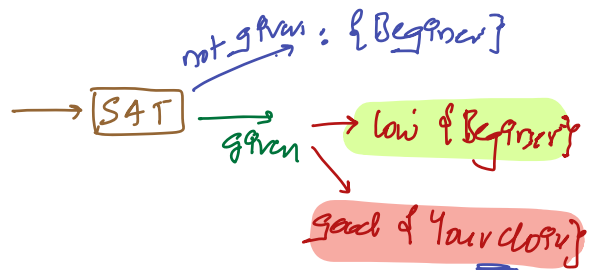


Hello World!

- Satya Sai Siva Rama Krishna
- 2019 graduate
- 2+ years Teaching DSA
- 1 1/2 year in Sator as Instructor



Beginner:

1 1/4 - 2

: print

- : Datatypes / operators
- : Read Input
- : If/Else
- : Loops
- : Arrays Array & List
- : 2D Arrays
- : Strings
- : Functions
- : Class & Objects
- : Maths

Intermediate:

2 months

- : Time Complexity
- : Space Complexity
- : Arrays
- : Sorting
- : Strings
- : HashMap / HashSet
- : Recursion
- : Subsets / Subsequence

→ Dashboard

Advanced:

// Java

} Python -

} Intermediate -

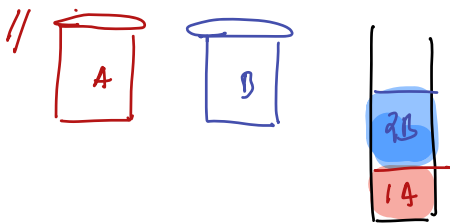
} Wrong Baten -

} Support,

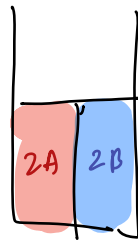
} They will transfer to correct baten

## Puzzle 1: (Medical Condition)

A person has to take exactly 1 A pill & exactly 1 B pill both pills at same time. 1 day he takes 1 pill from Jar A dissolve in water glass & by mistake 2 pills from Jar B & dissolves in same water glass. Pills are expensive & he doesn't want to waste water, how can he get correct quantity of medicine without wasting any.

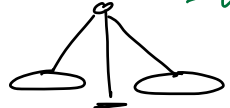


Idea: 1) Add 1 more pill A in water



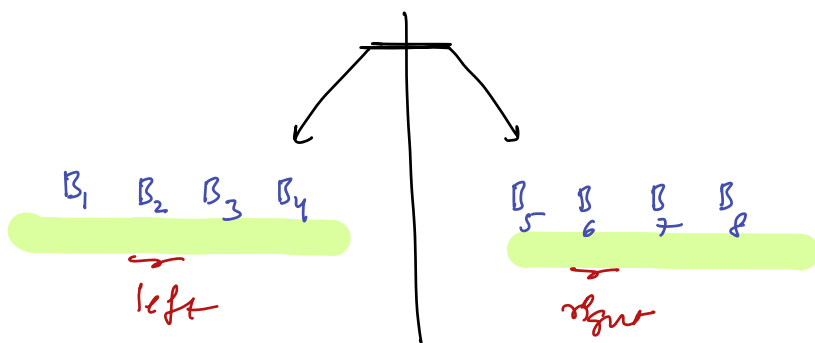
- 2) Drink half Today
- 3) Drink remaining Tomorrow

208) 8 balls } 7 balls same weight  
 } 1 ball has no weight } → weight scale

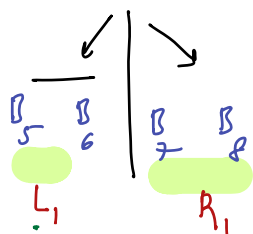


Q) Min times we need to use weight scale to get ball with no weight?

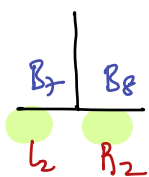
Sol:  $B_1 B_2 B_3 B_4 B_5 B_6 B_7 B_8$



left > right: ans on right



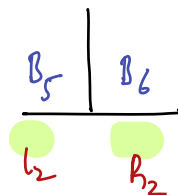
$L_1 > R_1$  : ans on right



$L_2 > R_2$  :  $B_8$  is ans

$R_2 > L_2$  :  $B_7$  is ans

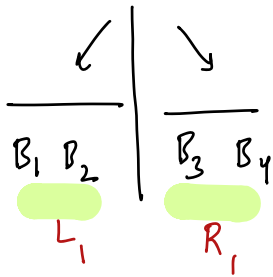
$R_1 > L_1$  : ans on left



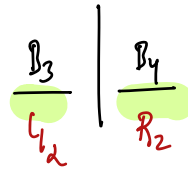
$L_2 > R_2$  :  $B_6$  is ans

$R_2 > L_2$  :  $B_5$  is ans

right > left : ans on left



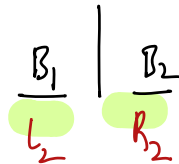
$L_1 > R_1$  : ans on right



$L_2 > R_2$  :  $B_4$  is ans

$R_2 > L_2$  :  $B_3$  is ans

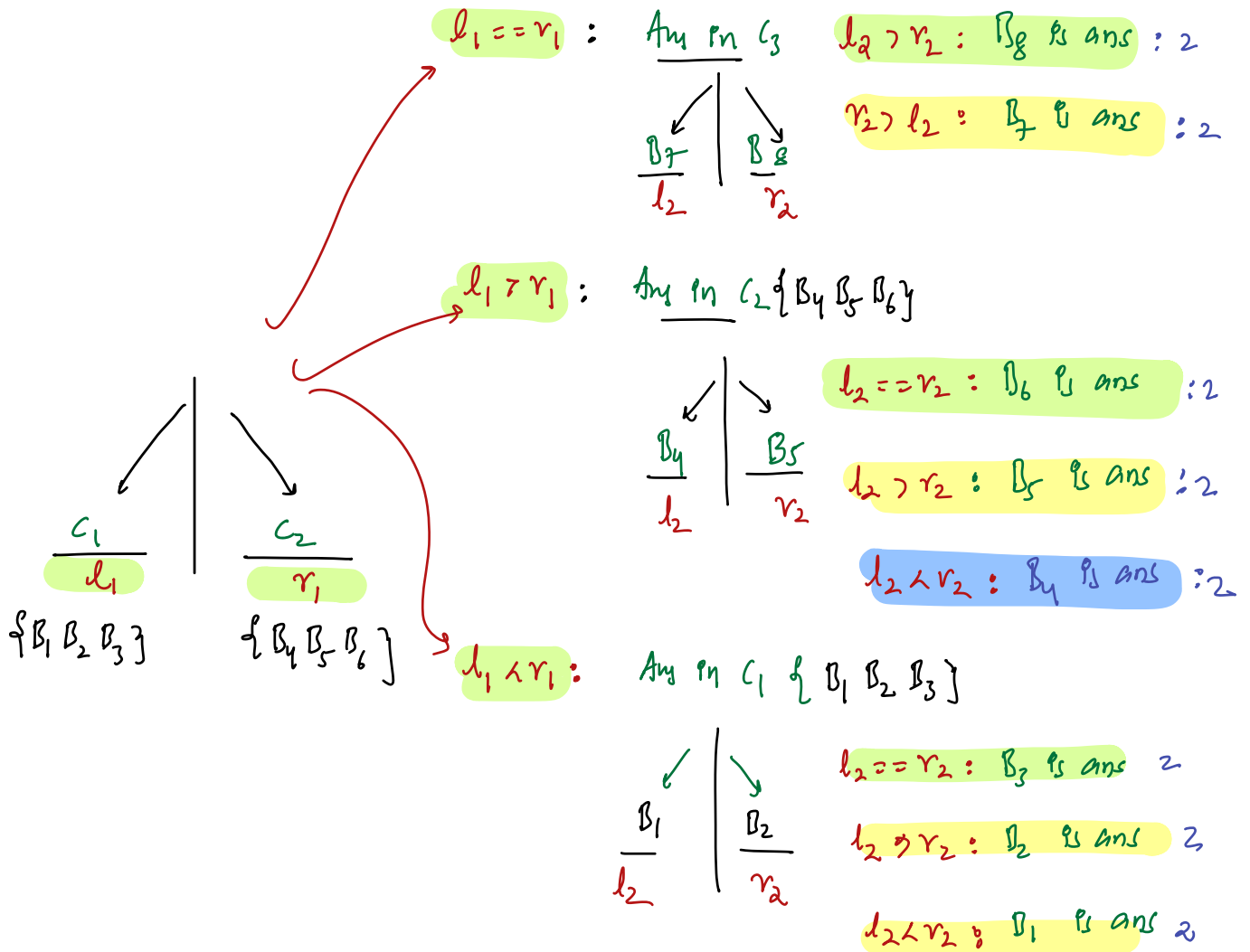
$R_1 > L_1$  : ans on left



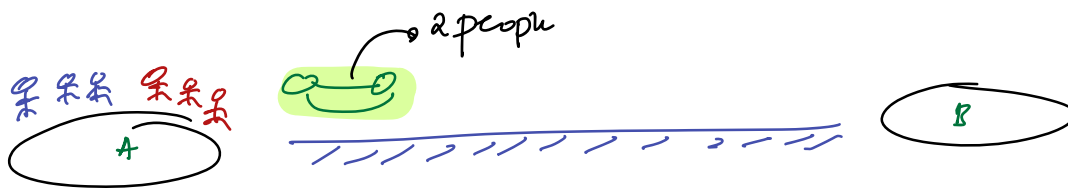
$L_2 > R_2$  :  $B_2$  is ans

$R_2 > L_2$  :  $B_1$  is ans

Sol:  $\begin{array}{ccc} B_1 & B_2 & B_3 \\ \hline & \downarrow & \\ C_1 & & \end{array} \quad \begin{array}{ccc} B_4 & B_5 & B_6 \\ \hline & \downarrow & \\ C_2 & & \end{array} \quad \begin{array}{cc} B_7 & B_8 \\ \hline & \downarrow \\ C_3 & \end{array} \rightarrow \text{ans} = 2$



3<sup>rd</sup> Ques:



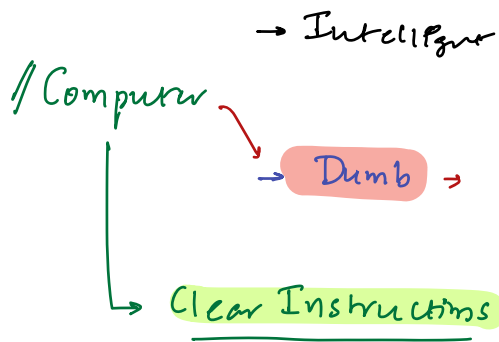
Q) Transfer all Priests from A  $\rightarrow$  B

a) In Boat only 2 people can travel

b) If number of Devils > Priests, Kill

c) All of them safely from A  $\rightarrow$  B

// 10:35 break



Maggie : { Surya } { Vinay } { Harsha } { ... }  
                  ↓                   ↓                   ↓  
                  u                   u                   u  
                  u                   u                   u  
                  u                   u                   u

language : { Go / Python / C# / C++ / C / Java --- }

- 1) Rules & Regulation
- 2) Syntax