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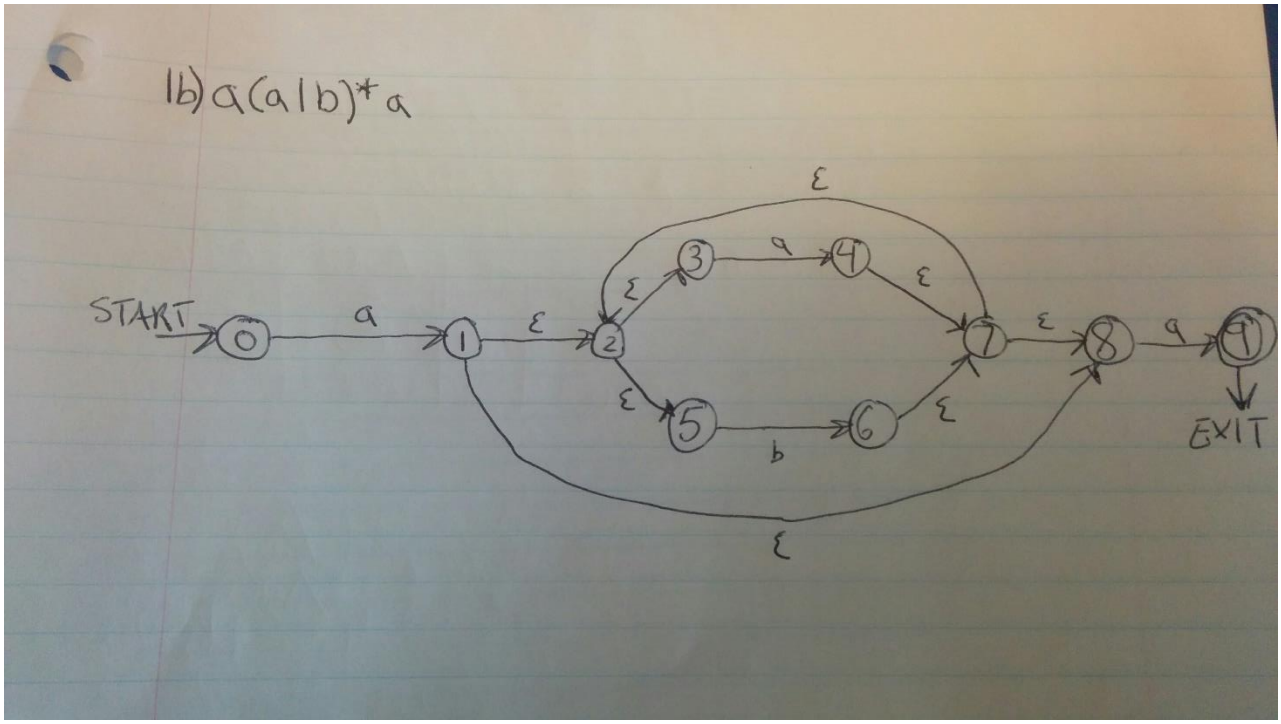
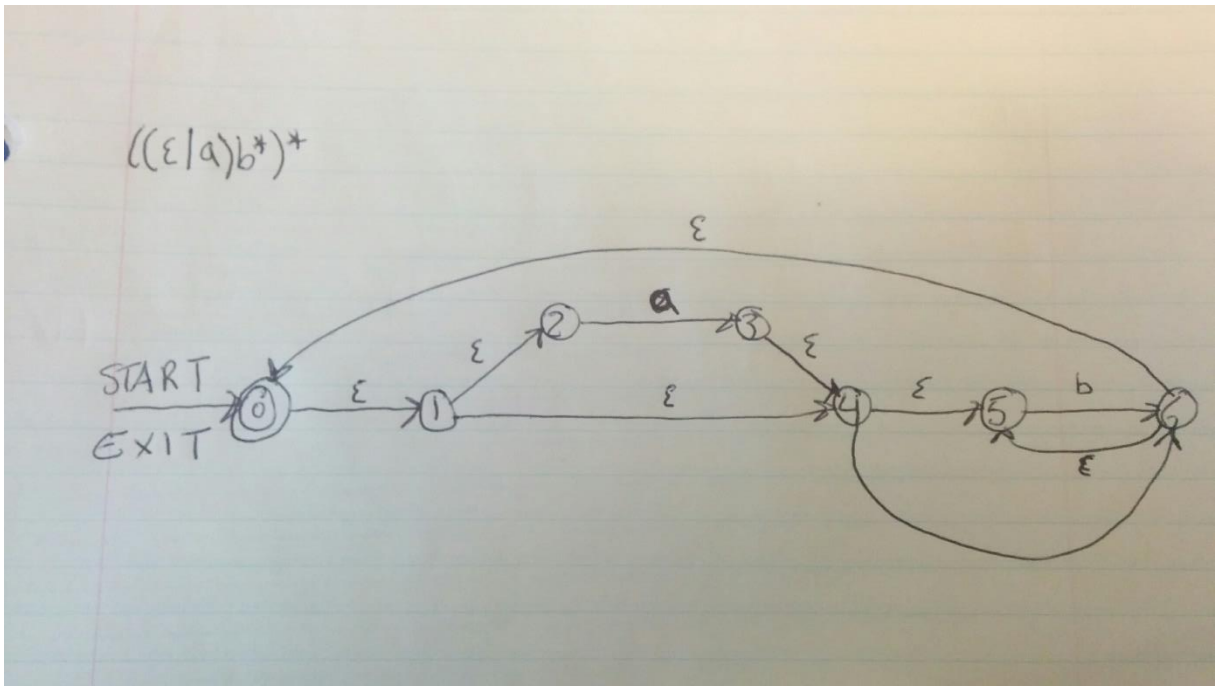
1a) a(a|b)*a - denotes the set of all strings that start with ‘a’ followed by zero or more ‘a’ or ‘b’ characters and also end with ‘a’. {aa, aaa, aba, abba, ...}

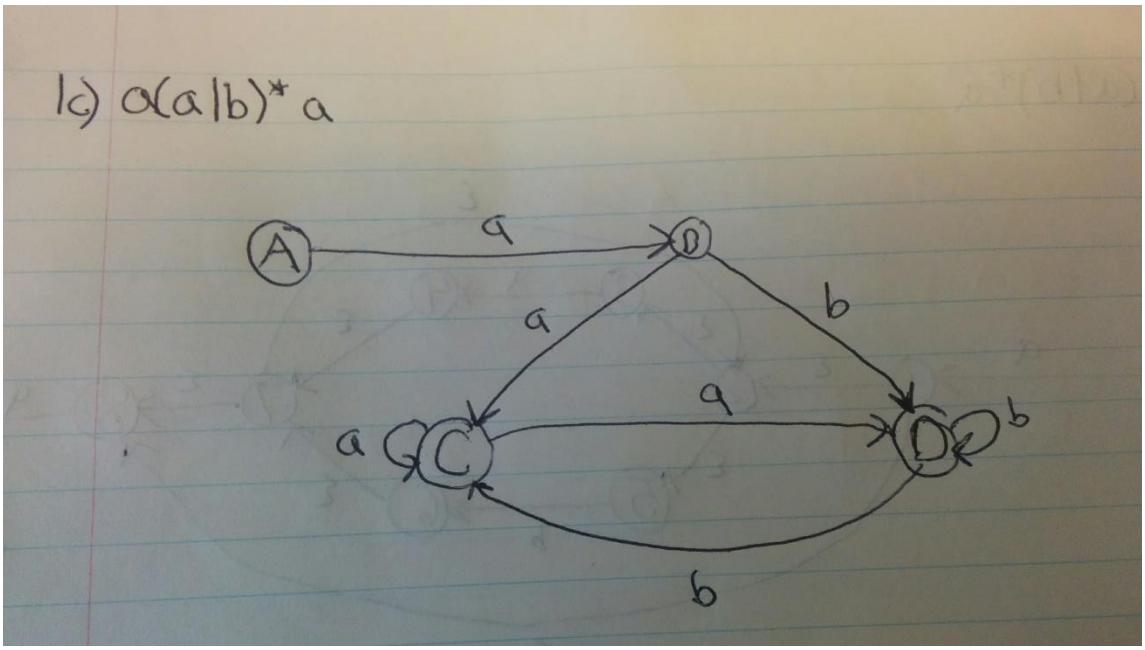
((ε|a)b*)* - denotes the set of all strings that are made up of sub-strings containing zero or more ‘b’ characters, starting with an optional ‘a’ character. {ε, b, ab, bb, abb, bbb, ...}

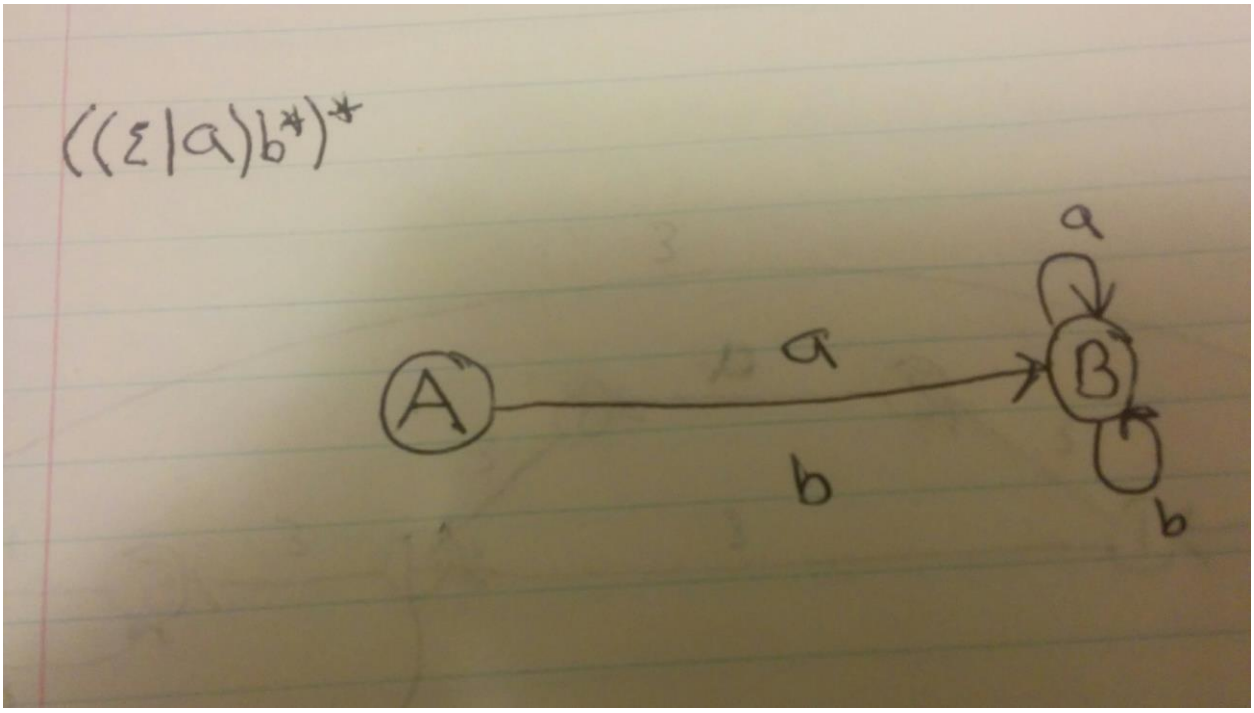
1b)





1c)





2) Language given by s* {ε, s, ss, sss, ssss, ... }

There are n-1 prefixes of s

There are n-1 suffixes of s

There are infinite strings with s as a prefix

3) (?i)(select | from | where | like)