

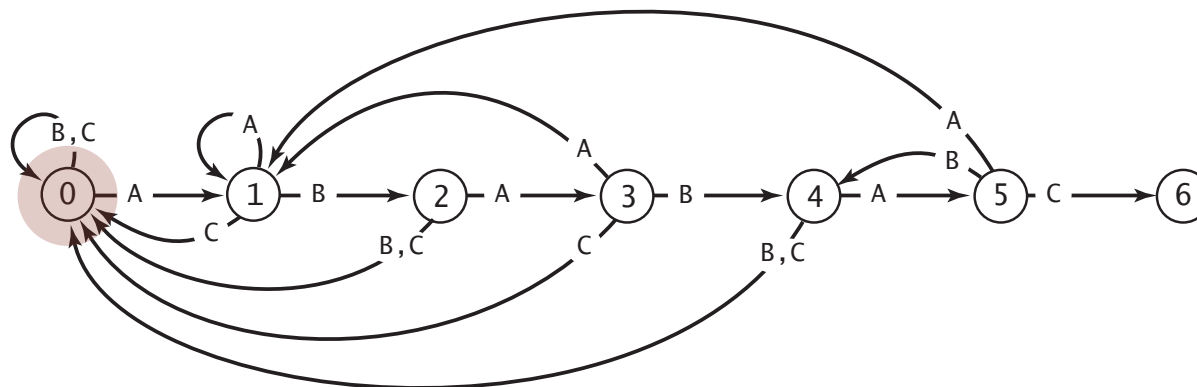
DFA Simulation

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



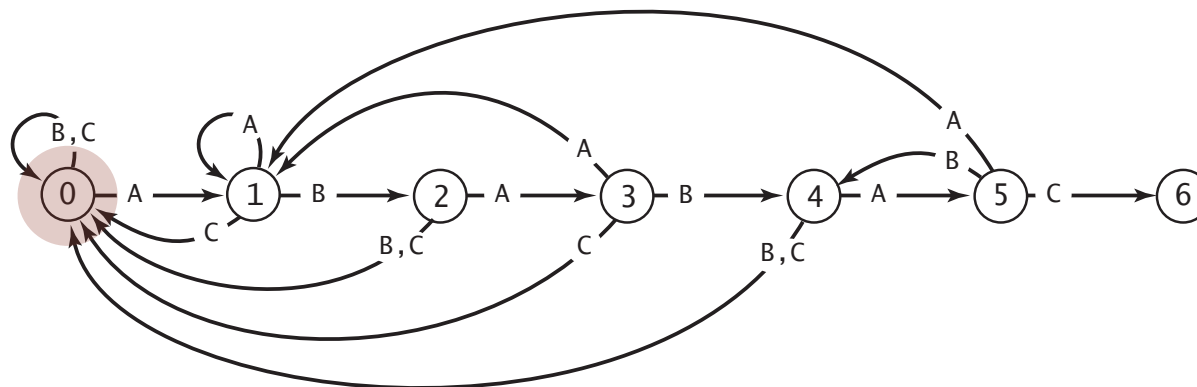
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



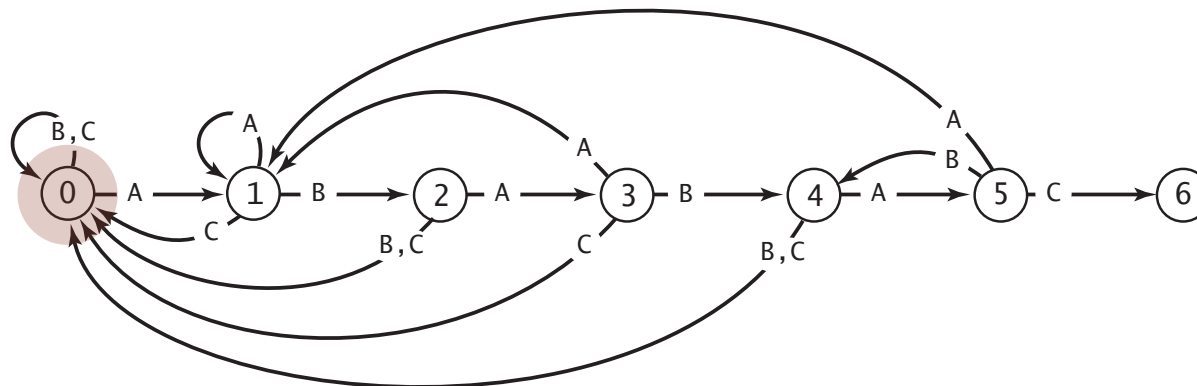
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

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j	0	1	2	3	4	5
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dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



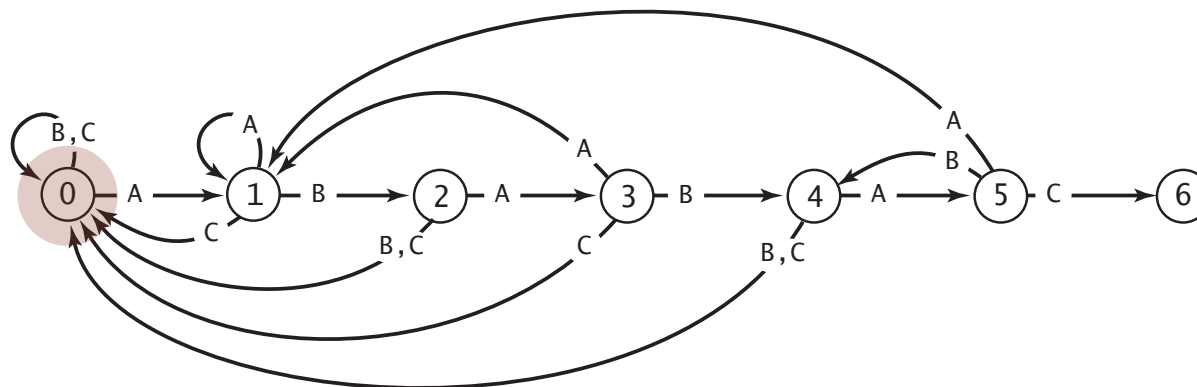
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



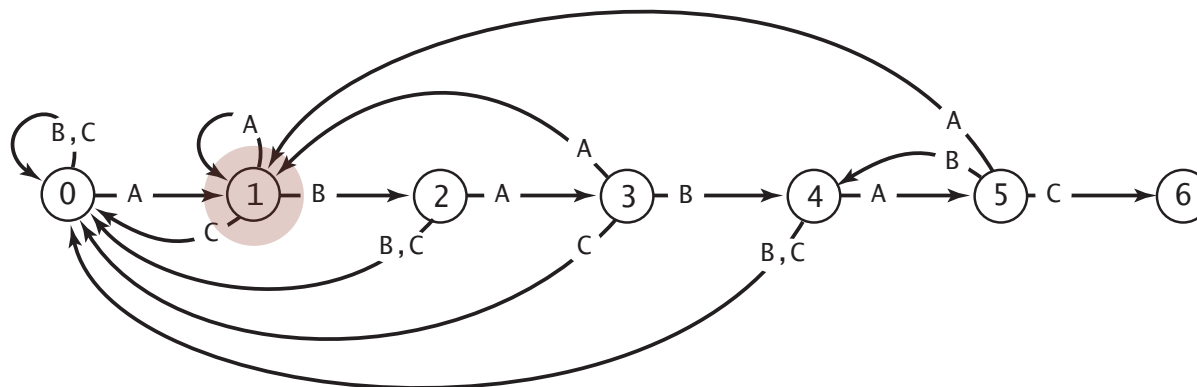
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B **A** A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



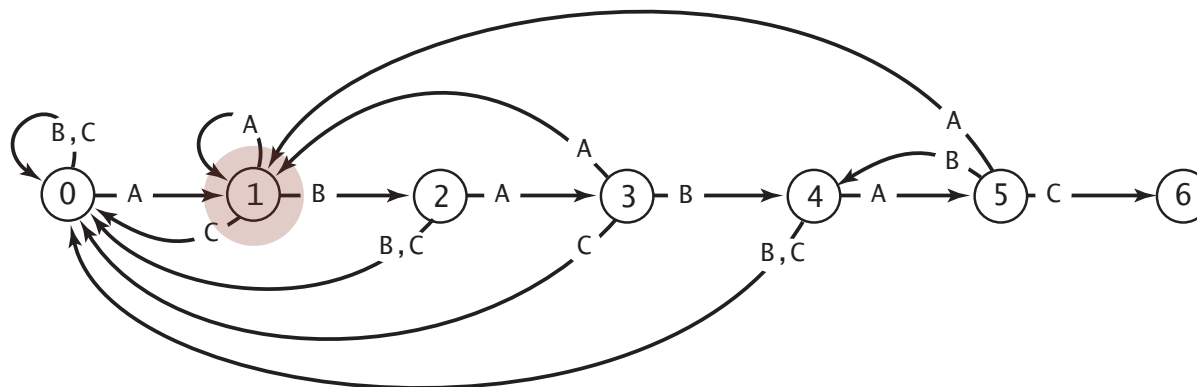
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A **A** B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



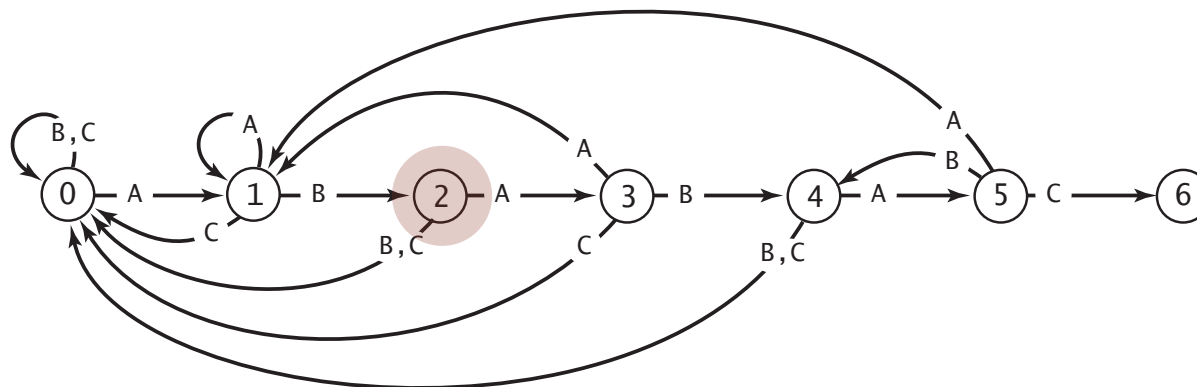
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



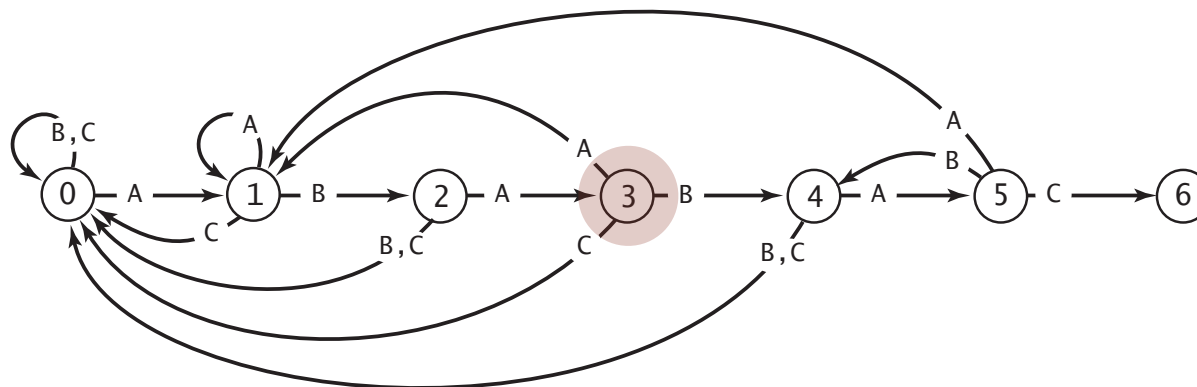
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



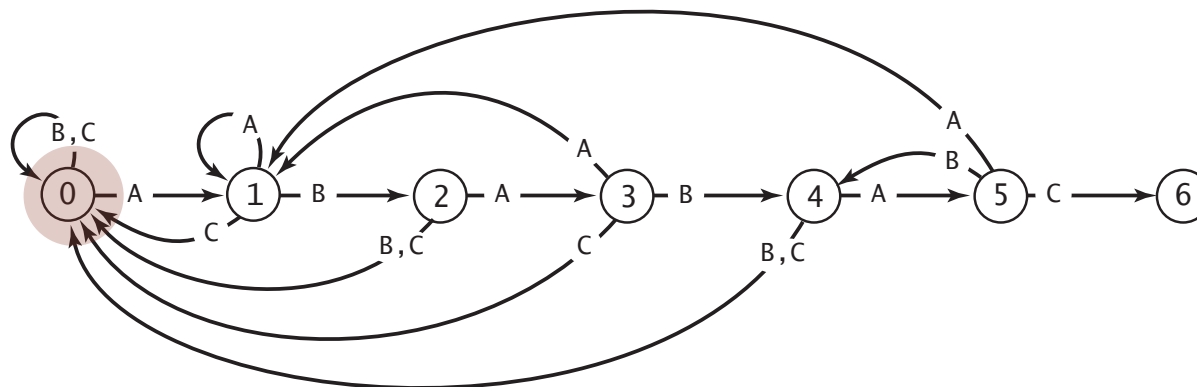
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



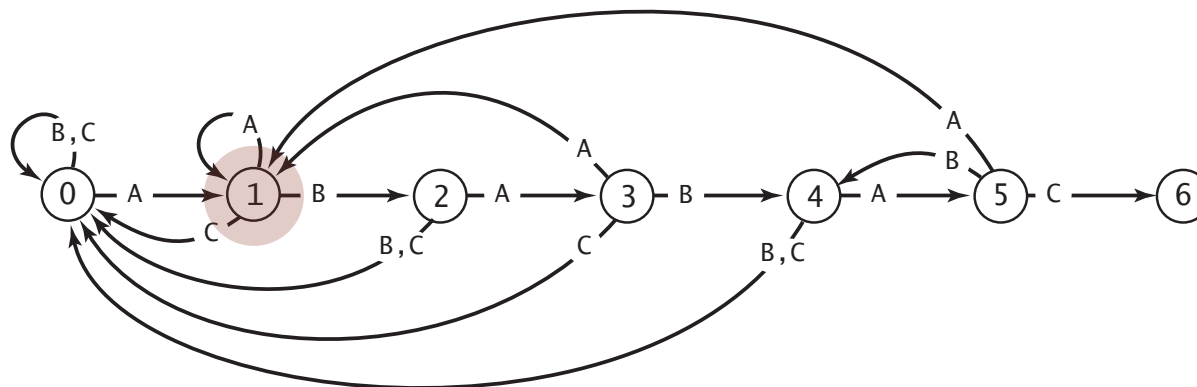
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C **A** A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6

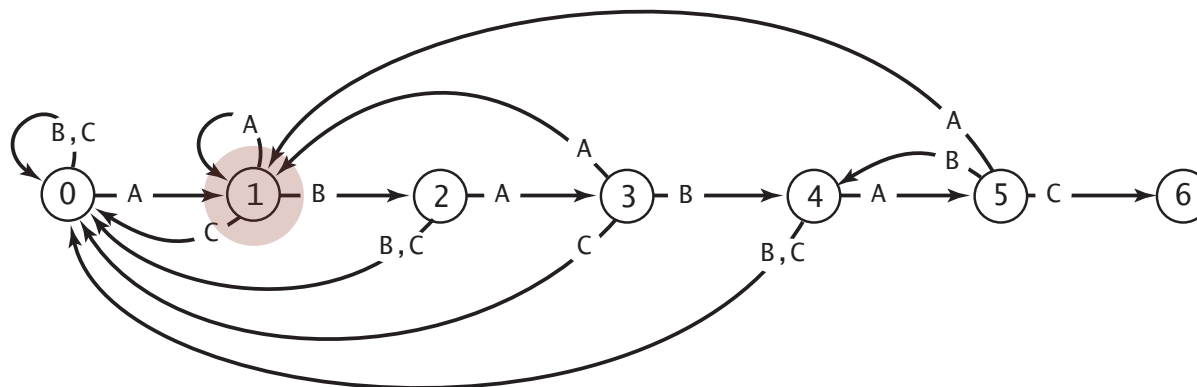


Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A **A** B A B A C A A

	j	0	1	2	3	4	5
pat.charAt(j)		A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5	1
	B	0	2	0	4	0	4
	C	0	0	0	0	0	6



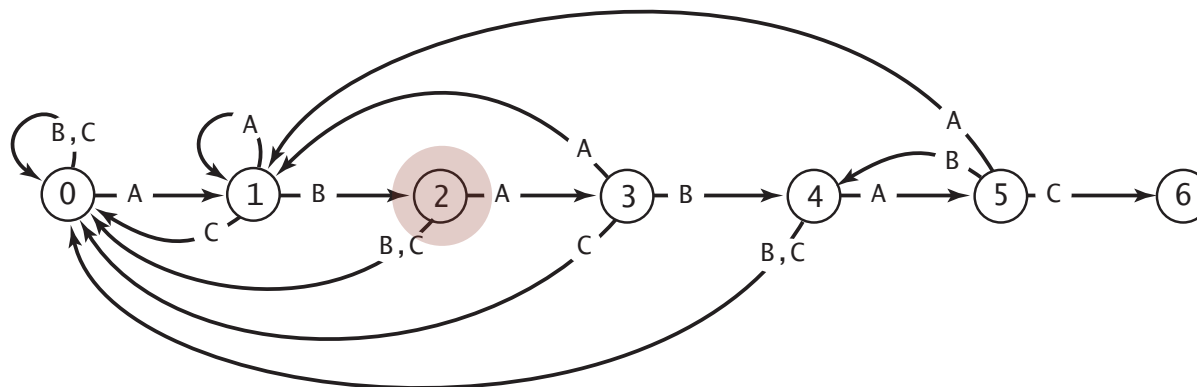
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



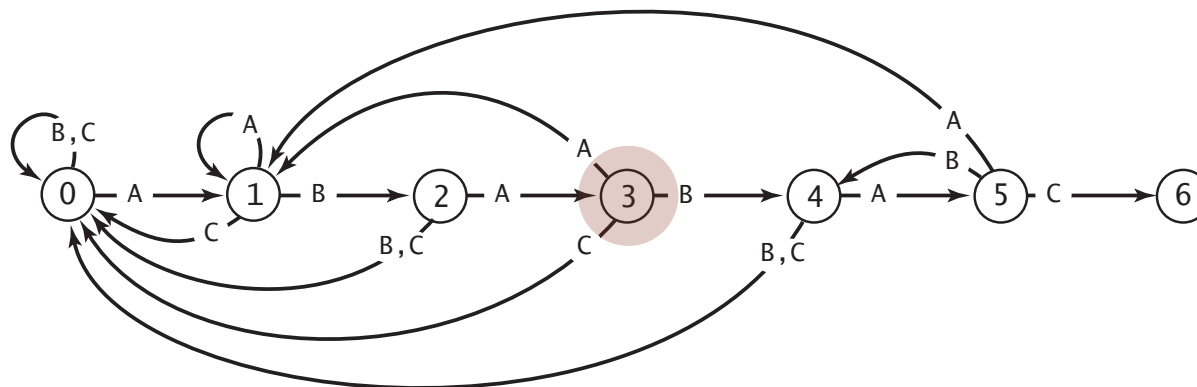
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

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j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



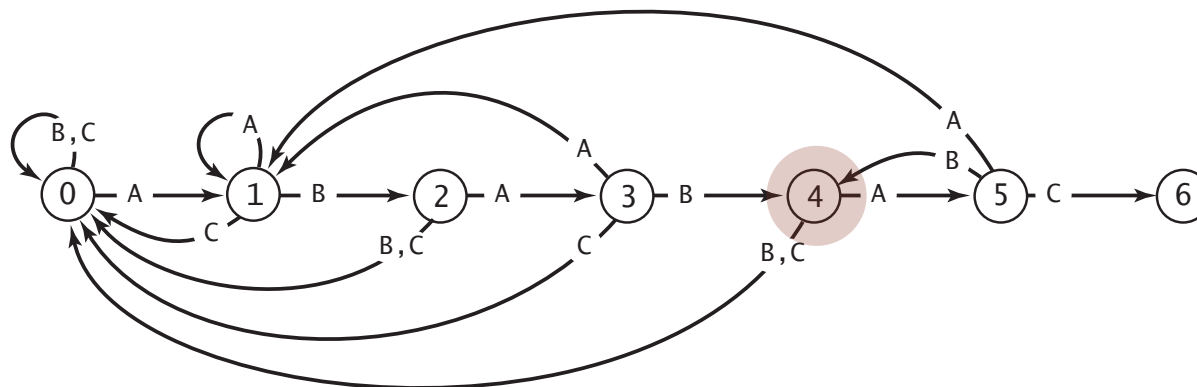
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6



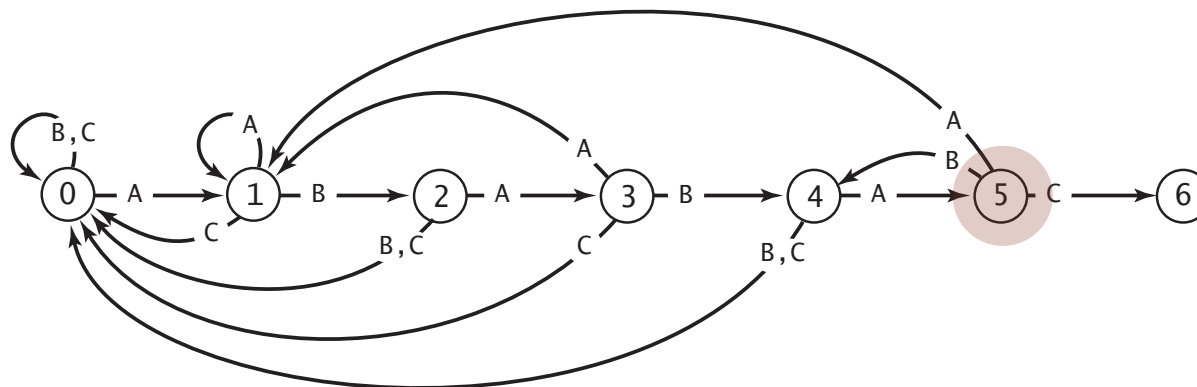
Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A

↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j]	A	1	1	3	1	5
	B	0	2	0	4	0
	C	0	0	0	0	6

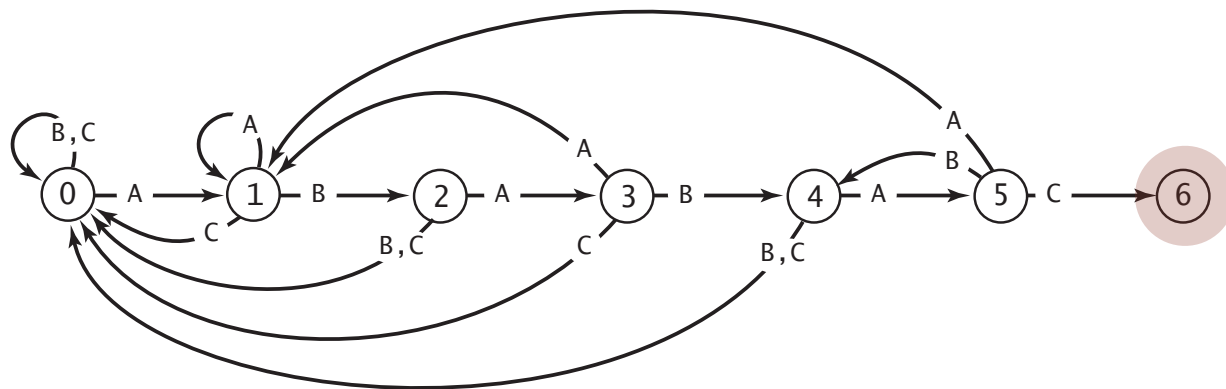


Trace of KMP substring search (DFA simulation) for A B A B A C

DFA simulation

B C B A A B A C A A B A B A C A A
↑

j	0	1	2	3	4	5
pat.charAt(j)	A	B	A	B	A	C
dfa[][j] A	1	1	3	1	5	1
dfa[][j] B	0	2	0	4	0	4
dfa[][j] C	0	0	0	0	0	6



Trace of KMP substring search (DFA simulation) for A B A B A C