

# String Matching Automaton of $\varepsilon$

Initial automaton

$\Sigma$   
 $Q$   
0

# String Matching Automaton of $a$

State 1 will be a clone of state 0

$\Sigma \setminus \{a\}$

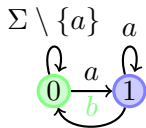


# String Matching Automaton of *a*

State 1 is a clone of state 0

# String Matching Automaton of $ab$

State 2 will be a clone of state 0

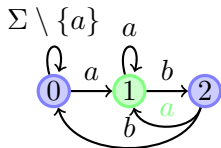


# String Matching Automaton of $ab$

State 2 is a clone of state 0

# String Matching Automaton of $aba$

State 3 will be a clone of state 1

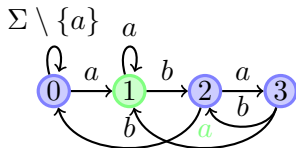


# String Matching Automaton of *aba*

State 3 is a clone of state 1

# String Matching Automaton of $abaa$

State 4 will be a clone of state 1

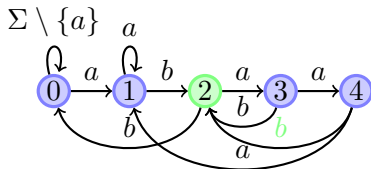


# String Matching Automaton of *abaa*

State 4 is a clone of state 1

# String Matching Automaton of $abaa**b**$

State 5 will be a clone of state 2

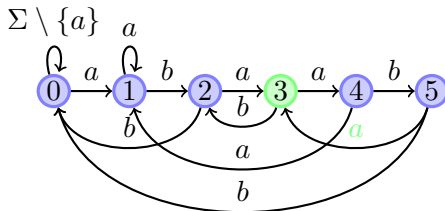


# String Matching Automaton of *abaa**b***

State **5** is a clone of state **2**

# String Matching Automaton of *abaaba*

State 6 will be a clone of state 3

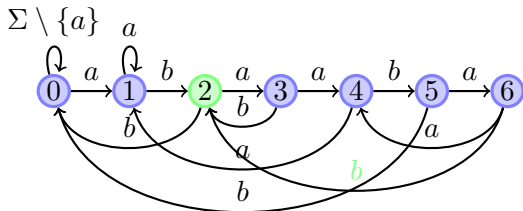


# String Matching Automaton of *abaaba*

State 6 is a clone of state 3

# String Matching Automaton of *abaabab*

State 7 will be a clone of state 2

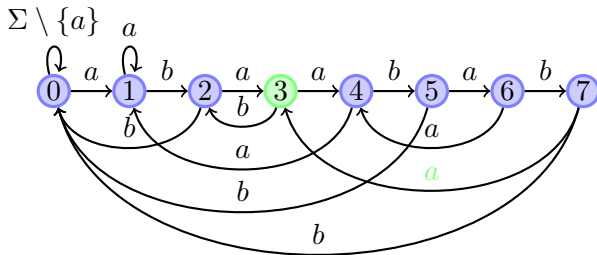


# String Matching Automaton of *abaabab*

State 7 is a clone of state 2

# String Matching Automaton of *abaababab**a*

State 8 will be a clone of state 3

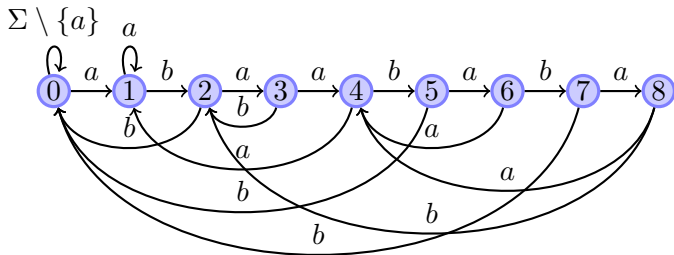


# String Matching Automaton of *abaababa**a*

State 8 is a clone of state 3

# String Matching Automaton of *abaababa*

## Final Automaton



Please cite

*Algorithms on strings*

M. Crochemore, C. Hancart and T. Lecroq  
Cambridge University Press, 2007