Week-1

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CSE-C

Program-1

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

Where

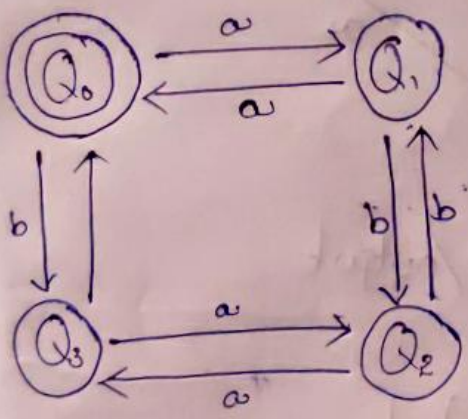
Q = Set of all States = $\{Q_0, Q_1, Q_2, Q_3\}$

Σ = Input Alphabet = $\{a, b\}$

Start state is Q_0

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

And the transition states are defined in Diagram



Sample Input/Output:-

1. aabb
   String accepted
2. ababa
   String not accepted
3. abc
   Invalid token

PROGRAM-2

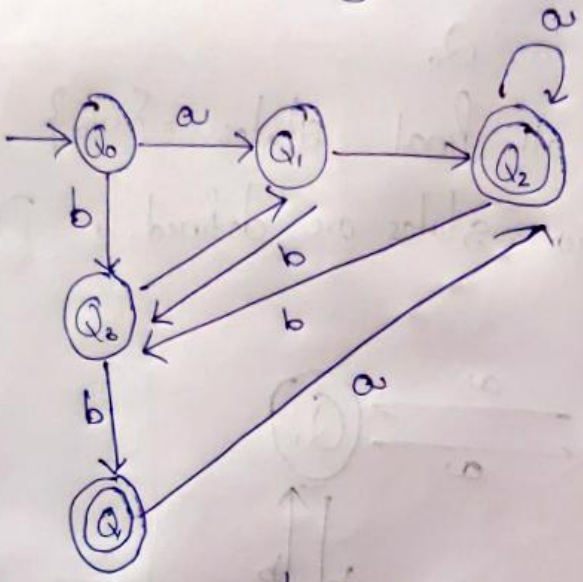
DFA = $(Q, \Sigma, \delta, Q_0, F)$

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

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

Start state = Q_0

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



Sample Input/output

1. abb

   String Accepted

2. abab

   String Not Accepted

3. a q a

   Invalid token.