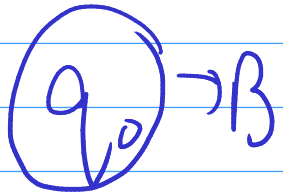
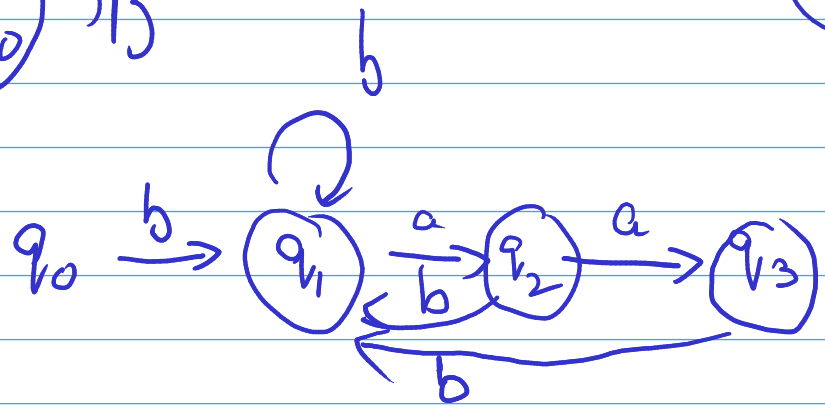
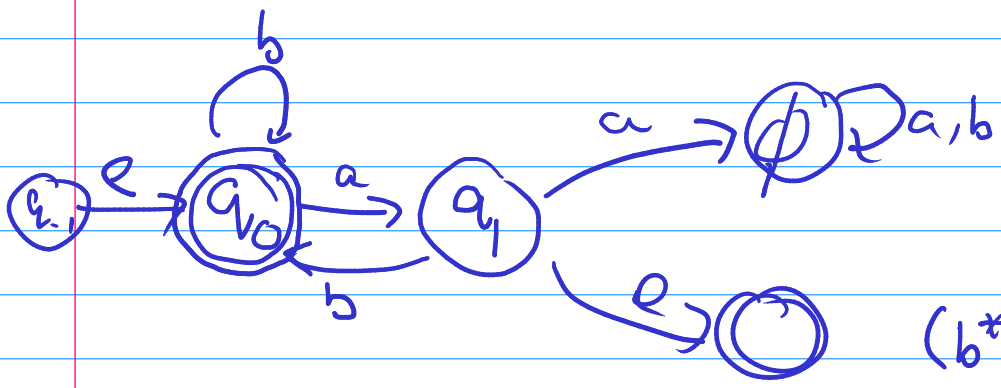
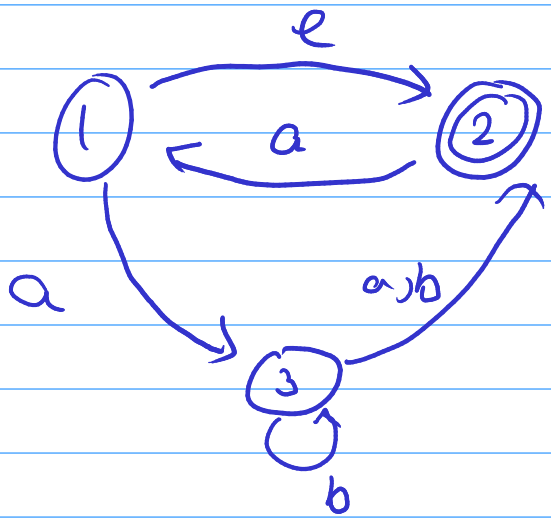


bwaa dfa

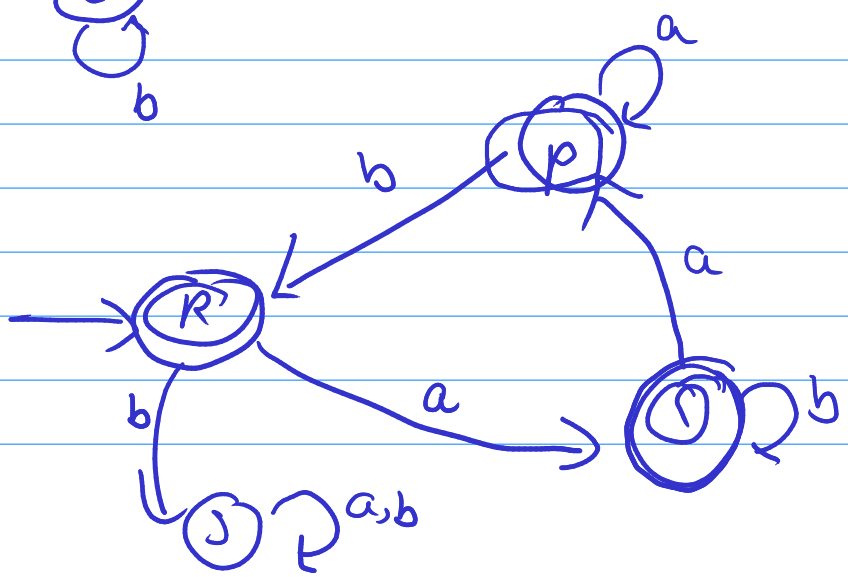




$(b^* ab)^* [\varepsilon \cup b^* a]$



Complete DFA (just convert)



{C} {A, B, D, E, F, G, H}

{C} {B,H} {F, D} {A, E, G}

{C}, {B, H}, {F, D}, {A E} {G}

δ	a	b
q_0	q_1	q_0
q_1	q_0	q_3
q_2	q_4	q_5
q_3	q_4	q_1
q_4	q_2	q_6
q_5	q_6	q_2
q_6	q_5	q_4

$\{q_0, q_2, q_3, q_4\}$

$\{q_1, q_5, q_6\}$

$\{\{q_0\}\{q_1, q_3, q_4\}$

$\{q_1, q_5, q_6\}\} = \Pi_1$

$\{\{q_0\}\{q_2\ q_3\ q_4\}$

$\{q_1, q_5\}\{q_6\}\} = \Pi_2$

$\Pi_3 = \{\{q_0\}\{q_6\}\{q_2, q_3\}\{q_4\}\{q_1, q_5\}\}$

$\Pi_4 = \Pi_3$

$\Pi_4 = \Pi_f \Rightarrow$ by renaming the equivalence classes

$P_0 = \{q_0\}$ $P_1 = \{q_1, q_5\}$ $P_2 = \{q_2, q_3\}$ $P_3 = \{q_4\}$

$P_4 = \{q_6\}$

We construct an equivalent minimal DFA as shown in the following