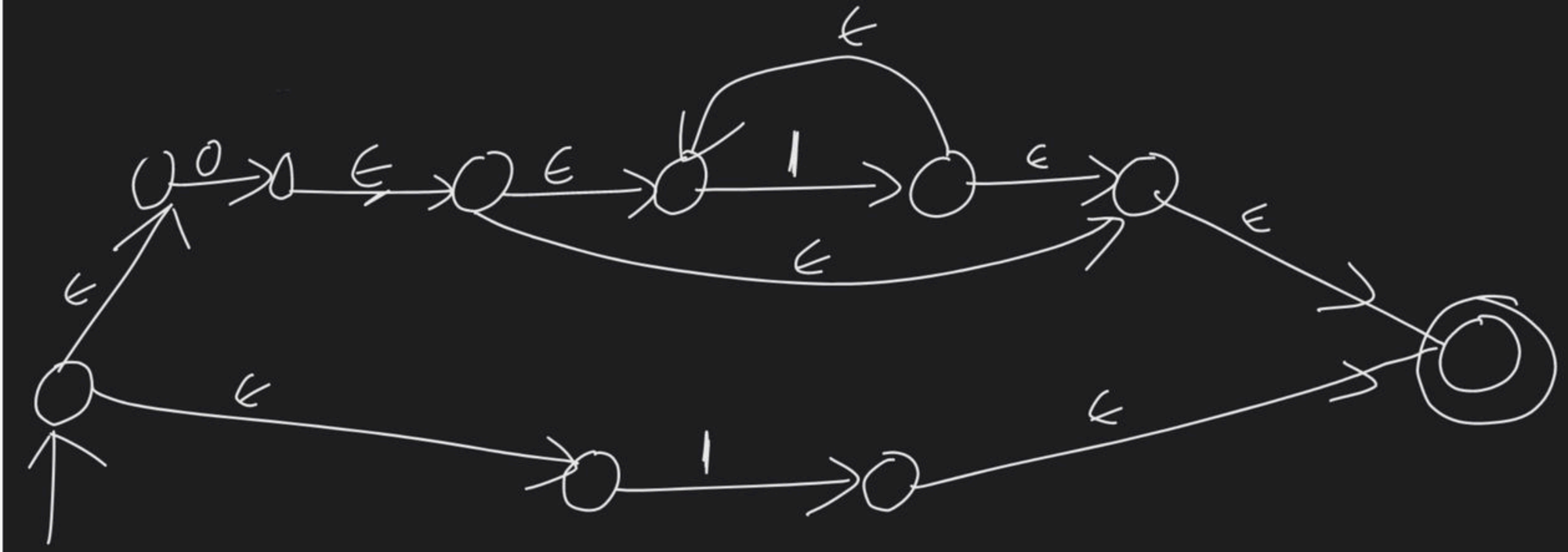
Doubt Clearing Session

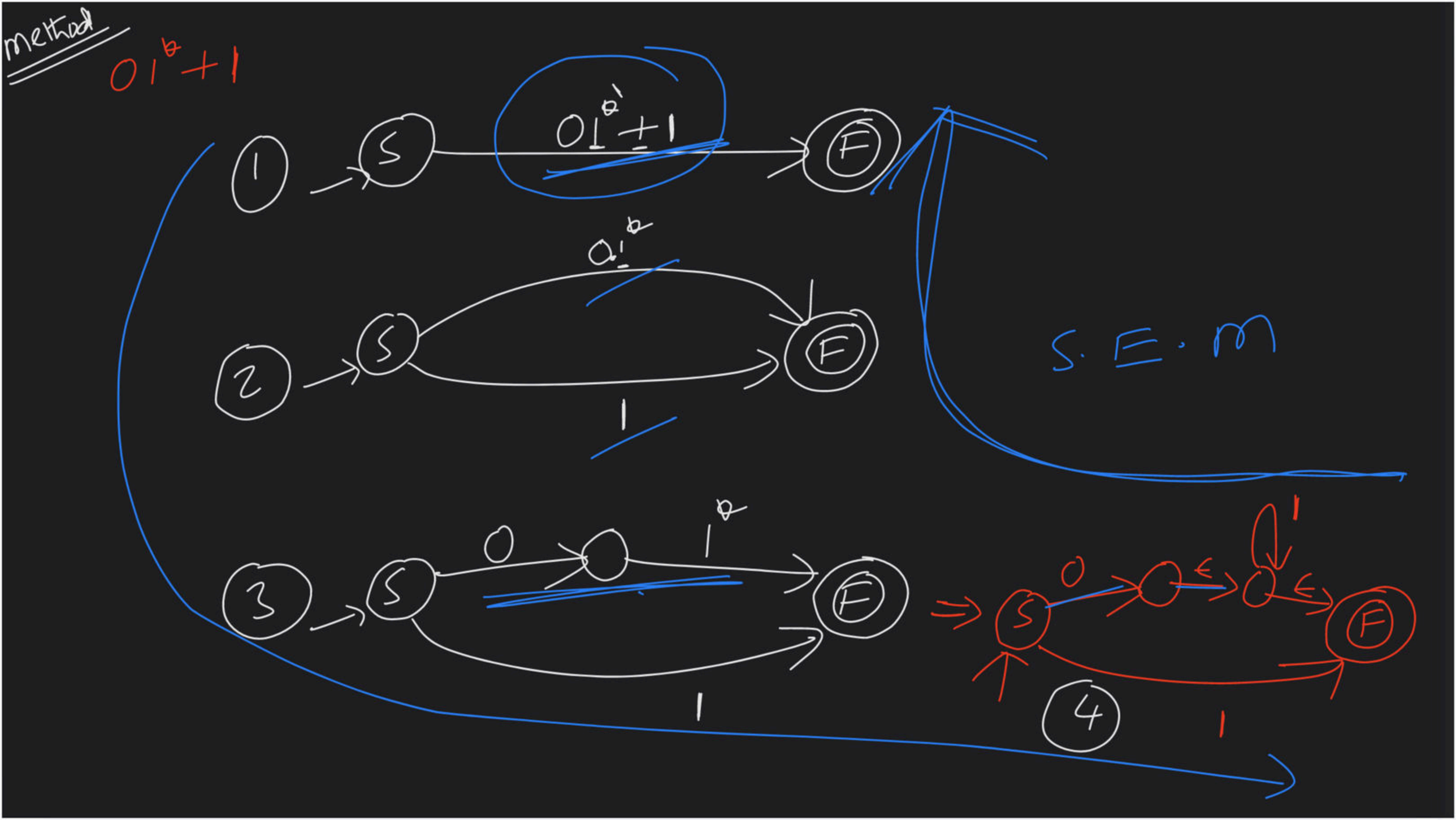
Complete Course on Theory of Computation

Subbarao Lingamgunta • Lesson 24 • Mar 7, 2022

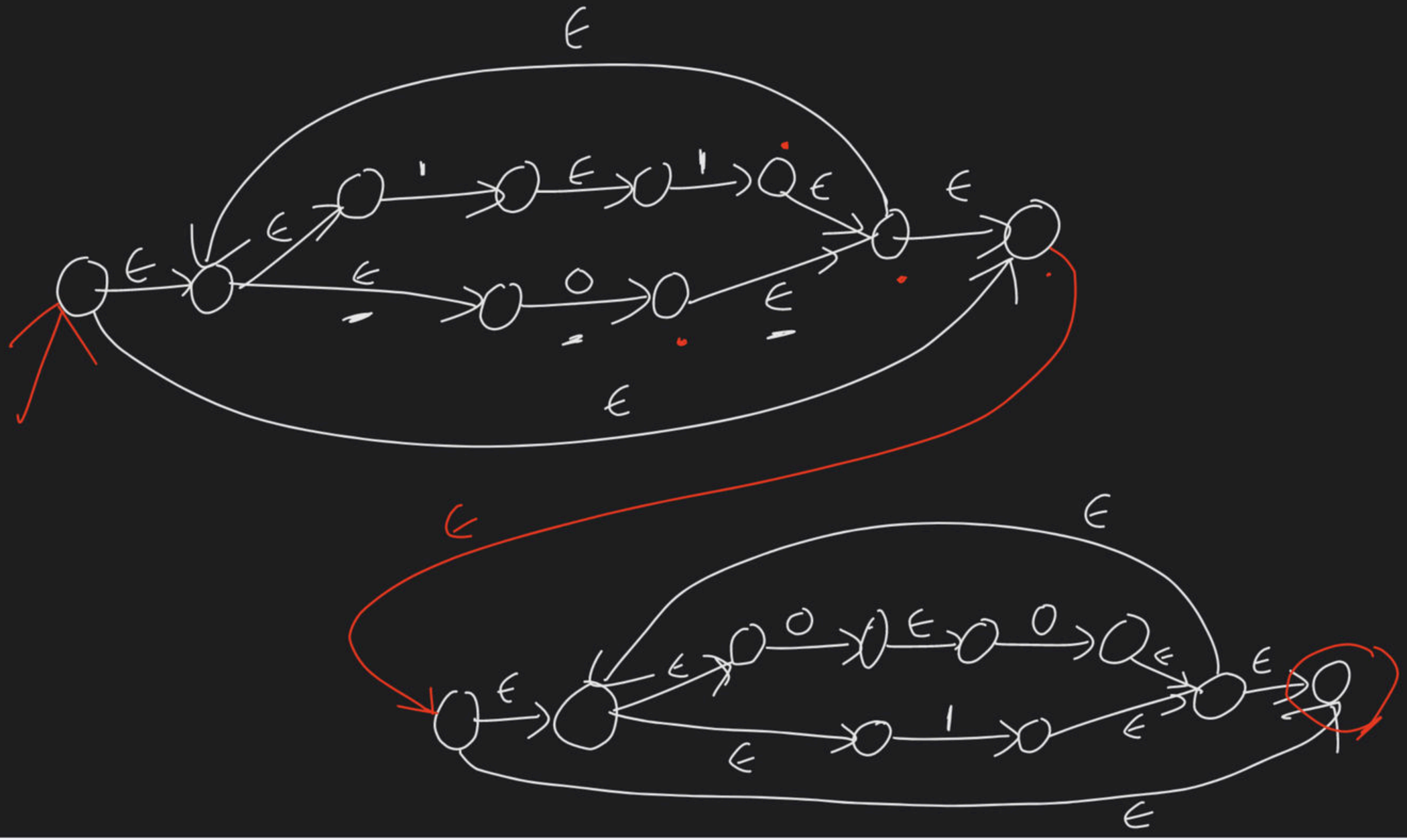
ex

(5) Draw FA to the R.E $\Rightarrow$ $0.1^{\Phi}+1$

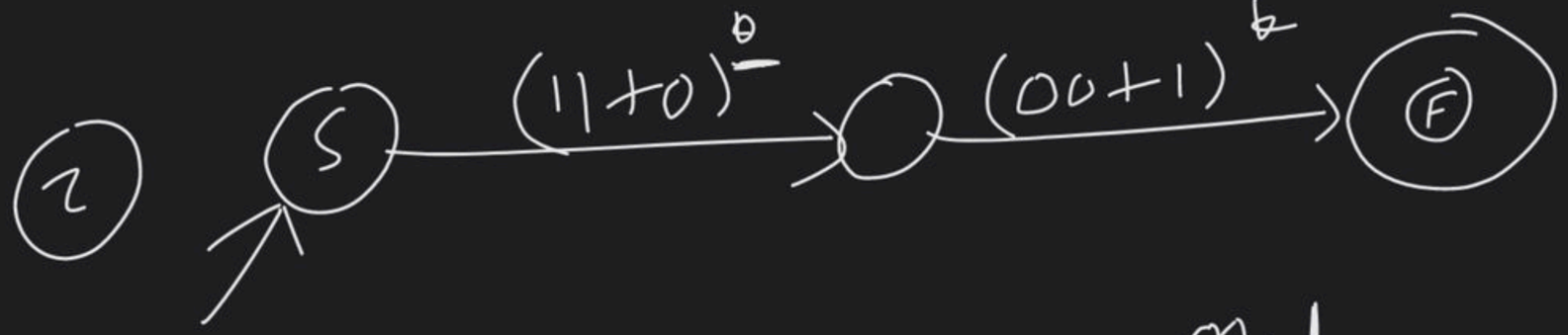


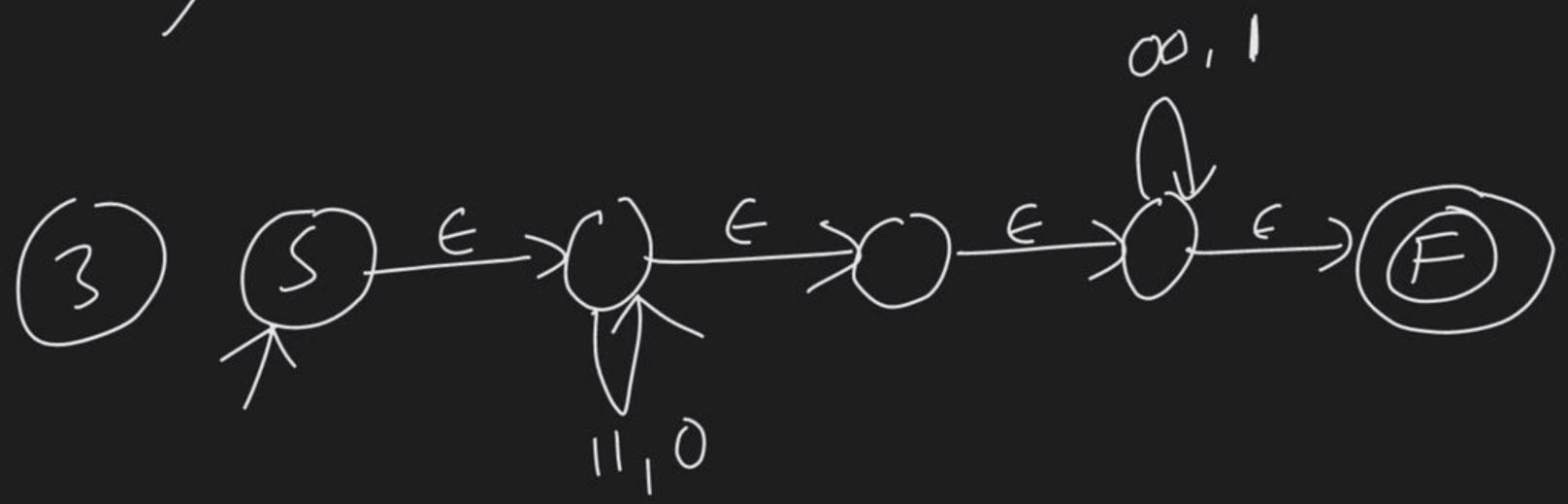

Method
$0 1^b + 1$
1
S
$0 1^b + 1$
F
2
S
$0 1^b$
F
1
S.E.m
3
S
0
1^a
F
1
$\Rightarrow$
S
0
ϵ
ϵ
1
F
4
1

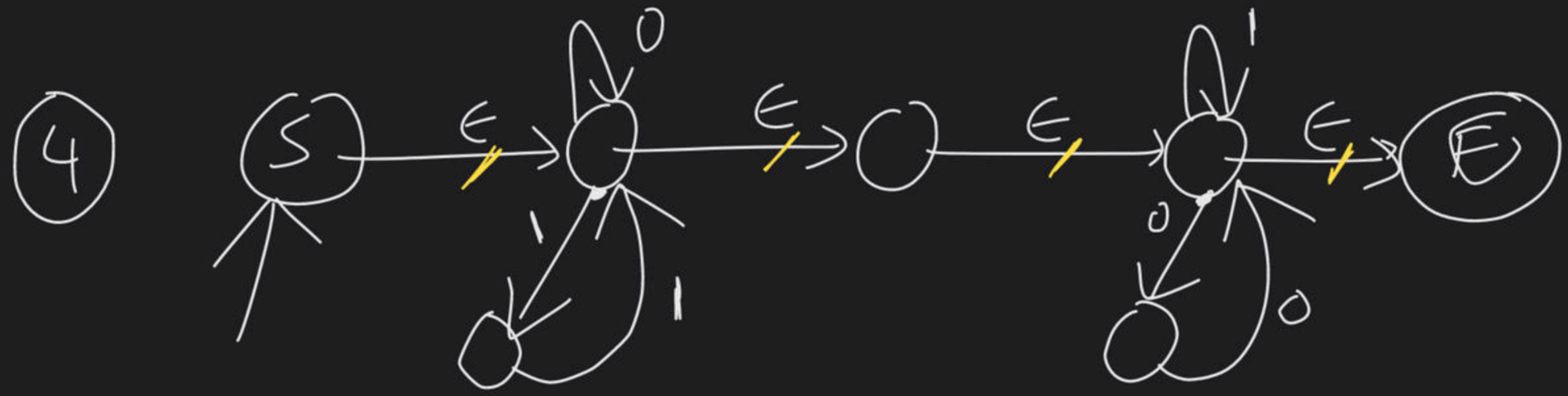
Ex (1.1+0)*.(00+1)*



$\gamma = (11+0)^{a} . (00+1)^{b}$

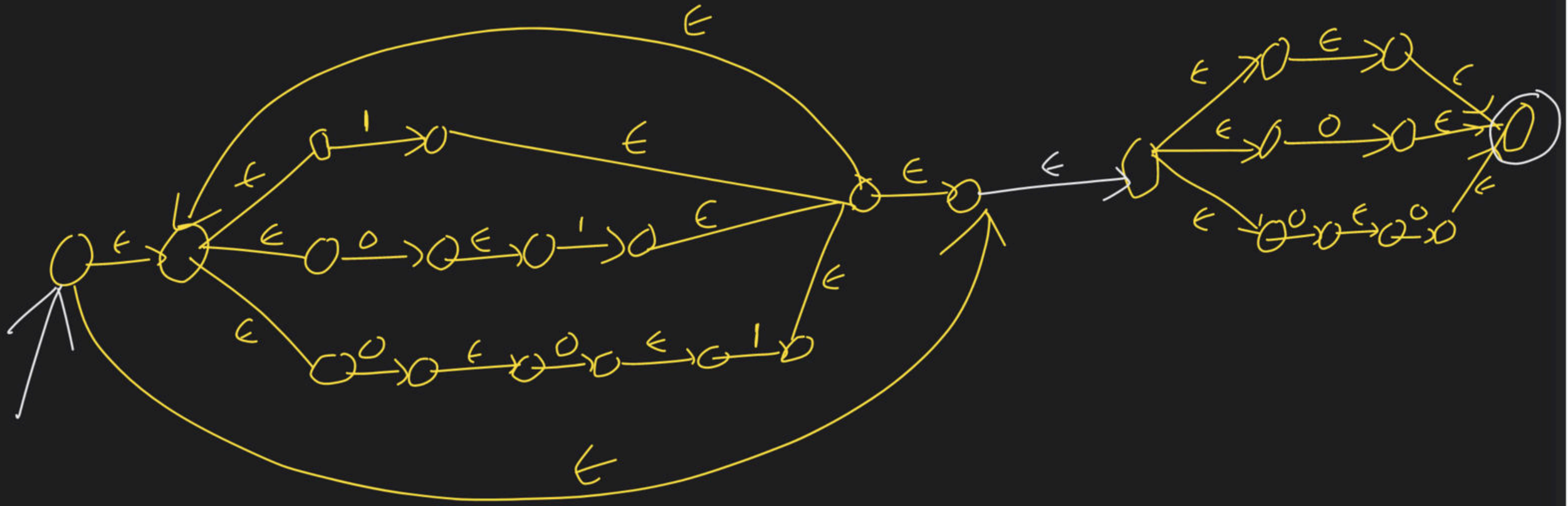




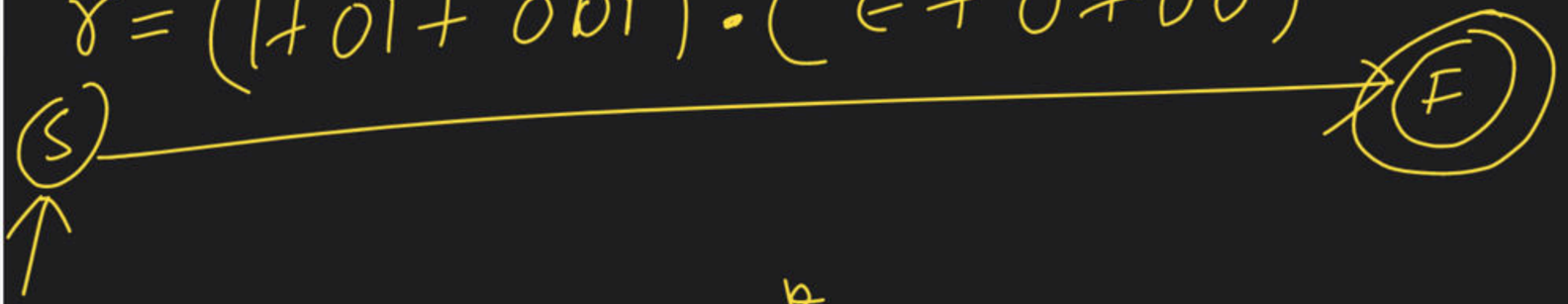

4
S
0
1
1
0
1
0
0
E

ex

$(1+01+001)^*.(\epsilon+0+00)$

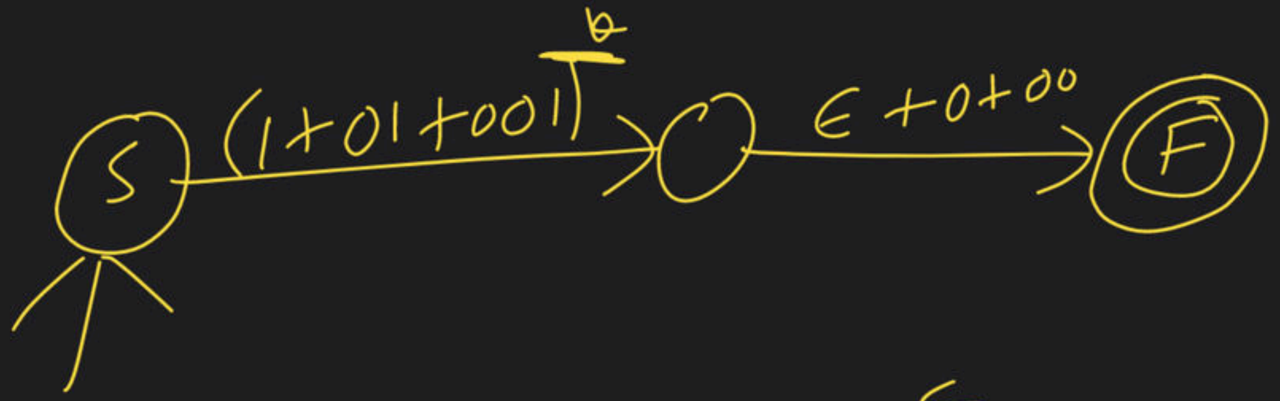


$r = (1+01+001)^{*} \cdot (\epsilon + 0 + 00)$

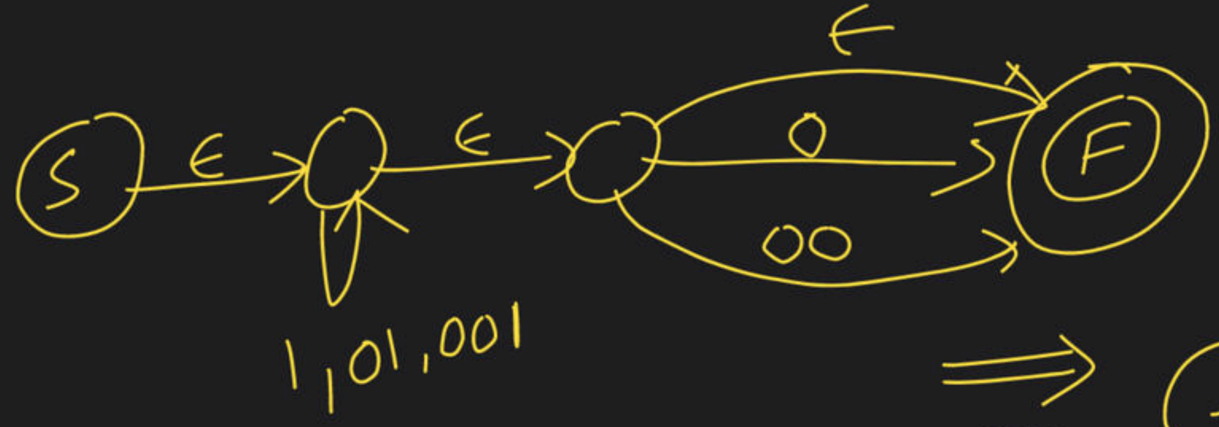


(1)

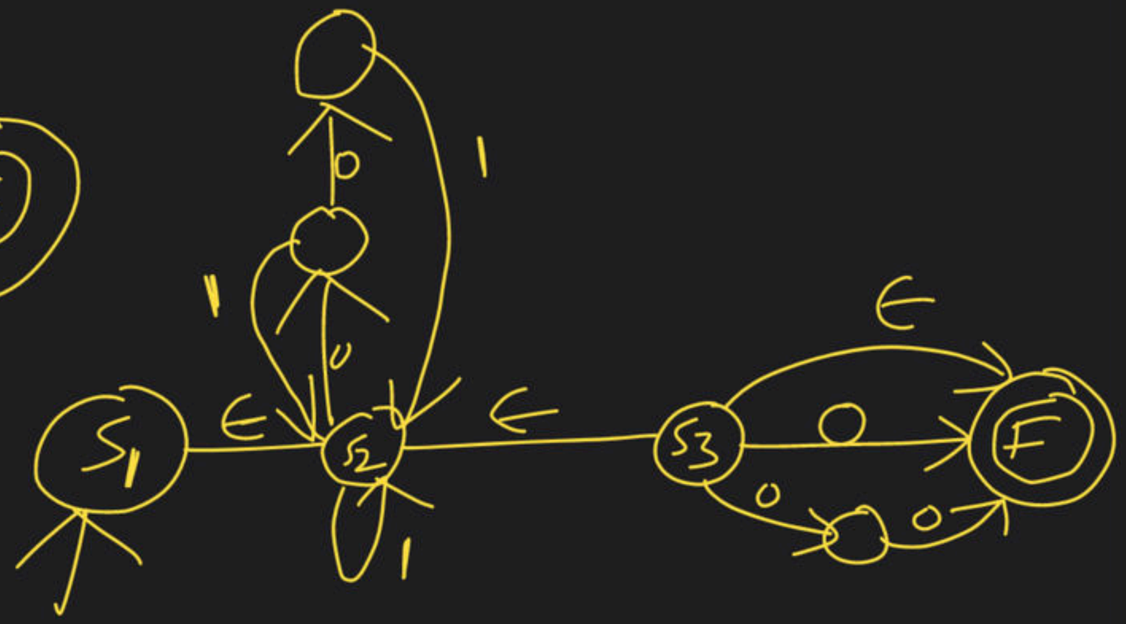
(2)



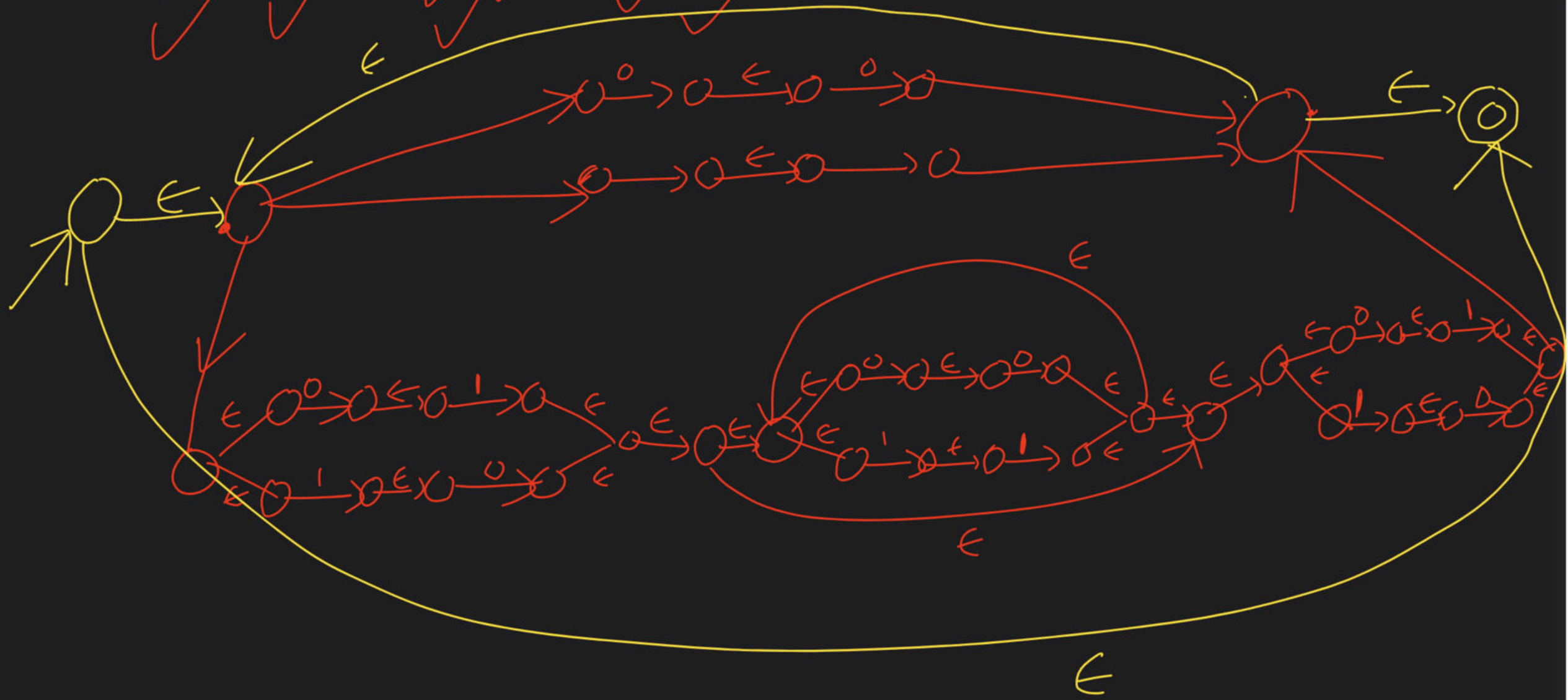
(3)



(4)



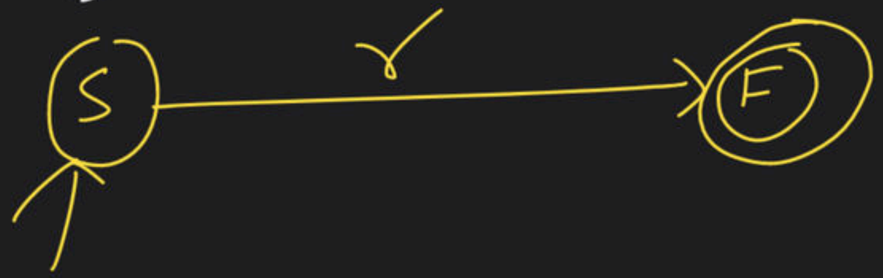
ex $[00 + 11 + (01+10).(00+11)^*(01+10)]^*$



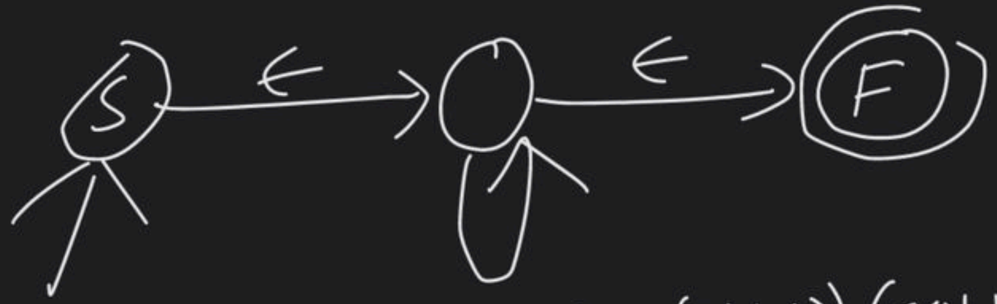
$$\gamma = \left[\underbrace{00}_{a} + \underbrace{11}_{b} + \underbrace{(01+10)(00+11)^{*}(01+10)}_{c} \right]^{*}$$

$$(a+b+c)^{*}$$

1

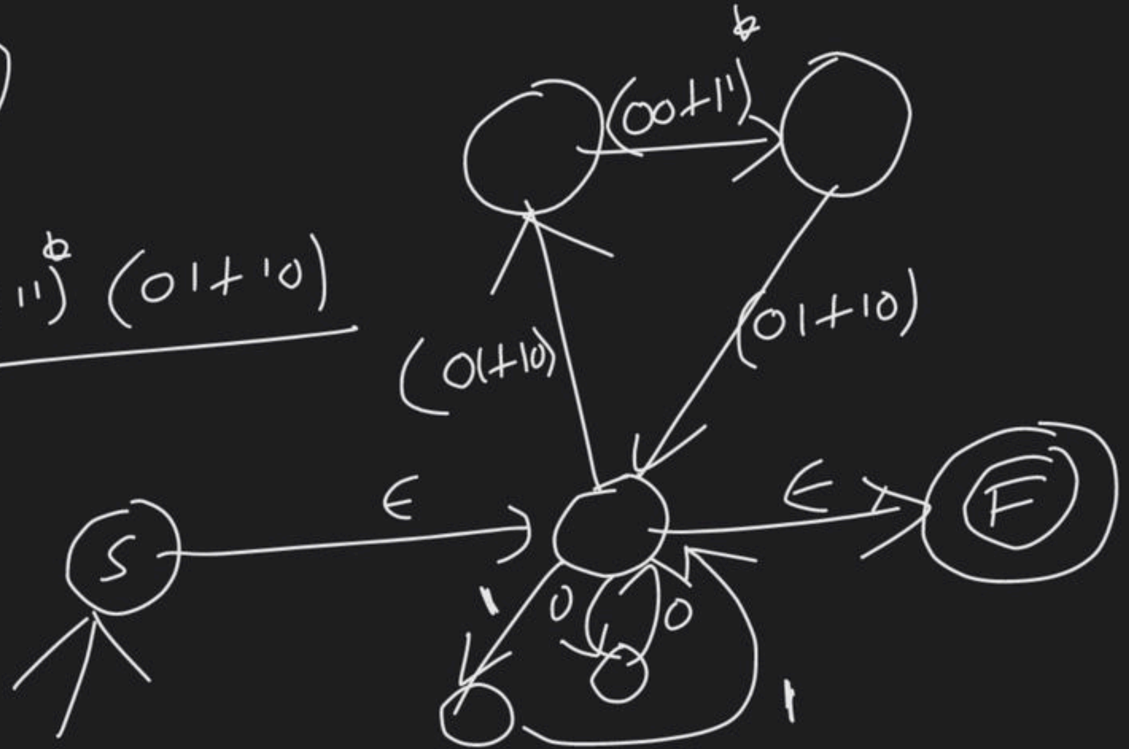


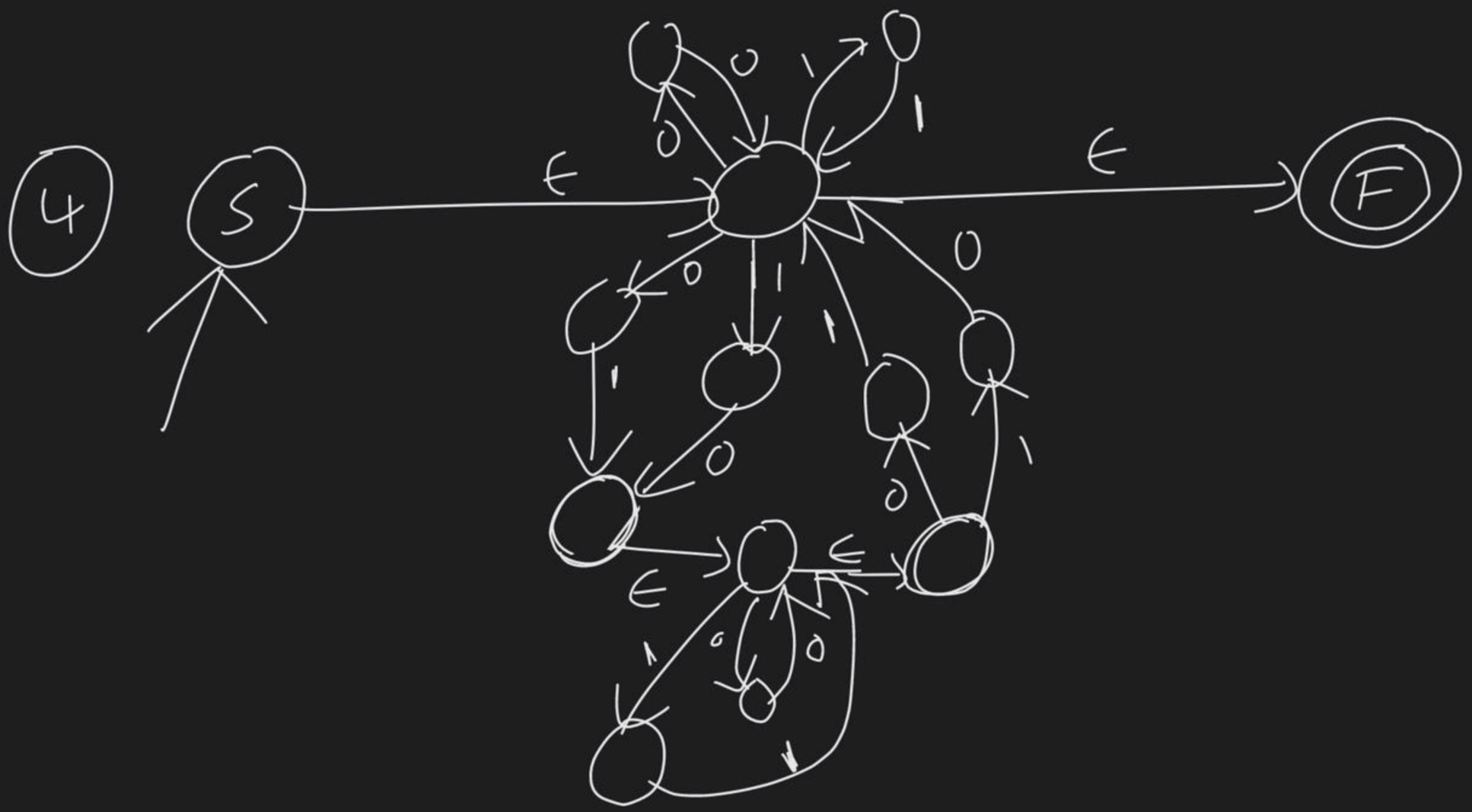
2



$00, 11, (01+10)(00+11)^{*}(01+10)$

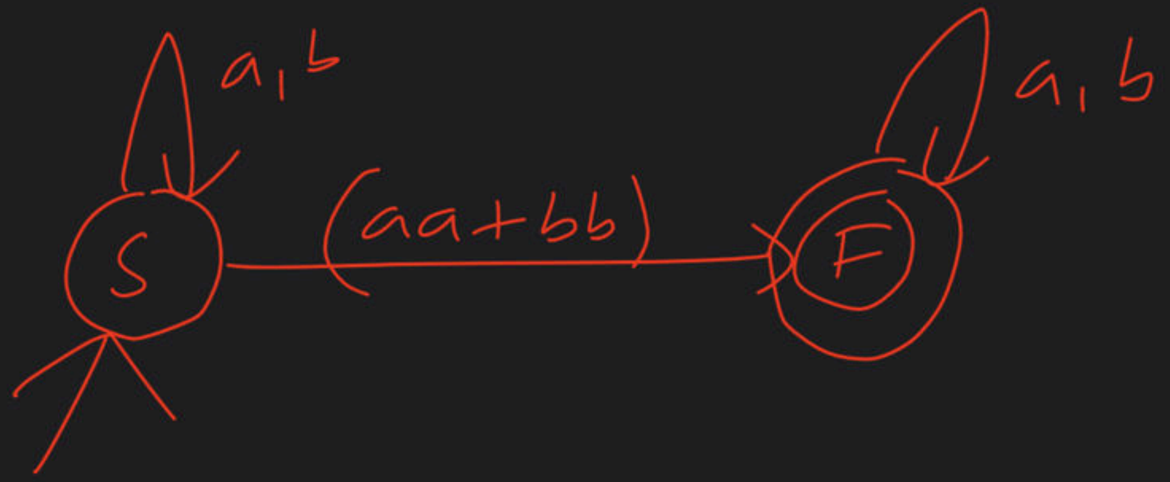
3

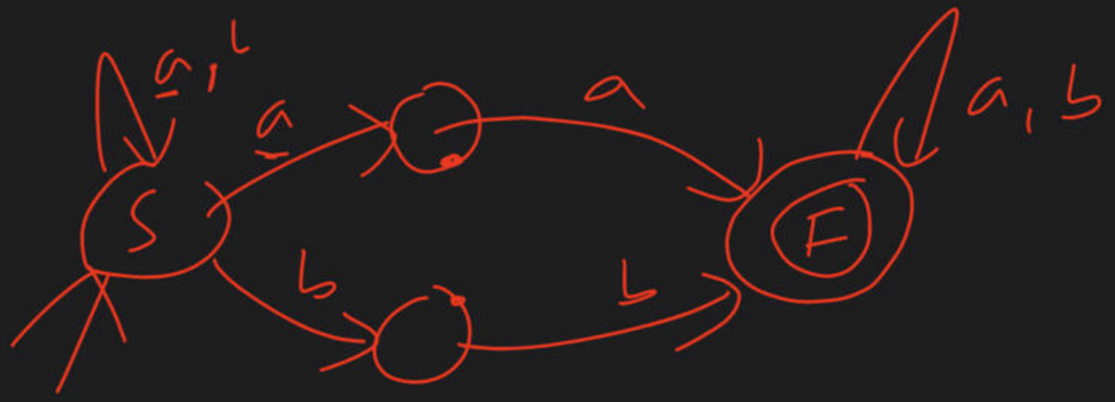



4
S
ϵ
0
1
ϵ
F

Construct ∈-free NFA for the R.E

$$r = (a+b)^*(aa+bb)(a+b)^*$$





Construct ∈-free NFA for its R.E

$r = 10 + (0+11)\,0^*1$

Dedicate Hate

Follow

Thanks All