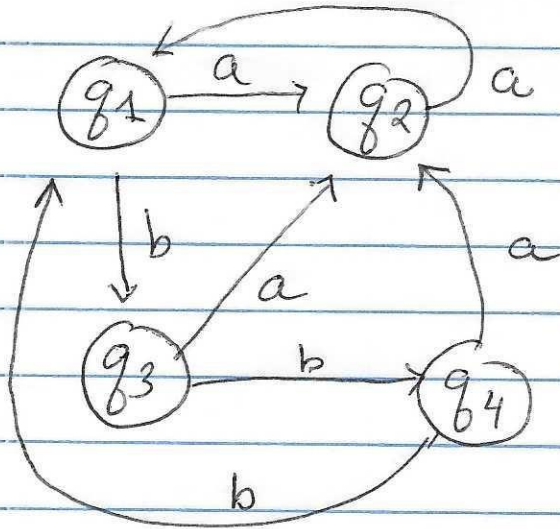


Example of
dfa M to one that is nonrestarting \tilde{M}



$$Q = \{q_1, q_2, q_3, q_4\}$$

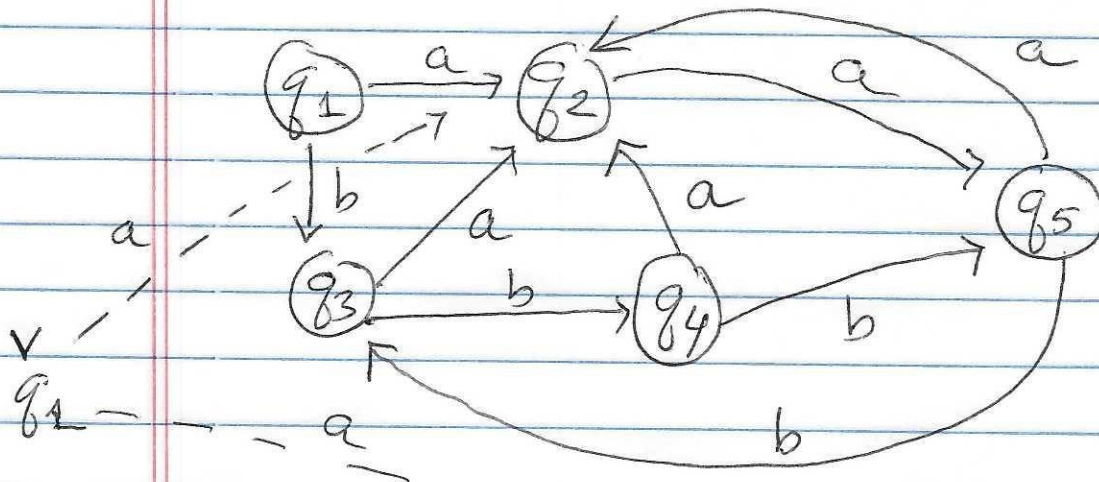
Not
nonrestarting
since

$$\delta(q_2, a) = q_1$$

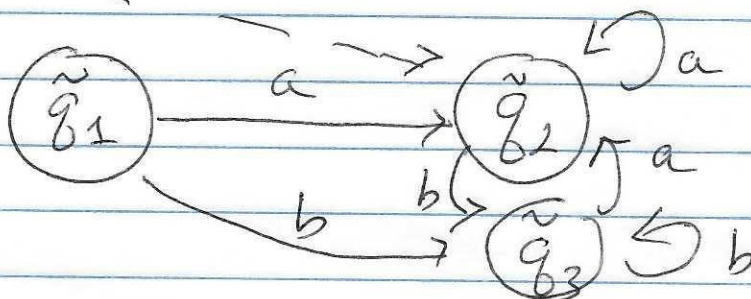
$$\hat{=} \delta(q_4, b) = q_1$$

↓ transform to nonrestarting DFA.

$$\tilde{Q} = \{q_1, q_2, q_3, q_4\} \cup \{q_5\}$$



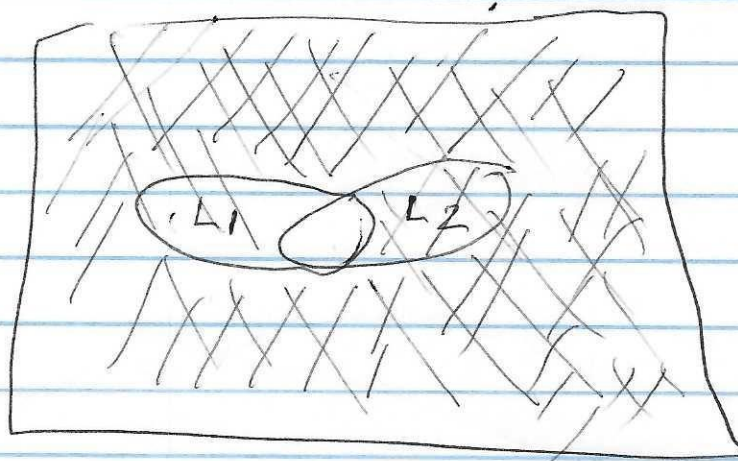
Note
also
have to
do
 $\delta(q_1^v, b)$



De Morgan Identity

L the complement of
 $L = \overline{\overline{L}} = A^* - L$

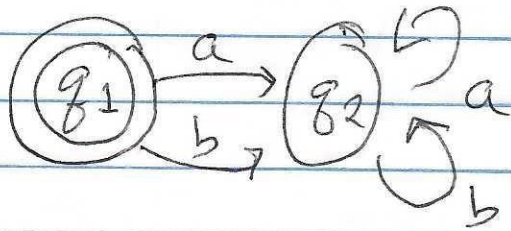
$$L_1 \cap L_2 = \overline{\overline{L_1} \cup \overline{L_2}}$$



Accepting \emptyset ϵ 0 or λ

$$\delta(q_1, a) = \delta(q_2, a)$$

λ
or 0



\emptyset

