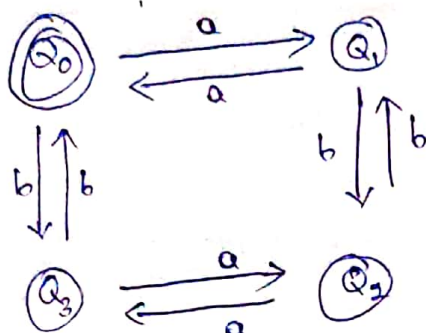


Program - 1



DFA $M = (Q, \Sigma, \delta, q_0, F)$

Q = Set of all states = $\{Q_0, Q_1, Q_2, Q_3\}$

Σ = Input alphabet = $\{a, b\}$

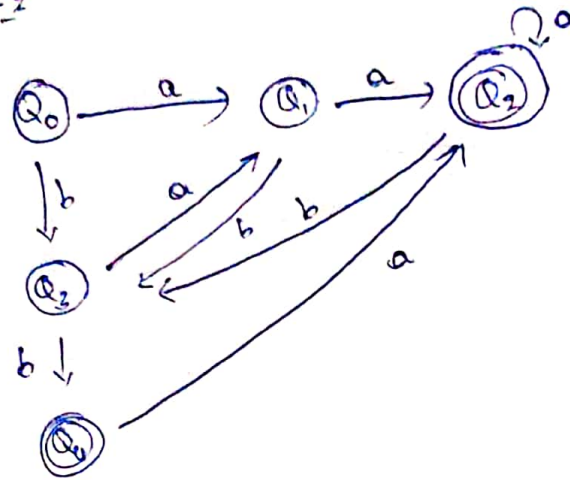
Start state is Q_0

F = Set of all final states
 $= \{Q_0\}$

Strings	Output
ab	Not accepted
aab	Not accepted
aabb	Accepted
abababab	Accepted
abcef	Not accepted Invalid Token

Program-2

2)



DFA = $(Q, \Sigma, \delta, Q_0, F)$

$Q = \{Q_0, Q_1, Q_2, Q_3, Q_4\}$

$\Sigma = \{a, b\}$

Start states = Q_0

Final state = $\{Q_2, Q_4\}$

String	Output
abab	Not accepted
abab	Not accepted
bbaa	Accepted
bbaabb	Accepted
abcdef	Invalid Token