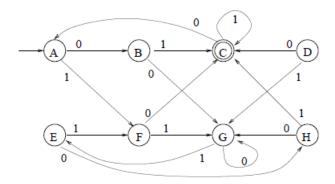
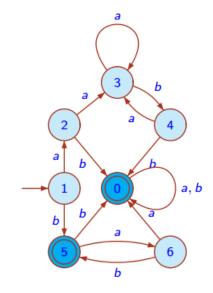
Minimize the following finite automata.

1. Minimize the following DFA



2. Minimize the following DFA



3. Minimize the DFA, M=(Q, $\sum,\ \delta,\ q_0,\ F)$ with

$$\begin{array}{l} Q \!=\! \left\{q_0\,,\ q_1\,,\ q_2\,,\ q_3\,,\ q_4\,,\ q_5\,,\ q_6\,,\ q_7\,\right\} \\ \sum \;=\; \left\{0\,,\;1\right\} \\ F \!=\! \left\{q_3\right\}, \text{ and } \delta \text{ is defined by} \end{array}$$

δ	0	1
q_0	q_1	q_0
q_1	q_0	q_2
q_2	q_3	q_1
q_3	q_3	q_0
q_4	\mathbf{q}_3	\mathbf{q}_5
q_5	q_6	q_4
q_6	q_5	q_6
\mathbf{q}_7	q_6	q_3