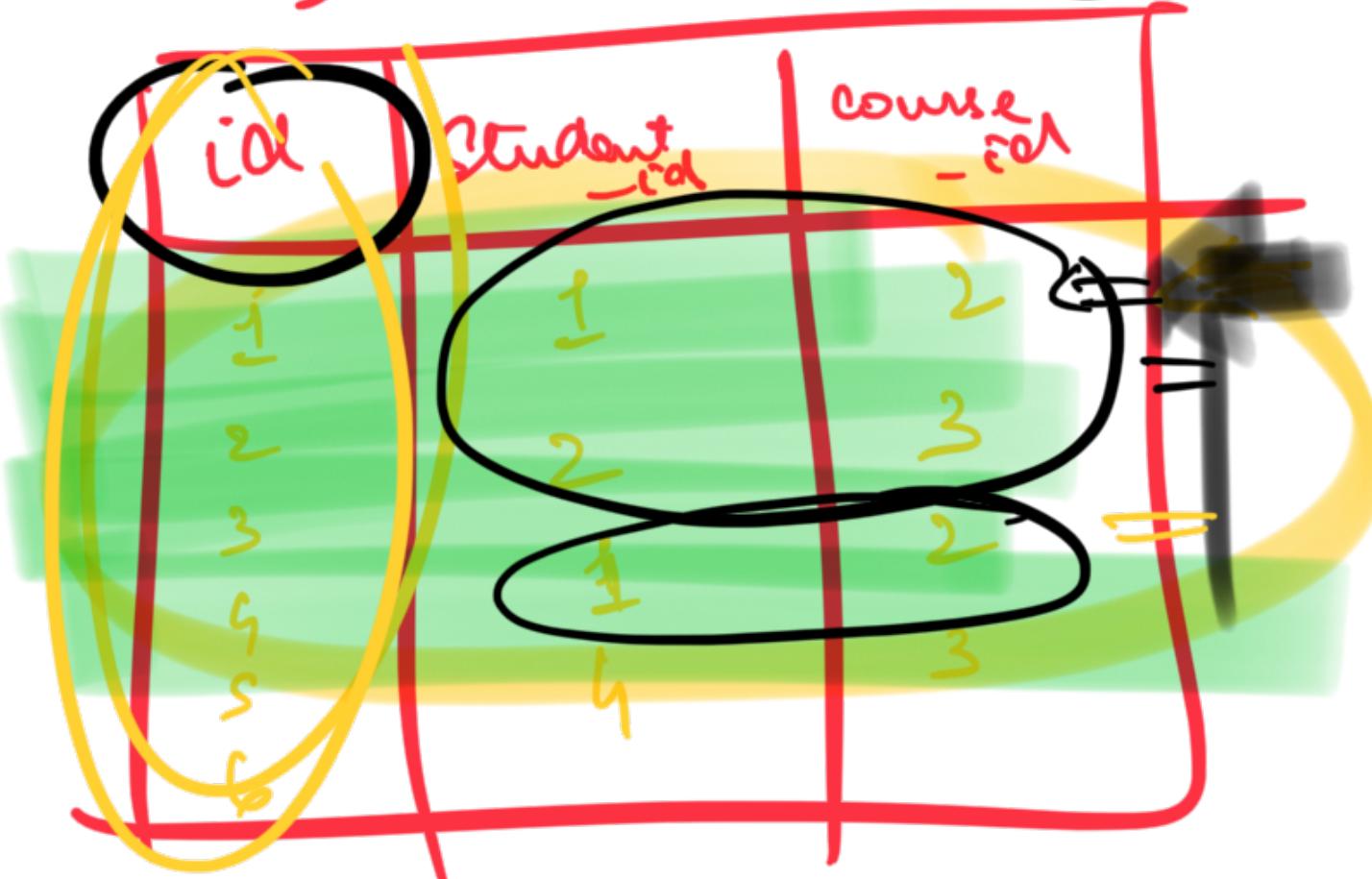
Glantz

Student.com

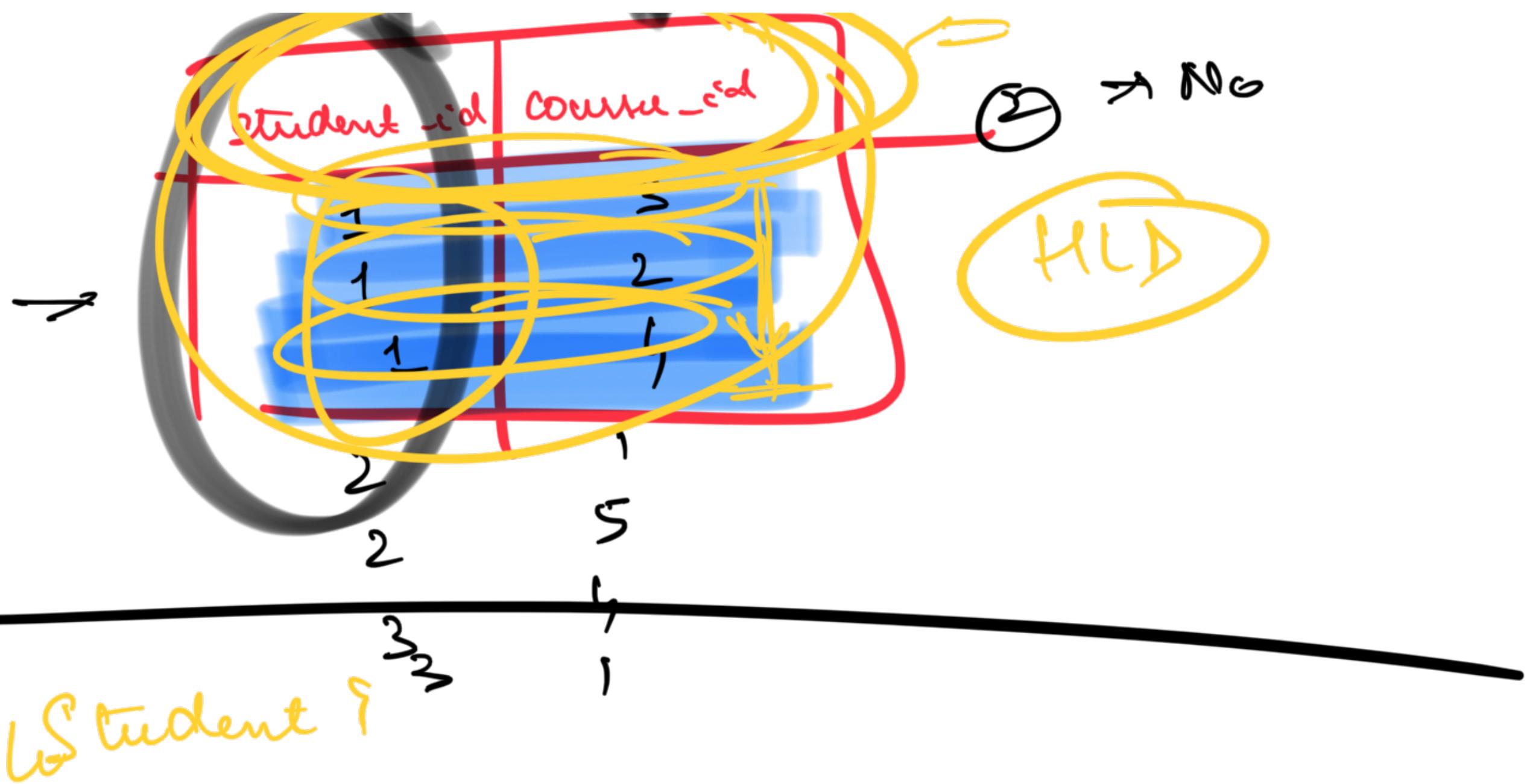
①

- under ~~city~~ well ~~be~~
- smaller
- make it as a
- easier to ~~key~~
- foreign

Student -com



Both combined



list < Course>



?

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