Chapter 5 Exercises

Part I. 8, 23, converting from NFA to DFA

8. Build a DFA that accepts the described language: The set of strings over {a, b} that do not contain the substring *aaa*.

23. Let M be the nondeterministic finite automaton
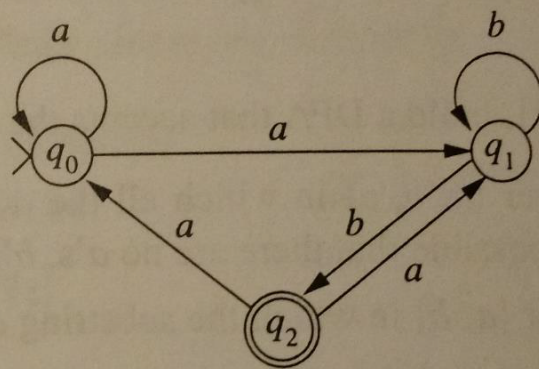
a) Construct the transition table of M.

b) Trace all computations of the string *aaabb* in M.

Hint:

- **Exercise 8: design a DFA to accept the complement of the language. Then interchange the accepting and non-accepting states.**

- **Make sure that you build a DFA for Exercise 8. Not an NFA.**

- **For Exercise 23 (b), you need to draw the computation tree for string aaabb, as we learned in class.**