

Determinización

c. $M_3 = (\{p, q, r, s\}, \{0, 1\}, \delta_3, p, \{q, s\})$

	0	1	λ
$\delta_2 =$			
p	{q, s}	{q}	\emptyset
q	{r}	{q, r}	\emptyset
r	{s}	{p}	\emptyset
s	\emptyset	{p}	\emptyset

Construimos M AFD tq $L(M) = L(M_3)$

$$M = (Q, \Sigma, \delta, M_{q_0}, F) \quad Q \subseteq P(\{p, q, r, s\}) \quad \Sigma = \{0, 1\} \quad M_{q_0} = \{p\}$$

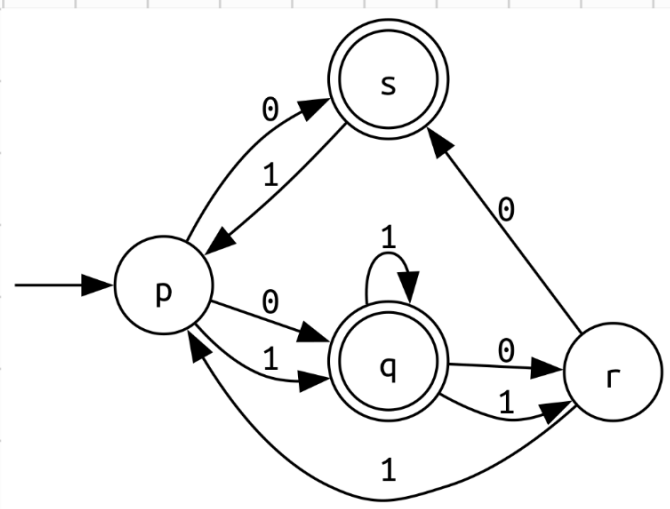
δ	0	1
$\{p\}$	$\{q, s\}$	$\{q\}$
$\{q, s\}$	$\{r\}$	$\{p, q, r\}$
$\{q\}$	$\{r\}$	$\{q, r\}$
$\{r\}$	$\{s\}$	$\{p\}$
$\{p, q, r\}$	$\{q, r, s\}$	$\{p, q, r\}$
$\{q, r\}$	$\{r, s\}$	$\{p, q, r\}$
$\{s\}$	\top	$\{p\}$
$\{q, r, s\}$	$\{r, s\}$	$\{p, q, r\}$
$\{r, s\}$	$\{s\}$	$\{p\}$
\top	\top	\top

$$Q = \{ \{p\}, \{q, s\}, \{q\}, \{r\}, \{p, q, r\}, \{q, r\}, \{s\}, \{q, r, s\}, \{r, s\}, \top \}$$

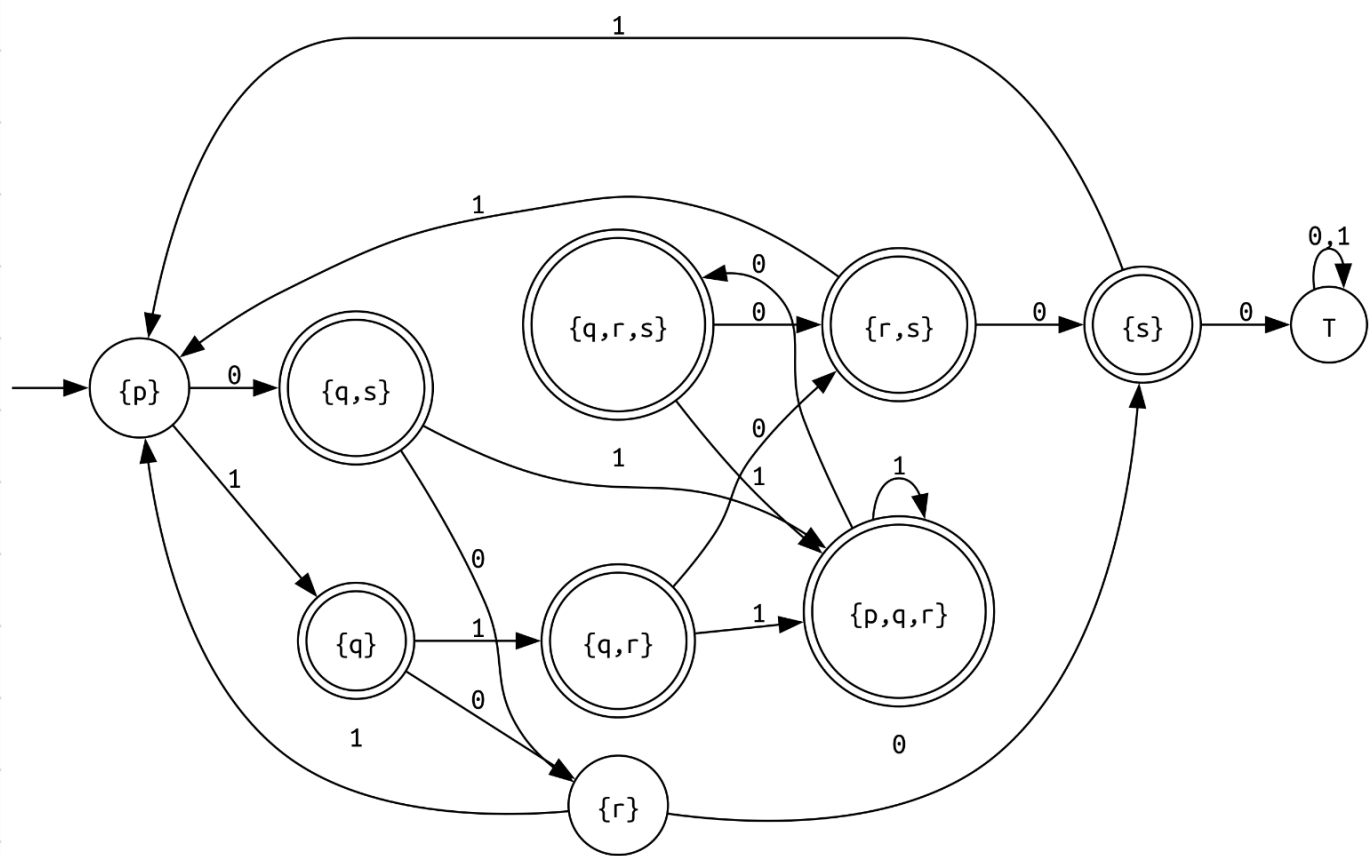
$$F = \{ q \in Q : q \cap \{q, s\} \neq \emptyset \}$$

$$= \{ \{q, s\}, \{q\}, \{p, q, r\}, \{q, r\}, \{s\}, \{q, r, s\}, \{r, s\} \}$$

M_3 AFND



M AFD



Minimización

Estados	\equiv_0	0	1	\equiv_1	0	1	\equiv_2	0	1	\equiv_3	0	1
$\{p\}$	NF	F	F	1_1	1_2	1_2	2_1	2_2	2_2	3_1		
$\{q, s\}$	F	NF	F	1_2	1_3	1_4	2_2	2_3	2_4	3_2		
$\{q\}$	F	NF	F	1_2	1_3	1_4	2_2	2_3	2_5	3_3		
$\{r\}$	NF	F	NF	1_3	1_5	1_1	2_3	2_6	2_1	3_4		
$\{p, q, r\}$	F	F	F	1_4	1_4	1_4	2_4	2_5	2_4	3_5		
$\{q, r\}$	F	F	F	1_4	1_6	1_4	2_5	2_7	2_4	3_6		
$\{s\}$	F	NF	NF	1_5	1_7	1_1	2_6	2_8	2_1	3_7		
$\{q, r, s\}$	F	F	F	1_4	1_6	1_4	2_5	2_7	2_4	3_6		
$\{r, s\}$	F	F	NF	1_6	1_5	1_1	2_7	2_6	2_1	3_8		
\top	NF	NF	NF	1_7	1_7	1_7	2_8	2_8	2_8	3_9		