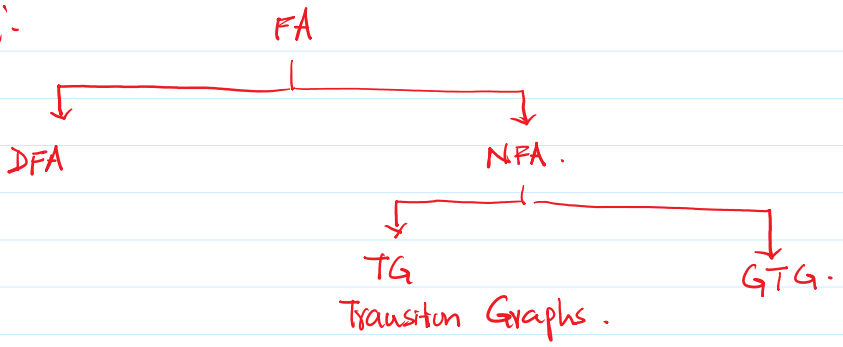
lecture 7:-



Transition Graphs:-

1- Finite States with atleast one initial State. & 0 or more final states.

2- Dead end State is not required. ✓

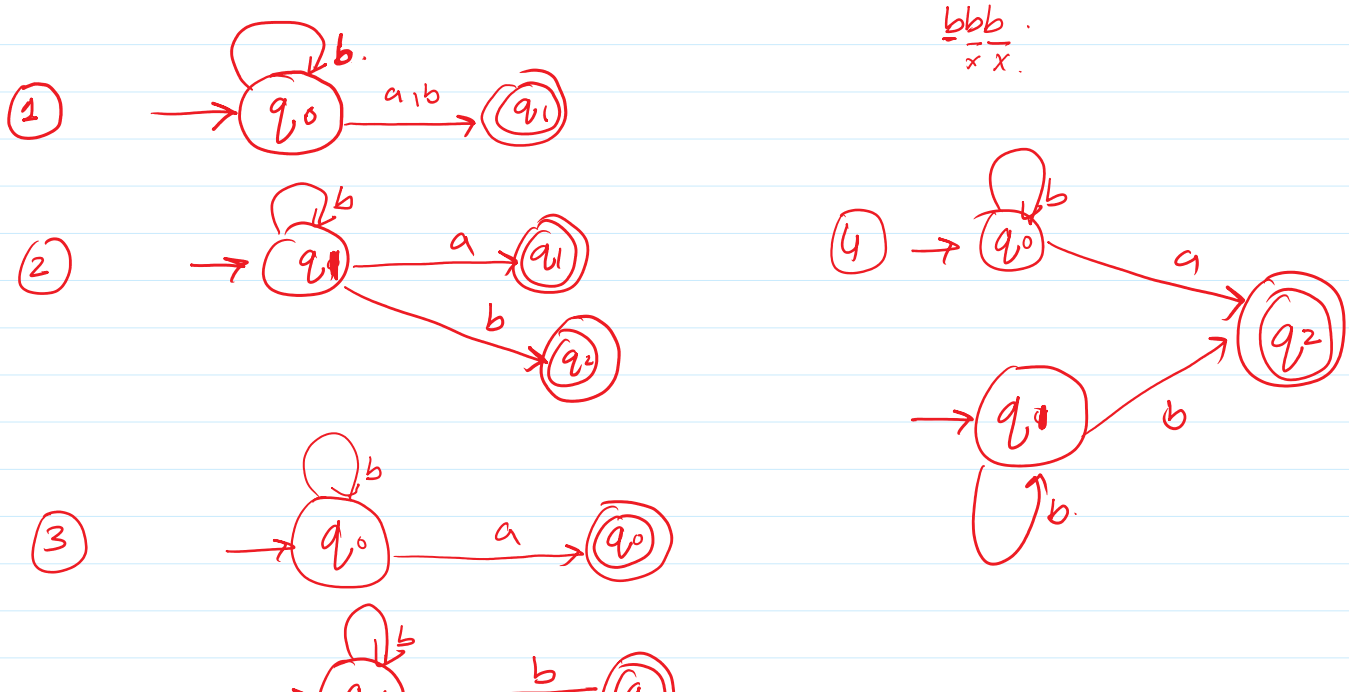
3- One letter can move to more than one State ✓

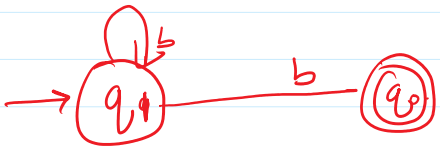
4- Can read more than one alphabet at a time ✓

5- It can accept a Null String. ✓

$b^*(a+b)$. $\Sigma = \{a, b\}$.

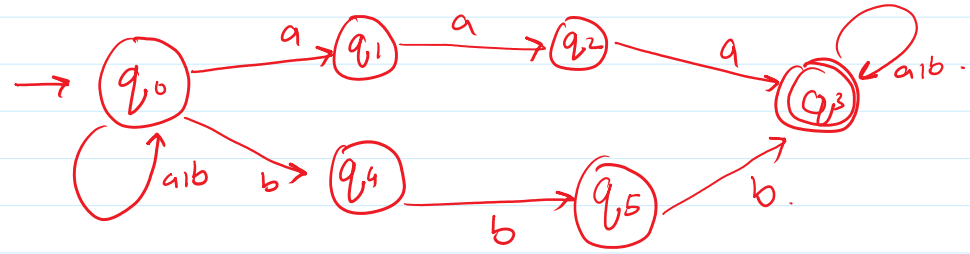
$= \{ a, b, ba, bb, bba, bbb, \dots \}$.



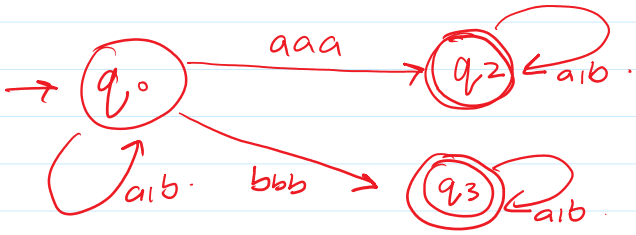


$(a+b)^*(aaa+bbb)(a+b)^* = \{aaa, bbb, ----\}$.

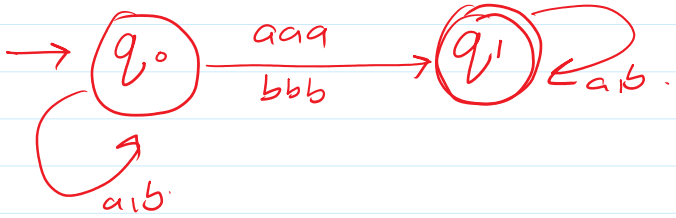
1



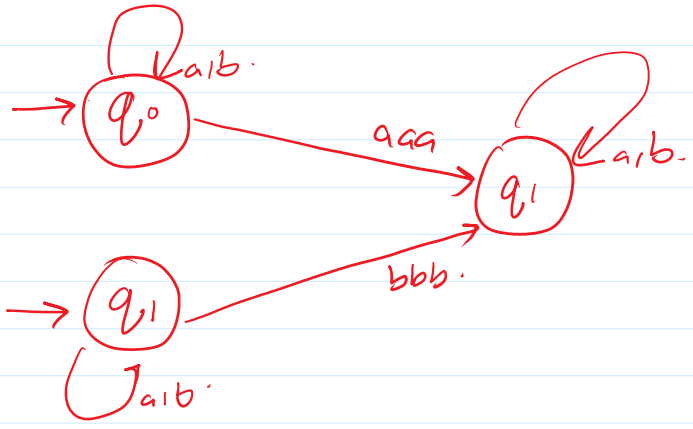
2



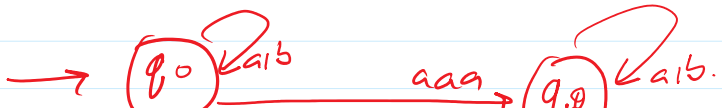
3



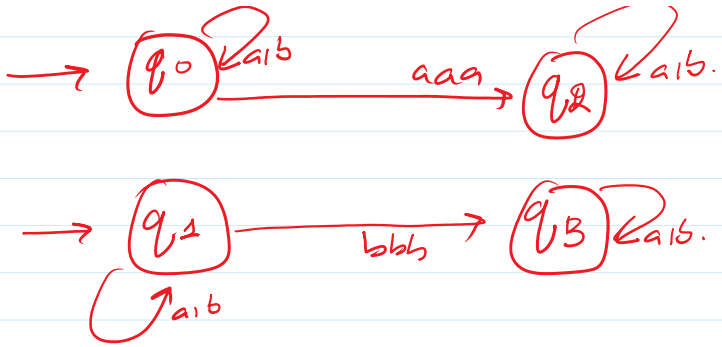
4



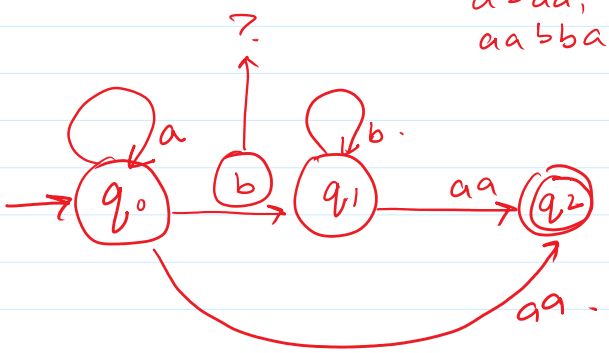
5



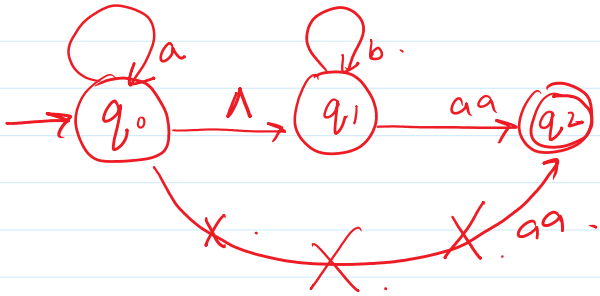
(5)



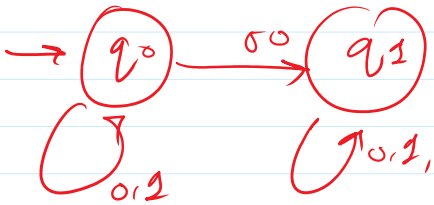
a^*b^*aa = { aa, aaa, aaaa, ...
baa, bbaa, ...
abaa,
aabbaa, --- }.



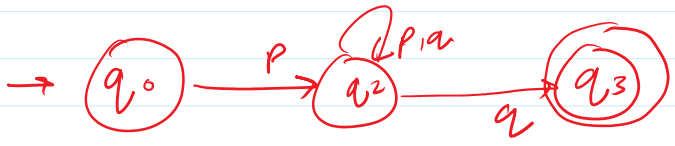
baa.

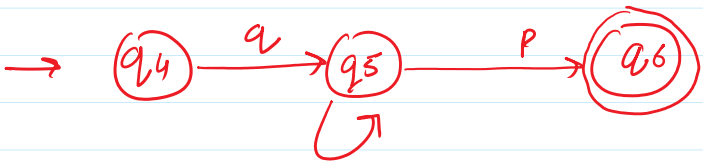


$(0+1)^*00(0+1)^*$ $\Sigma = \{0,1\}$.

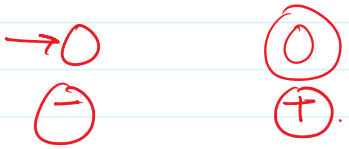


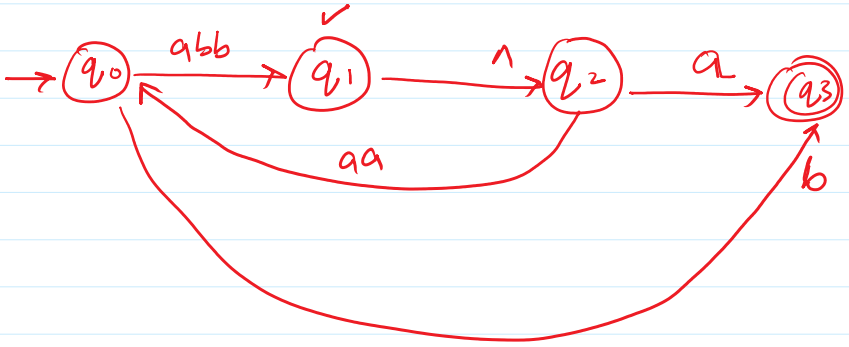
$p(p+q)^*q + q(p+q)^*p$ $\quad \Sigma = \{p, q\}$.





When to accept a string.





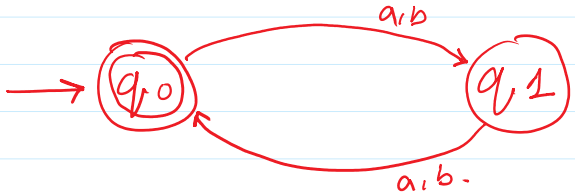
(abb ab) = ?

q1 q3

q2.

Quiz #2. $\quad$ 14- Sep- 2022.

$((a+b)(a+b))^*$. $\quad$ Even language.



TG2 2 initial states. and two final states.