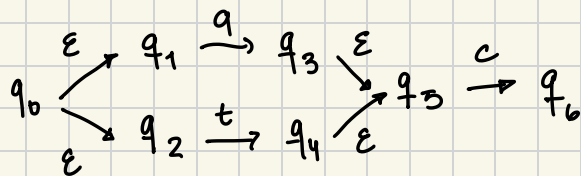


a) $(a|t)c$

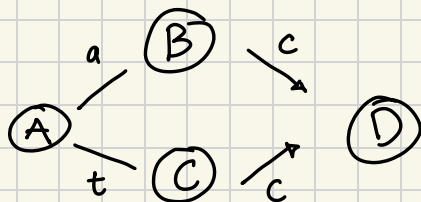
1)



2)

	a	t	c	ε
q ₀	∅	∅	∅	{q ₁ , q ₂ }
q ₁	{q ₃ }	∅	∅	∅
q ₂	∅	{q ₄ }	∅	∅
q ₃	∅	∅	∅	{q ₅ }
q ₄	∅	∅	∅	{q ₅ }
q ₅	∅	∅	{q ₆ }	∅
q ₆	∅	∅	∅	∅

3)

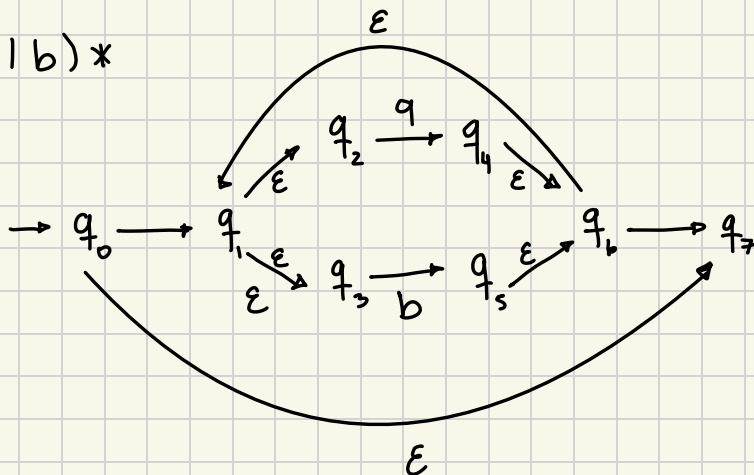


4)

	a	t	c
A	{B}	{C}	∅
B	∅	∅	{D}
C	∅	∅	{D}
D	∅	∅	∅

B) $(a|b)^*$

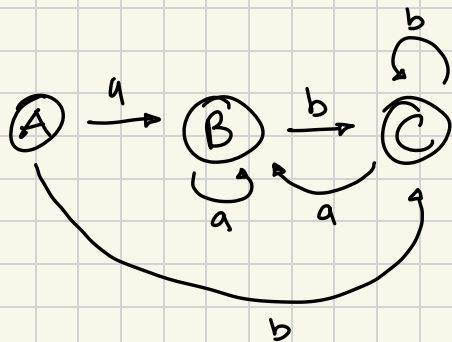
1)



2)

	a	b	ϵ
q_0	\emptyset	\emptyset	$\{q_7\}$
q_1	\emptyset	\emptyset	$\{q_2, q_3\}$
q_2	$\{q_4\}$	\emptyset	\emptyset
q_3	\emptyset	$\{q_5\}$	\emptyset
q_4	\emptyset	\emptyset	$\{q_6\}$
q_5	\emptyset	\emptyset	$\{q_6\}$
q_6	\emptyset	\emptyset	$\{q_1, q_6\}$
q_7	\emptyset	\emptyset	\emptyset

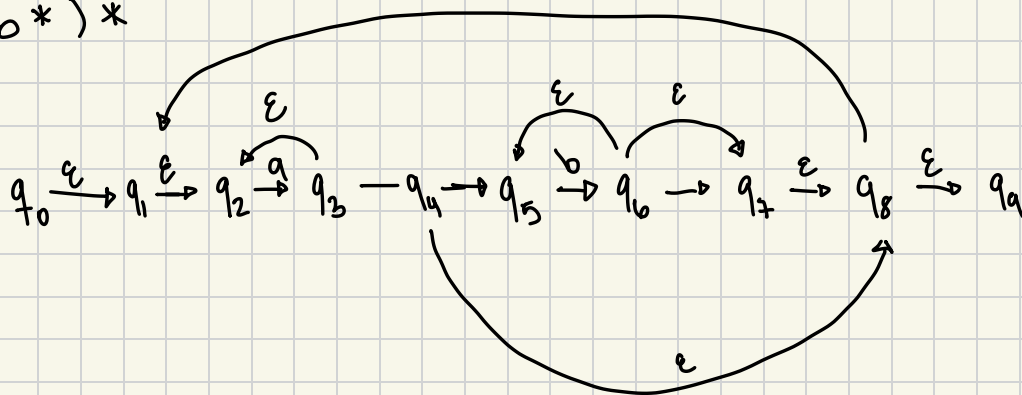
3)



4)

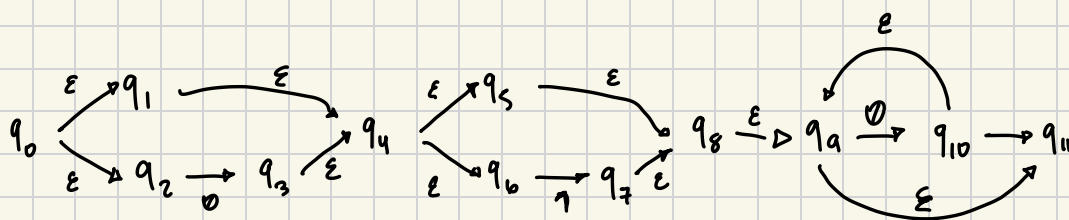
	a	b
A	$\{B\}$	$\{C\}$
B	$\{B\}$	$\{C\}$
C	$\{B\}$	$\{C\}$

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



f) $0^* (1^* 0^*)^* 0^*$

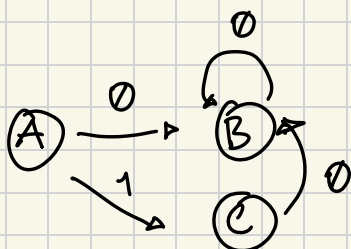
1)



2)

	ϵ	0	1
q_0	$\{q_1, q_2\}$	\emptyset	\emptyset
q_1	$\{q_4\}$	\emptyset	\emptyset
q_2	\emptyset	$\{q_3\}$	\emptyset
q_3	$\{q_4\}$	\emptyset	\emptyset
q_4	$\{q_5, q_6\}$	\emptyset	\emptyset
q_5	$\{q_8\}$	\emptyset	\emptyset
q_6	\emptyset	\emptyset	$\{q_7\}$
q_7	$\{q_8\}$	\emptyset	\emptyset
q_8	$\{q_9\}$	\emptyset	\emptyset
q_9	$\{q_{11}\}$	$\{q_{10}\}$	\emptyset
q_{10}	$\{q_1\}$	\emptyset	\emptyset
q_{11}	\emptyset	\emptyset	\emptyset

3)



4)

	0	1
A	B	C
B	B	\emptyset
C	B	\emptyset