

Algorithms

Find regular expressions for the following set of strings over the alphabet $\{0,1\}$:

1. All strings that start with 100 and end with 101.
2. All strings that have a 1 in every third letter.
3. All strings that have zeroes only in pairs, but not in triples, quadruples, etc.
4. All strings that start with 100 and end with 001.

Why is the following not a DFA. Convert it to a DFA.



