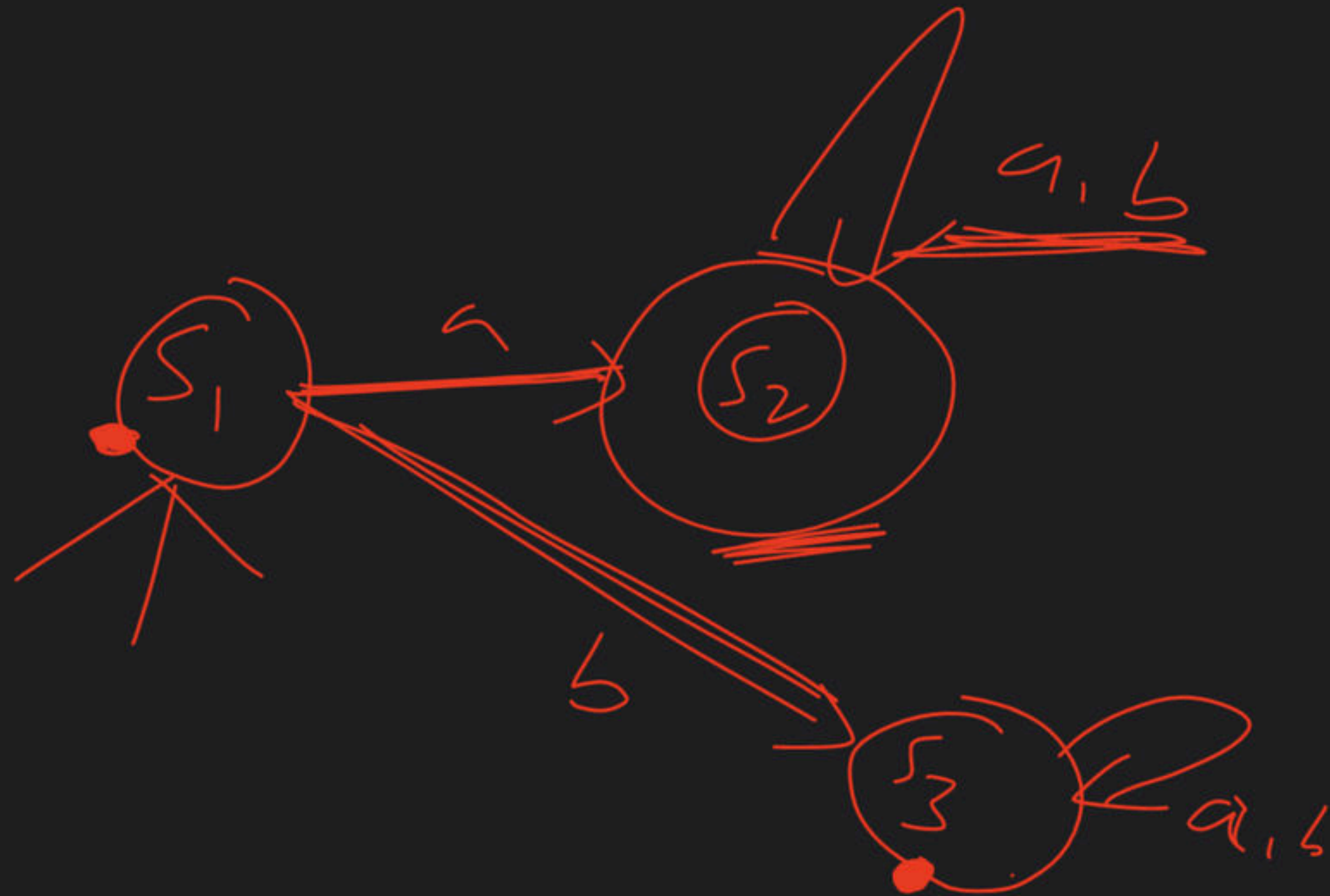




# DFA Construction - III

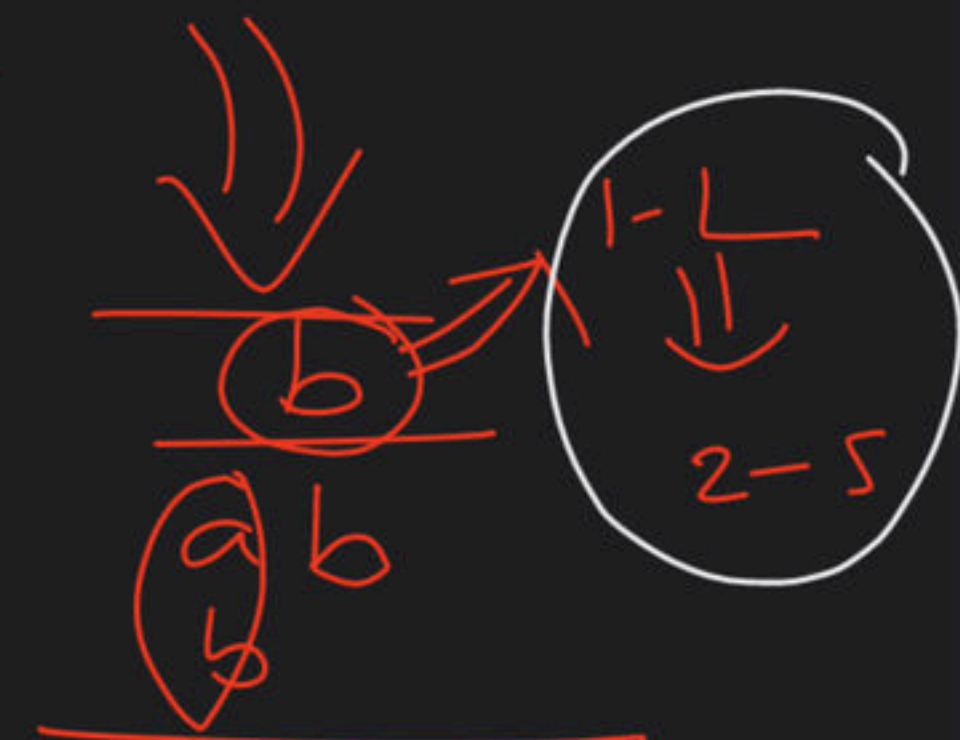
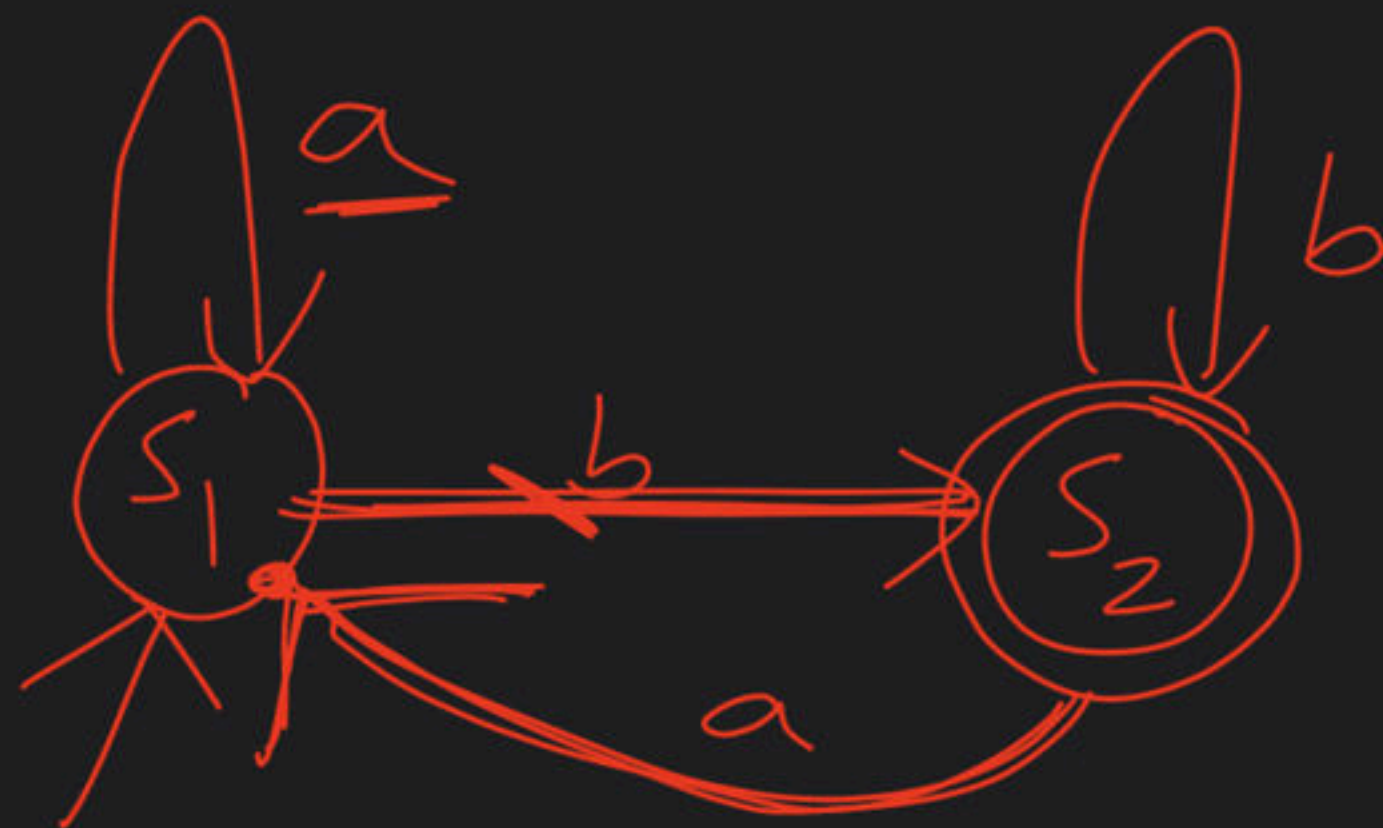
Complete Course on Theory of Computation

$$a \varepsilon^b \Rightarrow a(a+b)^b \Rightarrow \{a, a0\}$$



Dead state

CM DFA  $L = \{ \text{Set of all strings of a's \& b's where every string end with b.} \}$



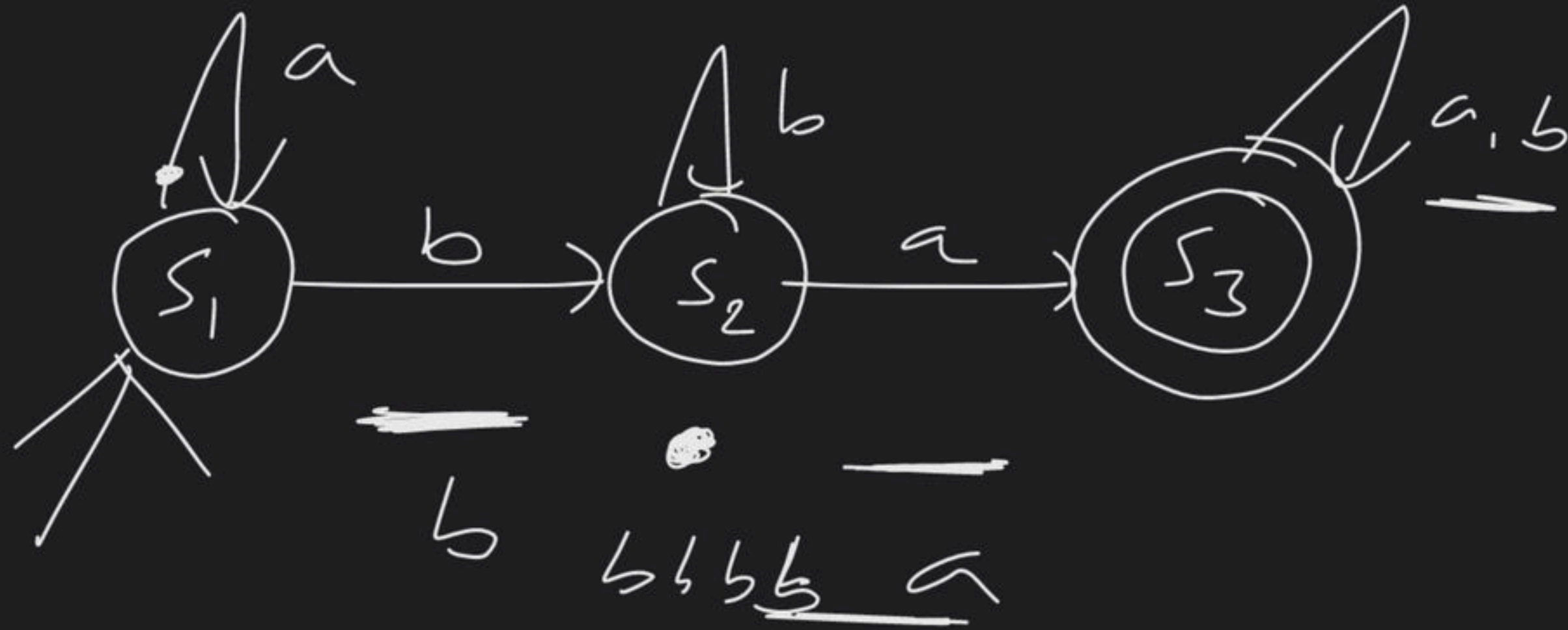
$aab$   
 $bbb$   
 $abb$   
 $bab$

$\vdots$   
 $a$   
 $\Sigma \cdot b$

$abbbbaabbbbaaaaa$   
 $\frac{(a,b)^* \cdot b}{(a+b)^* b (RE)}$



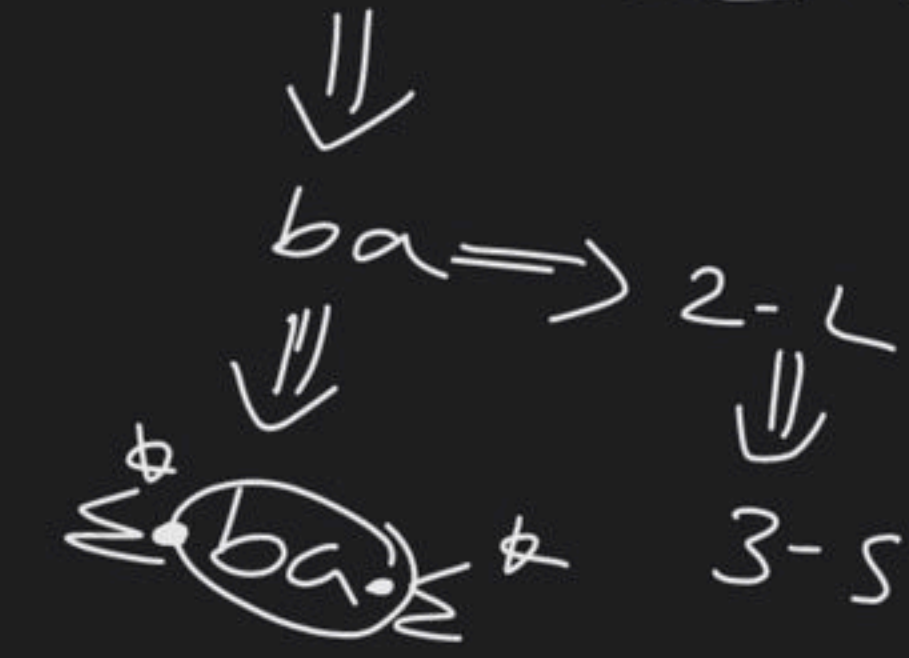
$\text{CM-DFA } L = \{ \text{Set of all strings containing } ba \}$



$b \quad bbb \quad a$

3

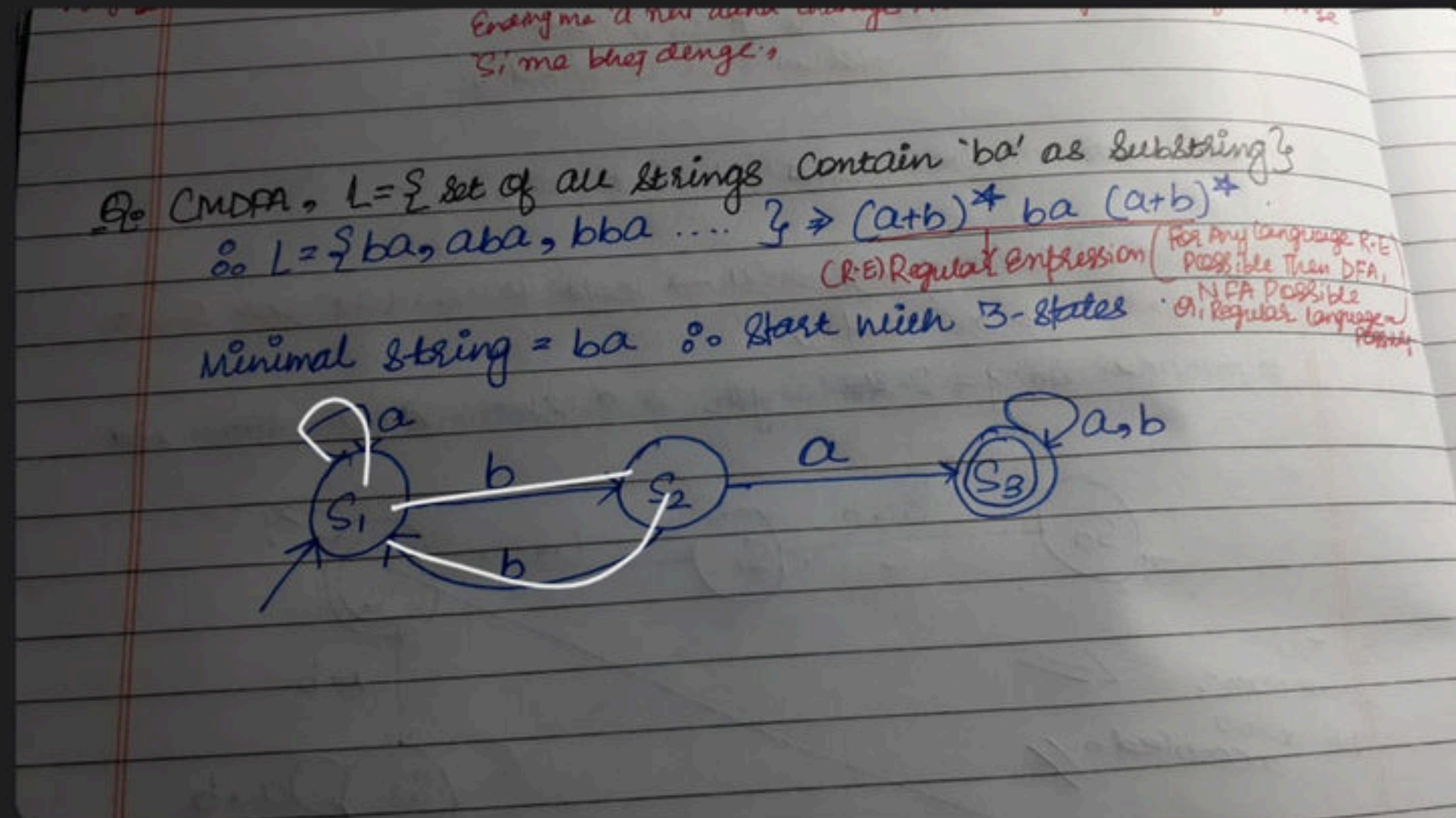
$ba$   
 $ba$   
 $ba$



$(a+5)^k L_n (a+5)^k$   
 $64 \quad R \subseteq$

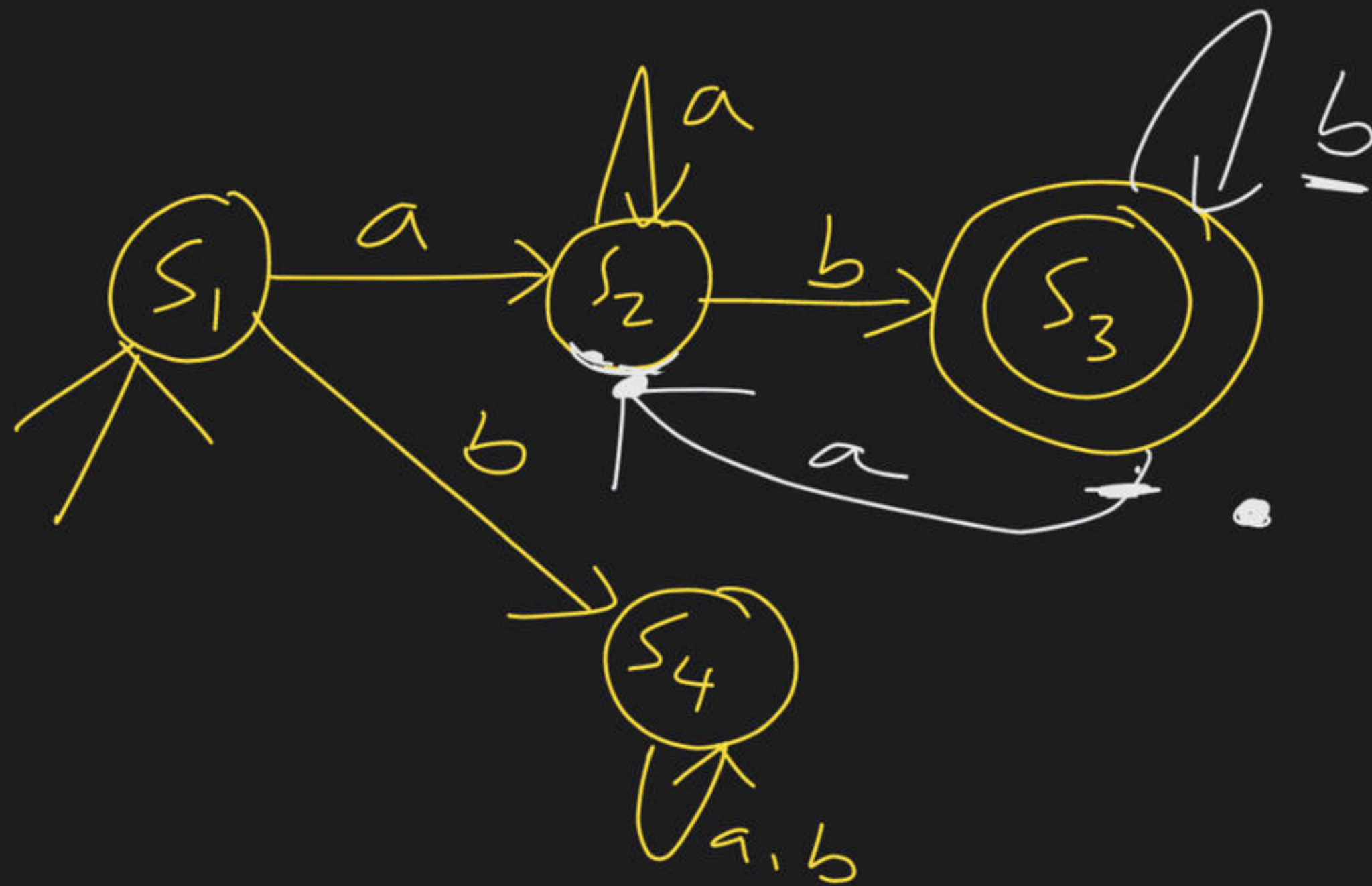
▲ 1 • Asked by Kabir

sir.. see this figure once



ba





Handwritten notes on a blackboard:

- Top left:  $\frac{a}{b}$
- Top right:  $\frac{a}{b}$
- Middle left:  $\frac{a}{b}$
- Middle right:  $\frac{a}{b}$
- Bottom left:  $\frac{a}{b}$
- Bottom right:  $\frac{a}{b}$

