

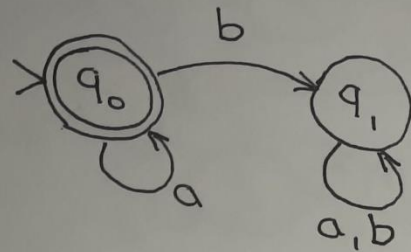
Module 02

Finite State Machines

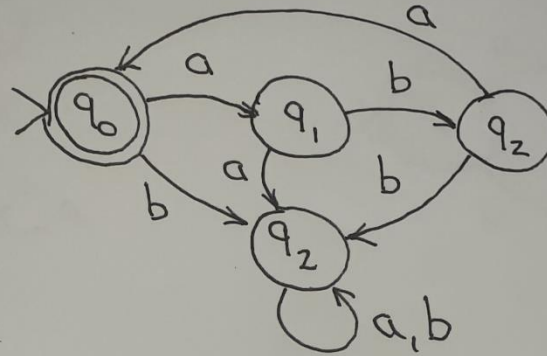
Practice Problem Solutions

CS 332 Organization of Programming Languages
Embry-Riddle Aeronautical University
Daytona Beach, FL

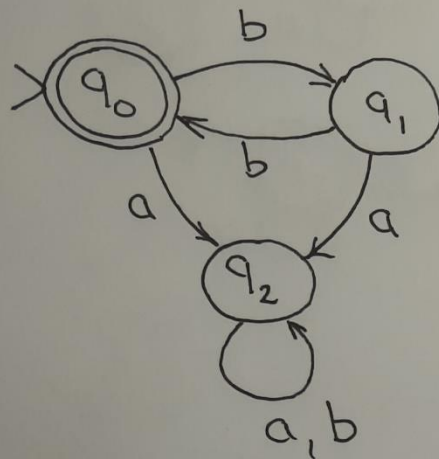
$$L_1 = a^*$$



$$L_2 = (aba)^*$$

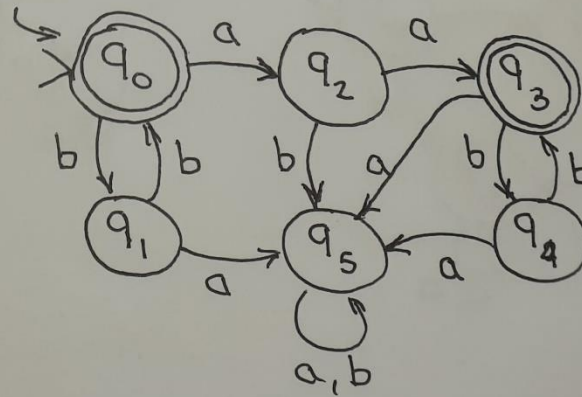


$$L_3 = (bb)^*$$

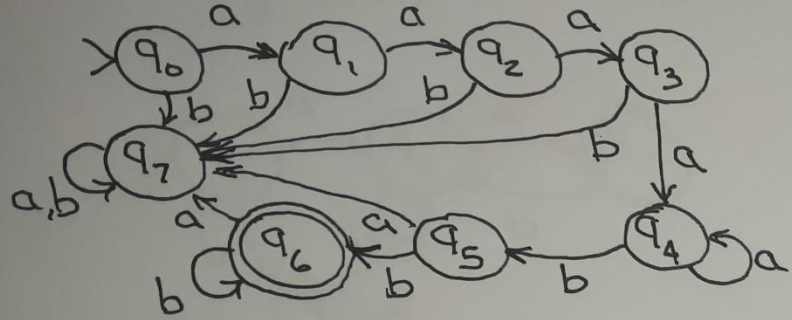


$$L_4 = (bb)^* aa (bb)^*$$

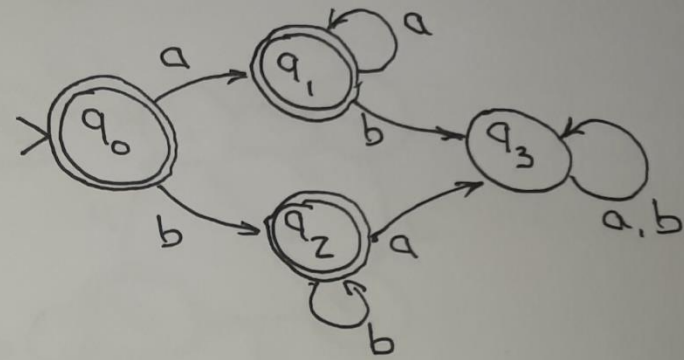
oops! should not be a final state.



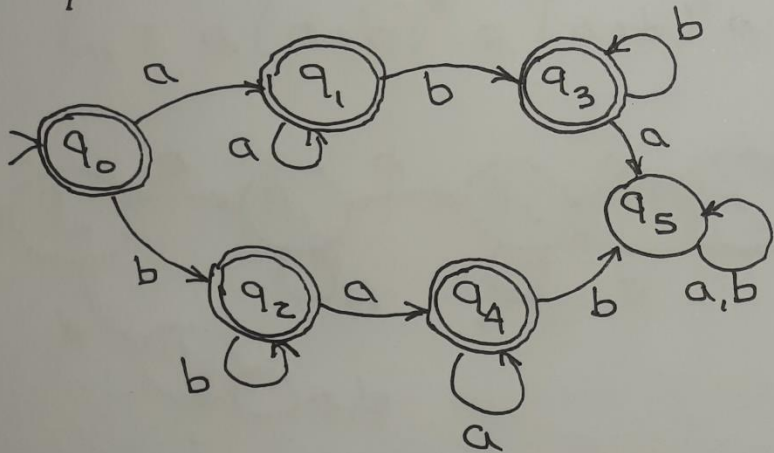
$$L_5 = aaaaaa^*b^*bb$$



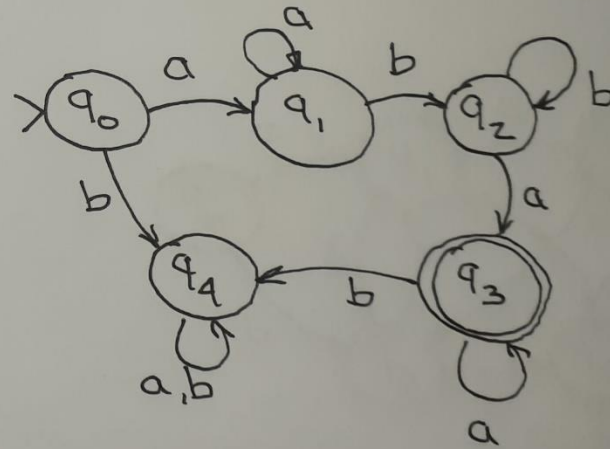
$$L_6 = a^* + b^*$$



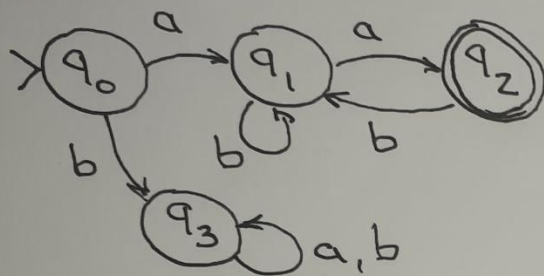
$$L_7 = a^*b^* + b^*a^*$$



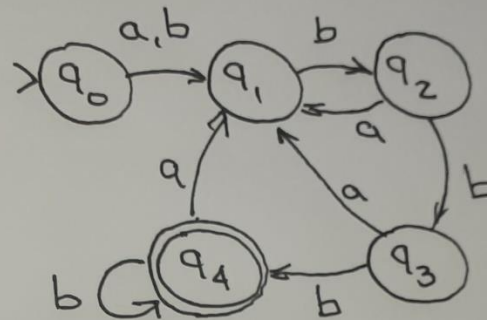
$$L_8 = a^+b^+a^+$$



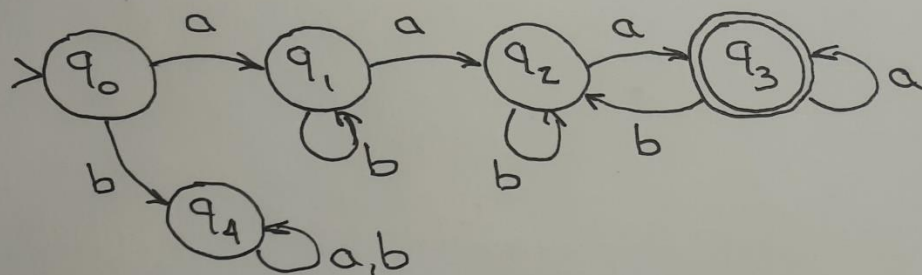
$$L_9 = a(a+b)^*a$$



$$L_{10} = (a+b)^+ bbb$$



$$L_{11} = a(a+b)^*a(a+b)^*a$$



$$L_{12} = (a+b)^*aa + (a+b)^*bb$$

