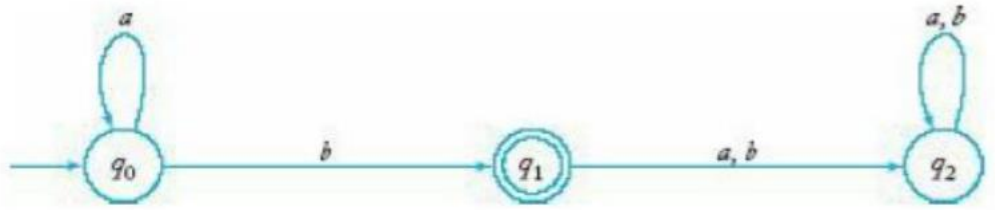
Construct a DFA that accepts the complement of a Language

For the language L, construct a DFA (say M) has to be completely defined including the trap/dead states.

Note that the trap/dead state(s) have a particular importance now as they would become one of the final states of the complement, M'

For example, the DFA, M, below accepts all strings represented by the regular expression a*b. Note that q1 is the final state and q2 is the trap state.



The DFA, M', that accepts the complement of the above language is

q0 and q2 are the final states.

Note that if the trap/dead state q2 was not defined, M' would not be a complete and accurate description for the complement of L.