

0/4 Questions Answered

Quiz 3 - NFA/DFA

STUDENT NAME

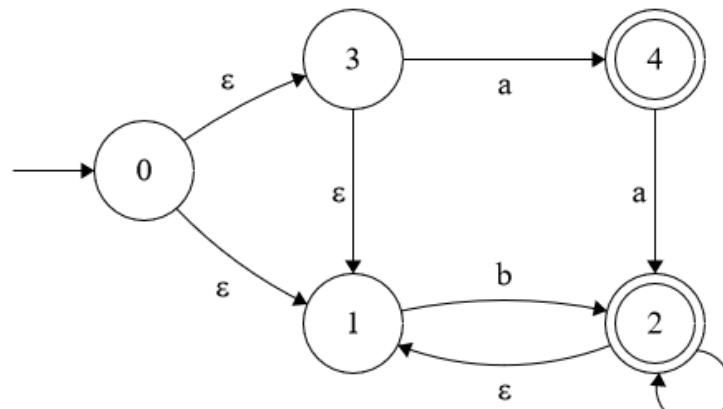
Q1 NFA to DFA

7 Points

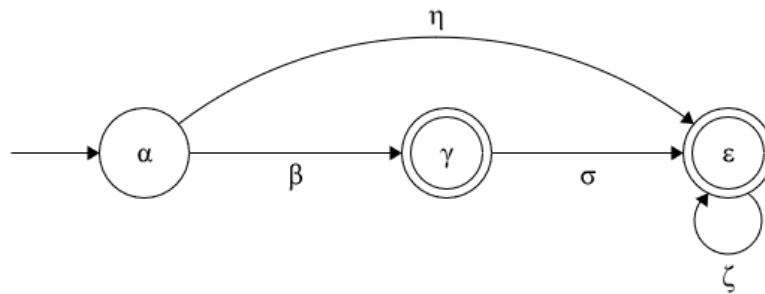
Q1.1 NFA to DFA

7 Points

Fill in the values for α , β , γ , δ , ϵ , ζ , and η by converting the following NFA to DFA. If multiple symbols are on the same transition, you can separate them with a comma. For example: a,b

NFA:

c

DFA:**Blank α** **Blank β** **Blank γ** **Blank δ**

Blank ϵ **Blank ζ** **Blank η** **Q2** Regex to NFA

7 Points

With this following regex:

Acceptable string matches include:

aab

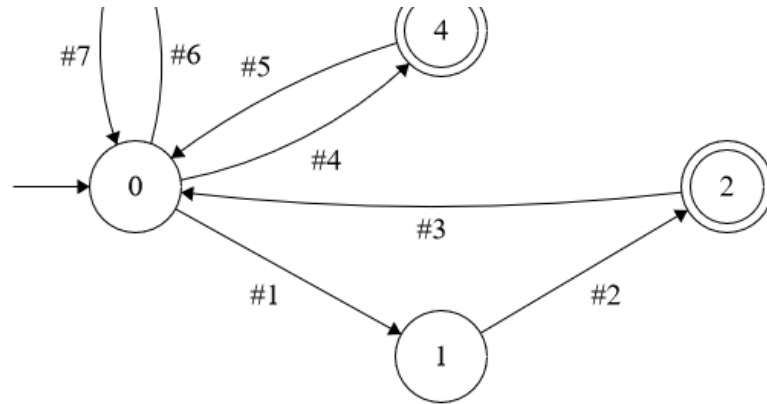
abaaab

acaba

aaaccc

Fill in the blanks for the following NFA so that it represents the regex given above. Valid representations of epsilon would be ϵ , E, or epsilon.





Blank #1:

Enter your answer here

Blank #2:

Enter your answer here

Blank #3:

Enter your answer here

Blank #4:

Enter your answer here

Blank #5:

Enter your answer here

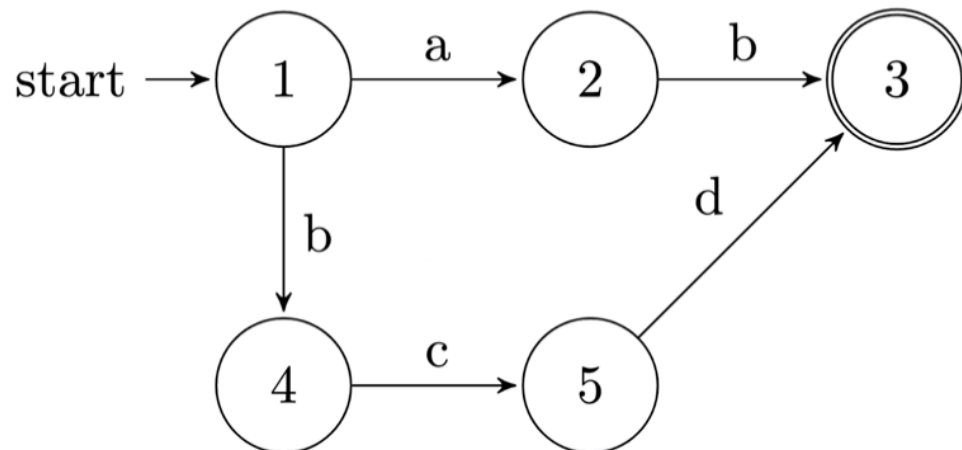
Blank #6:

Enter your answer here

Blank #7:

Q3 NFA Modification

6 Points



Q3.1

3 Points

What single transition could be added to modify the NFA to accept the input "bcdcdcdcdcd"?

Note: Use the notation $(1, a, 2)$ to denote a transition from state 1 to state 2 on input a. You can use $(1, \text{epsilon}, 2)$ to denote an epsilon transition from state 1 to state 2.

Save Answer

Q3.2

3 Points

Is the original NFA also a DFA? Explain why or why not.

Enter your answer here

Save Answer

Save All Answers

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