

Lab Two

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CRAFTING A COMPILER

3.3

Write regular expressions that define the strings recognized by the FAs in figure 3.33 on page 107.

$ab^*a|ba^*b$

$(a(bc|c)d)^+$

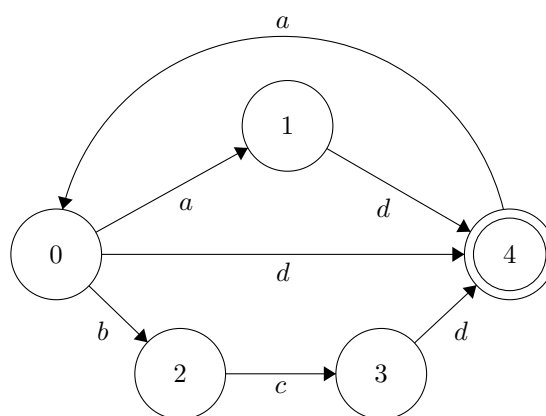
$(ab^+c)?$

3.4

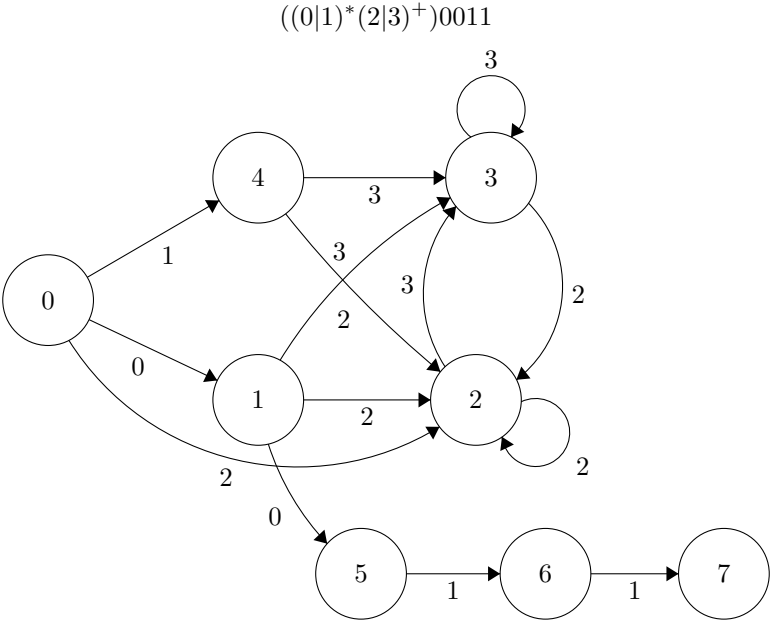
Write DFAs that recognize the tokens defined by the following regular expressions:

A.

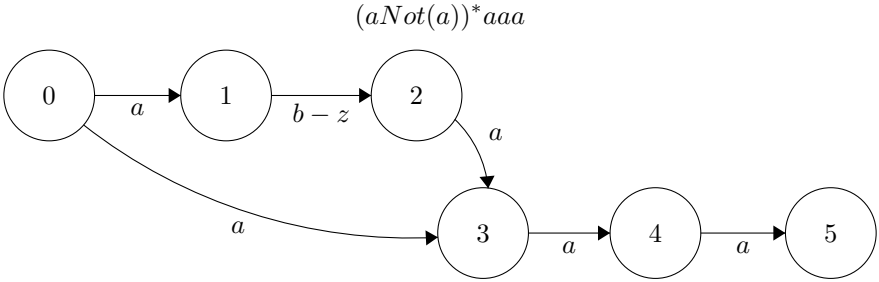
$(a|(bc)^*d)^+$



B.



C.

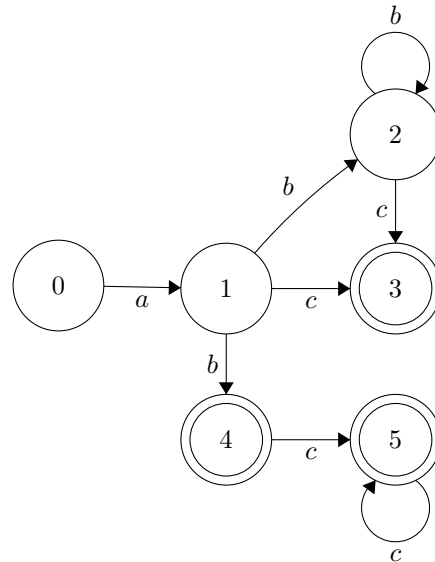


3.15

Show the NFA that would be created for the following expression:

$$(ab^*c)|(abc^*)$$

NFA:



DFA:

DRAGON

3.3.4

Show how to write a regular expression for a keyword in a case-insensitive language. Illustrate the idea by writing the expression for "select".

Each keyword will need to have two state change options for each letter; one for uppercase and lowercase.

$$(s|S)(e|E)(l|L)(e|E)(c|C)(t|T)$$