

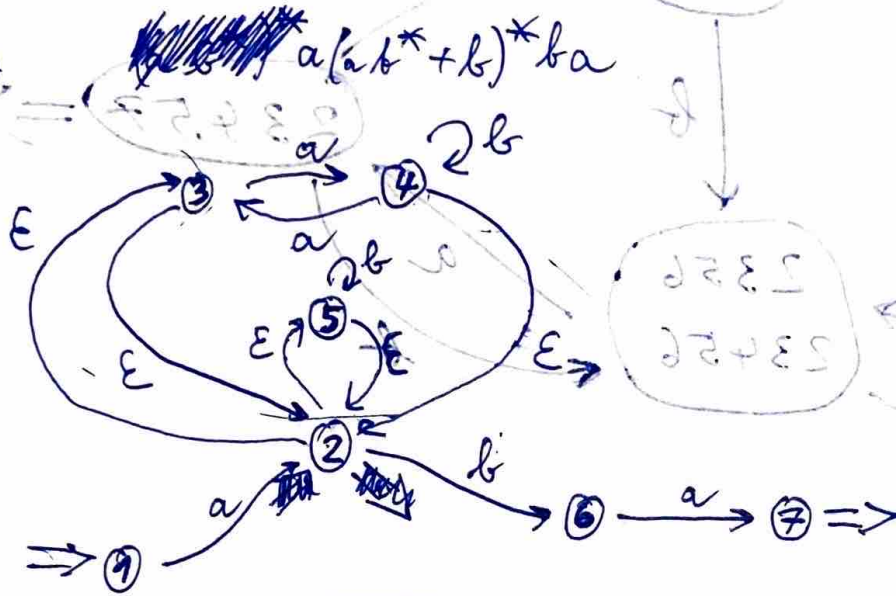
4.1.

$$(ab^*b^*)^*$$

CAF 1. Cofourch

$$r = a(ab^* + b)^*ba$$

NFA



NFA	ϵ	a	b
→ 1	\emptyset	{2}	\emptyset
2	{3, 5}	\emptyset	{6}
3	{2}	{4}	\emptyset
4	{2}	{3}	{4}
5	{2}	\emptyset	{5}
6	\emptyset	{7}	\emptyset
← 7	\emptyset	\emptyset	\emptyset

DFA	a	b	r_0	a	b	r_1	a	b	r_2	a	b	r_3	a	b	r_4
→ {1}	{2, 3, 5}	\emptyset	A	A	A	A	A	A	A	C	A	D			
{2, 3, 5}	{2, 3, 4, 5}	{2, 3, 5, 6}	A	A	A	A	A	B	C	C	B	C			
{2, 3, 4, 5}	{2, 3, 4, 5}	{2, 3, 4, 5, 6}	A	A	A	A	B	C	C	C	B	C			
{2, 3, 5, 6}	{2, 3, 4, 5, 7}	{2, 3, 5, 6}	A	K	A	B	K	B	B	K	B	B			
{2, 3, 4, 5, 6}	{2, 3, 4, 5, 7}	{2, 3, 4, 5, 6}	A	K	A	B	K	B	B	K	B	B			
{2, 3, 4, 5, 7}	{2, 3, 4, 5}	{2, 3, 4, 5, 6}	K	A	A	K	A	B	K	C	B	K			
← \emptyset	\emptyset	\emptyset	A	A	A	A	A	A	A	A	A	A			

slowest

slowest

regular DFA

