

Program Template for Assignment Three

1. Regular expressions

$AB \rightarrow a a^* b$

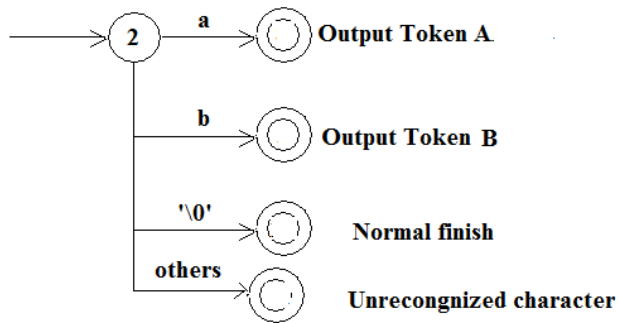
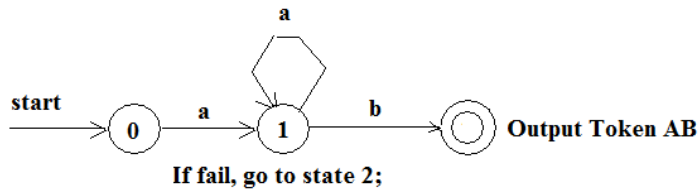
$A \rightarrow a$

$B \rightarrow b$

In the above regular expression, when processing strings, Token AB has the highest priority. So given the string "aaaabbbb", we should have the following tokens:

AB B B B

2. NFA (this is only for your reference; the solution can be different).



3. See the program attached for the implementation (a simplified version in which we only consider the case the buffer is big enough to hold all data from the source file).