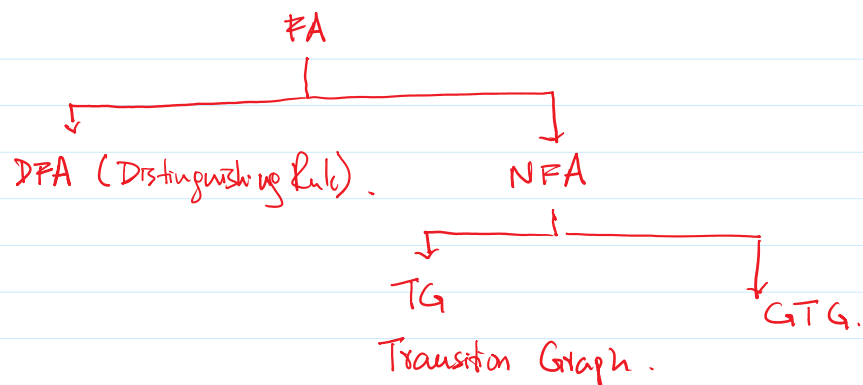
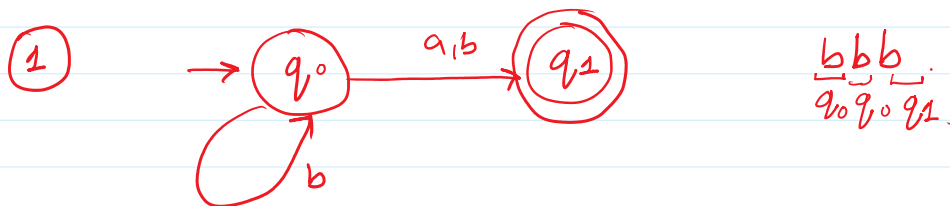


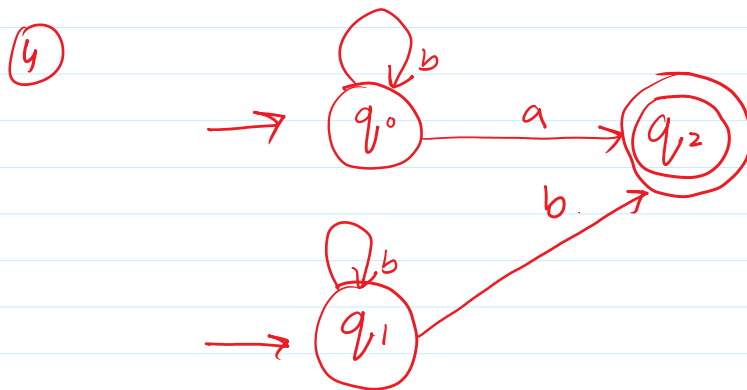
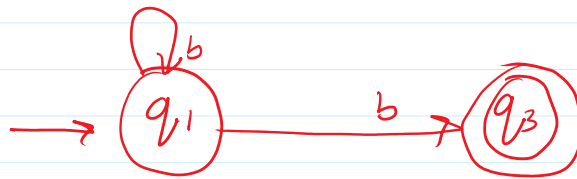
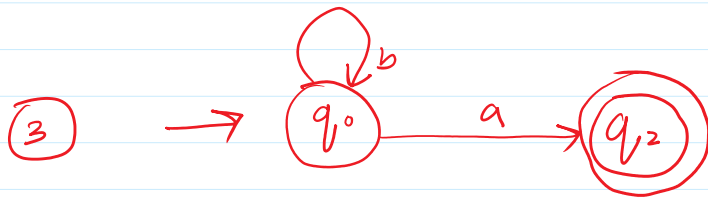
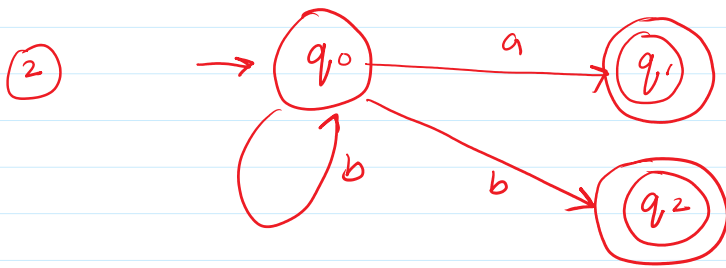
lecture 7



- 1- finite states with atleast one initial state.
- 2- Dead end states are not Required.
- 3- One letter can move to more than one state.
- 4- Can read multiple letters.
- 5- It allows transition for empty string.

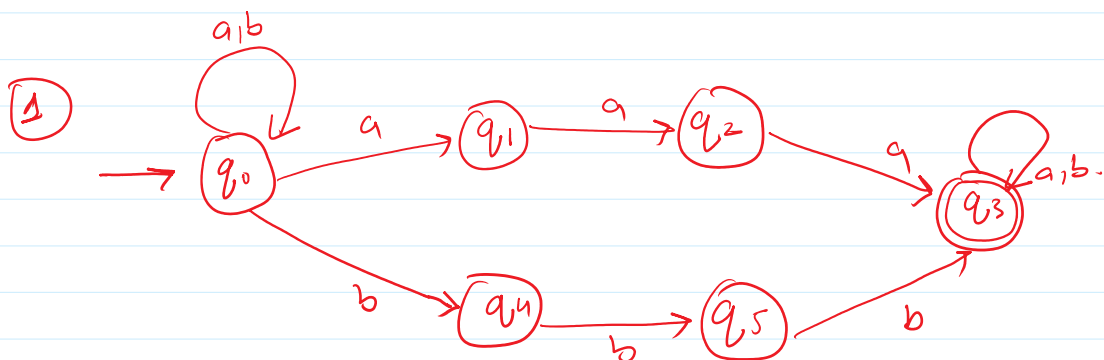
Ex $b^+(a+b)$ $\Sigma = \{a, b\}$
 $= \{ a, b, ba, bb, bba, bbb, bbba, bbbb, \dots \}$

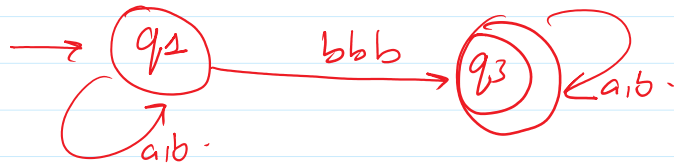
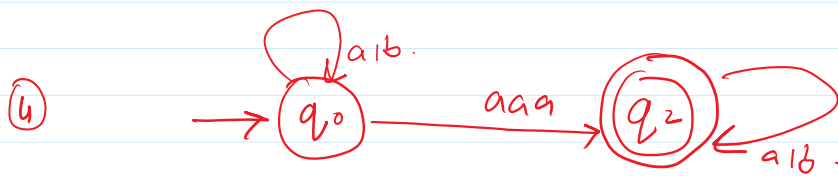
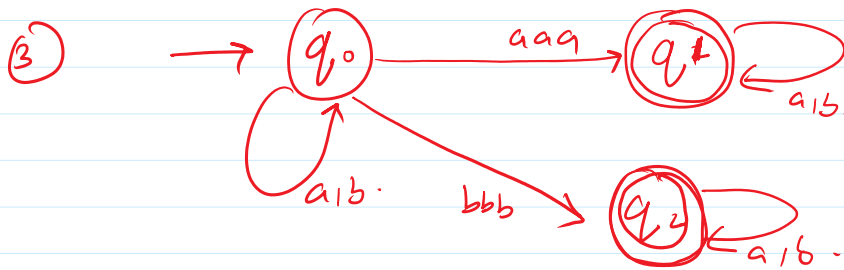
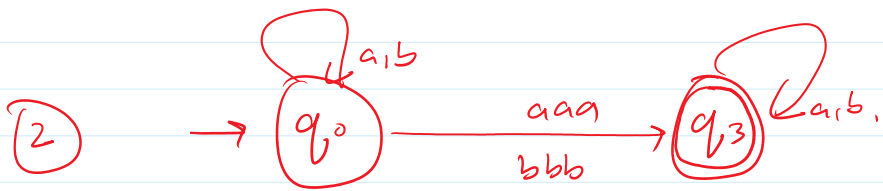




$$(a+b)^* (aaa + bbb) (a+b)^*$$

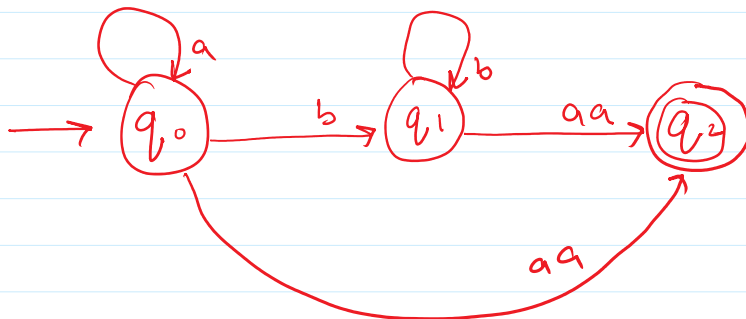
$$= \{ \underline{aaa}, bbb, \underline{aaaa}, baaa, \underline{abbb}, bbbb, \dots \}$$



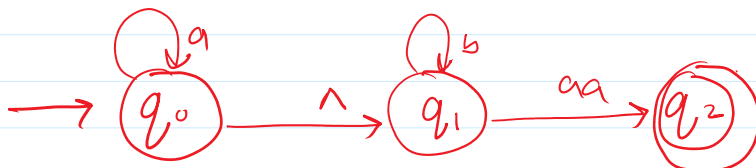


⑤ HW.

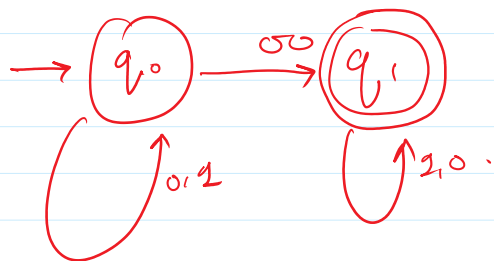
a^*b^*aa = { aa, aaa, baa, aaaa, aabaa, aabbbaa, ... }



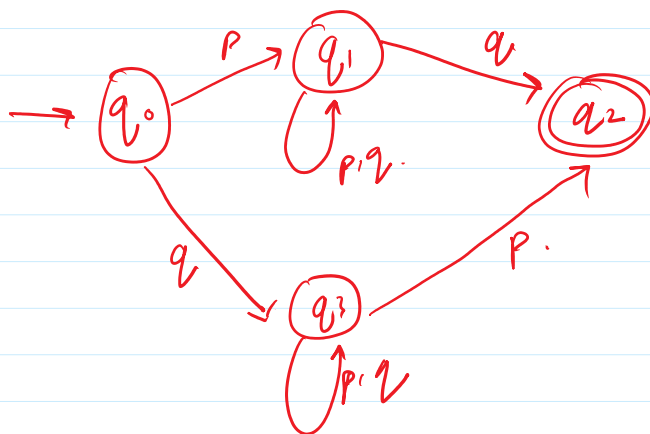
$baa = ?$



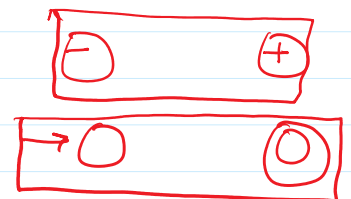
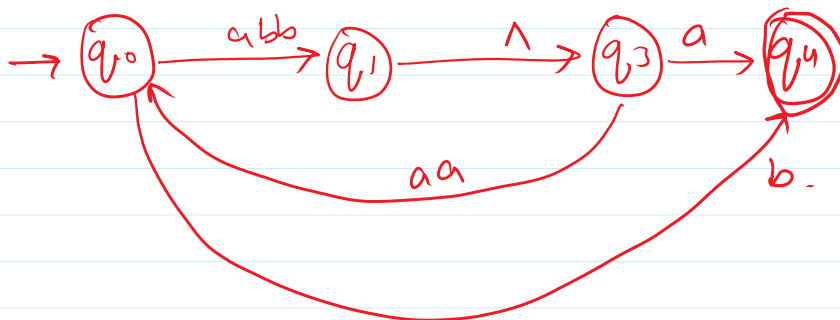
$(0+1)^* 00 (0+1)^*$
 $\Sigma = \{0, 1\}$



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



Most important - point.



$abb a b$
 $\Sigma = \{a, b\}$
 q_1, q_4
 q_3

Quiz #2.

14-SEP-2022.

$(a+b)^*$

Make TG.
Using 2 initial states & two final states.

