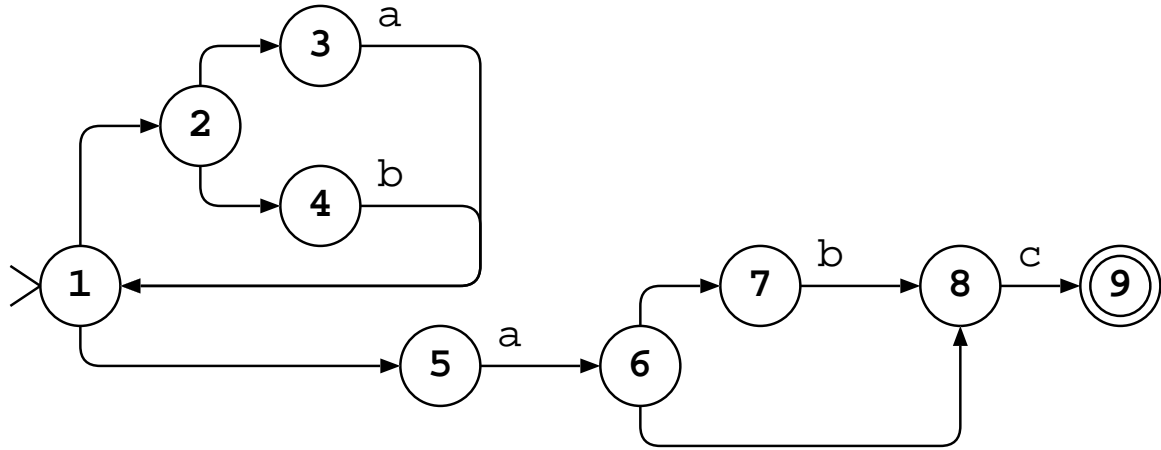


Computer Mathematics

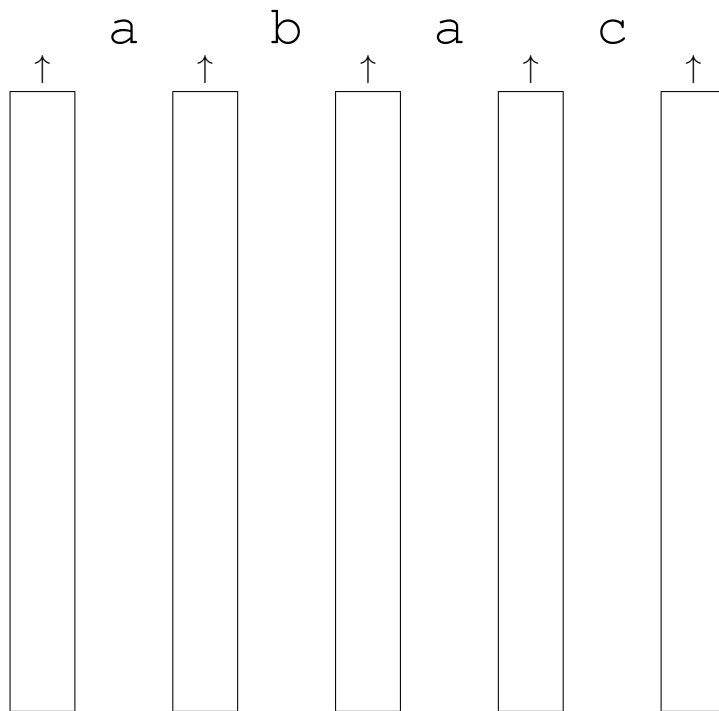
Week 13 Examples

1. Match the string “abac” using the following non-deterministic finite state machine.

$(a|b)^*ab^?c$

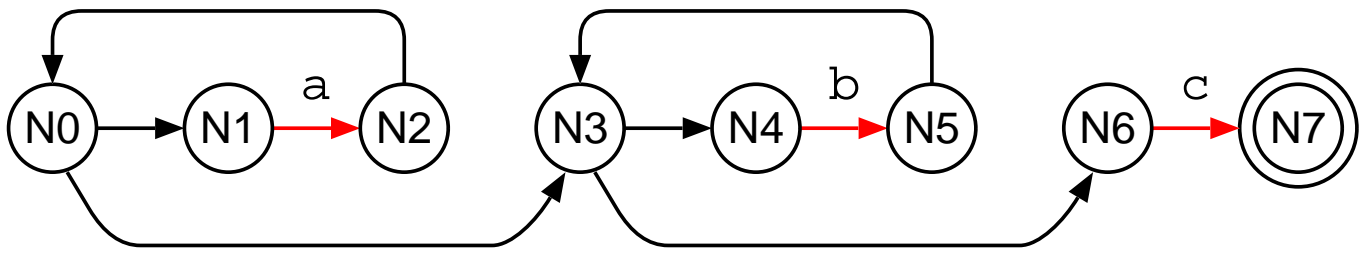


Input symbol sequence:



allowable states

2. Use the subset construction to convert the following NFA into an equivalent DFA.



DFA transition table:

D	a	b	c
0			
1			
2			
3			

DFA:

3. Invent three more NFAs (or re-use some of the NFAs from last week's examples). Convert each NFA into an equivalent DFA.