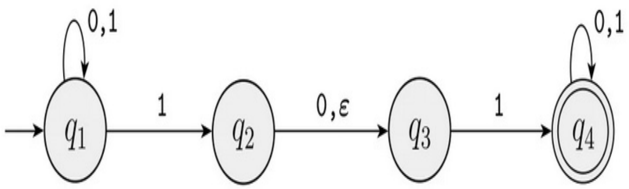
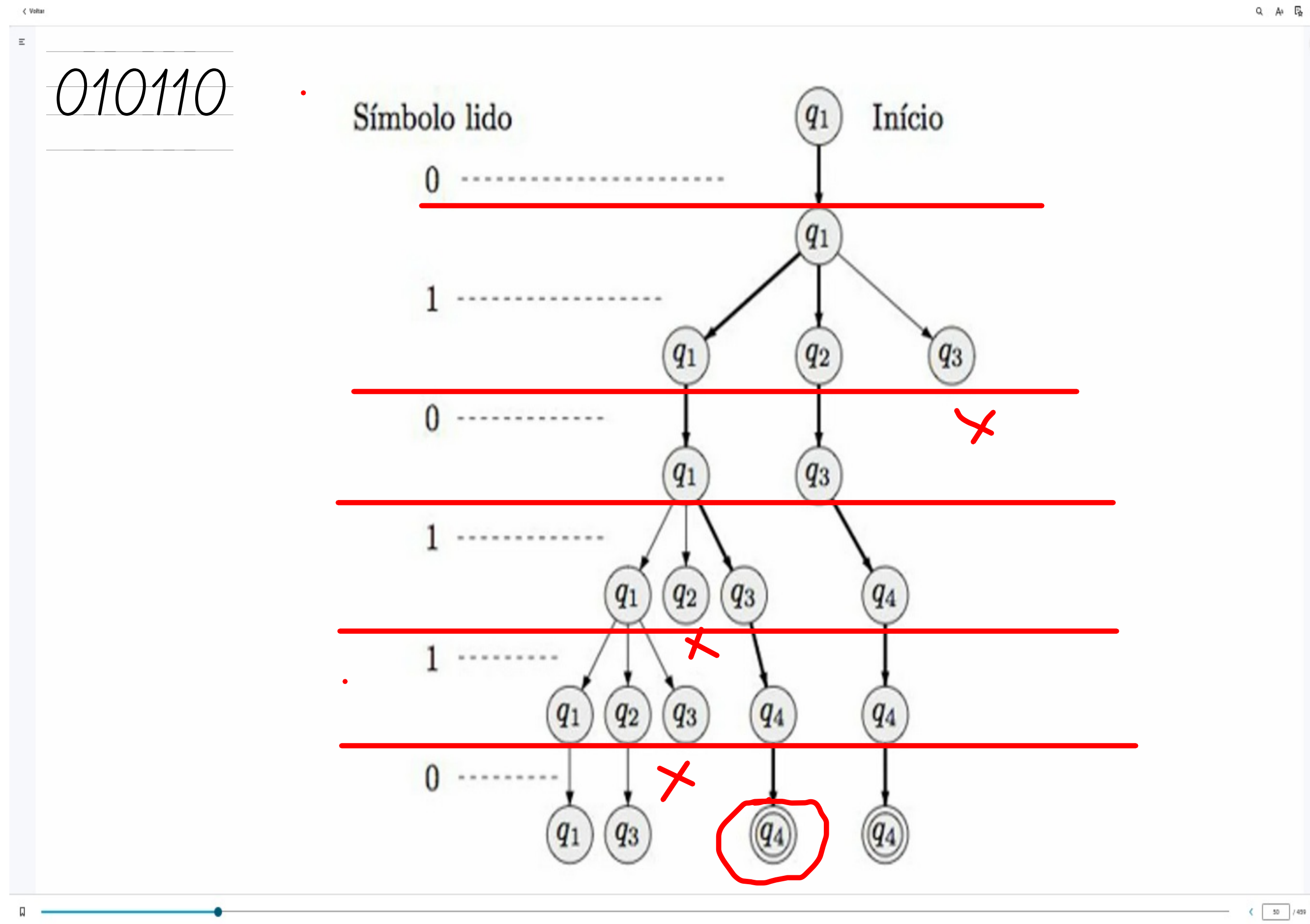


FIGURA 1.27
O autômato finito não-determinístico N_1.



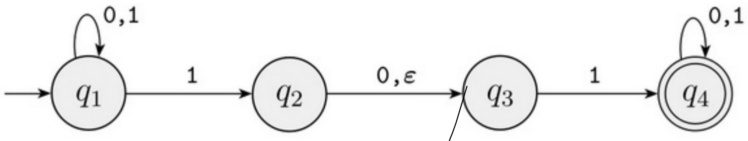


FIGURA 1.27
O autômato finito não-determinístico N_1.

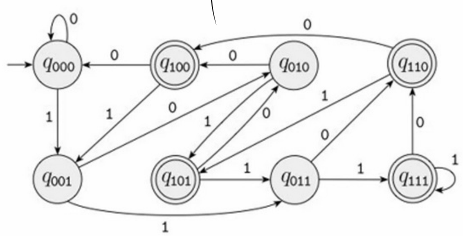


FIGURA 1.32
Um AFD que reconhece A.

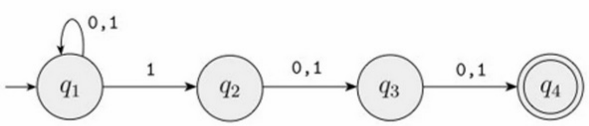
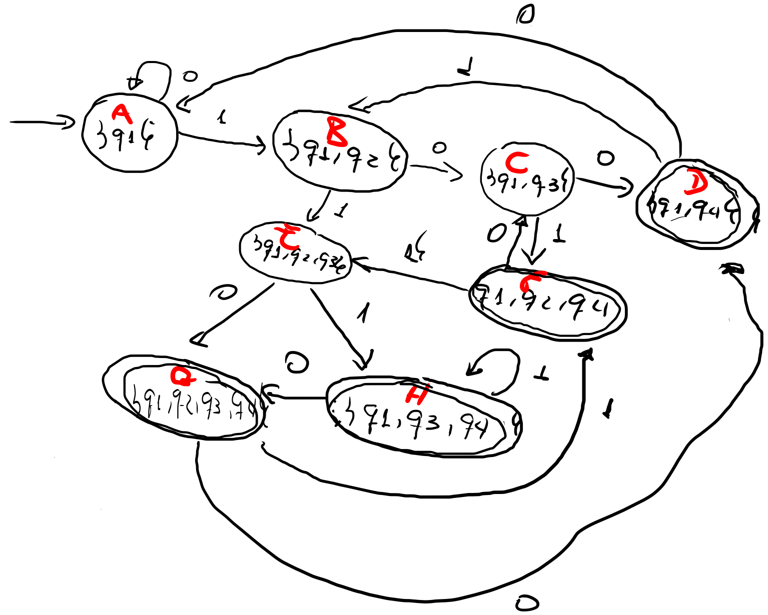


FIGURA 1.31
O AFN N_2 que reconhece A.



E( )

ε-move

$\{\}$

2^n

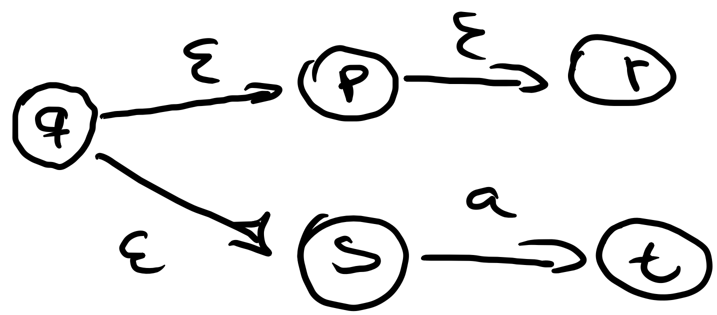
$\delta(q_1,0)=\{q_1\}$

$\delta(q_1,1)=\{q_1,q_2\}$

FUNÇÃO E( )

E(q) é o conjunto de todos os estados alcançáveis com ε, incluindo q.

Exemplo:



$E(q) = \{q, p, r, s\}$

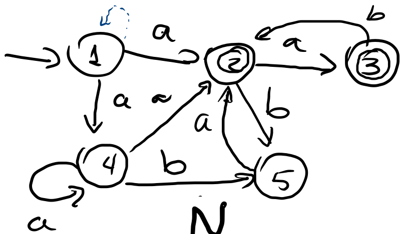
$$E(\{p_1, p_2, \dots, p_m\}) = E(p_1) \cup E(p_2) \dots E(p_m)$$

No exemplo acima.

$$E(p, s) = E(p) \cup E(s)$$
$$= \{p, r\} \cup \{s\} = \{p, r, s\}$$

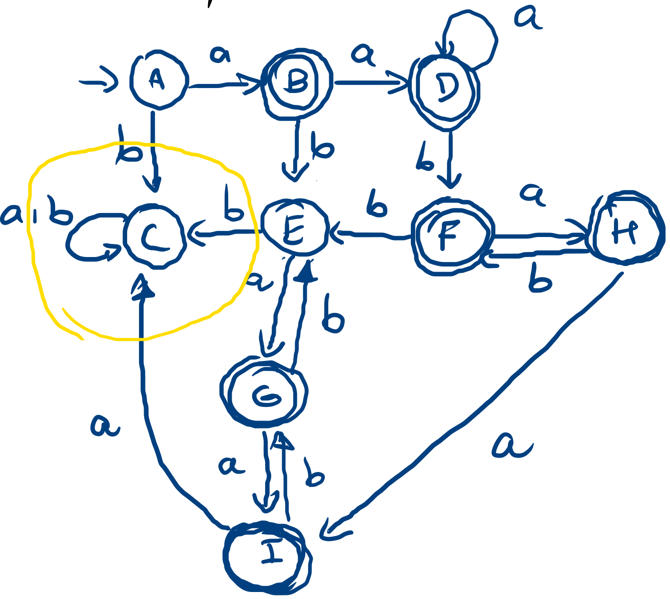
$\delta(\{p_1, p_2, \dots, p_n\}, a) = \delta(p_1, a) \cup \delta(p_2, a) \dots$

Seja o seguinte AFN representado abaixo



N

L(N) equiv L(M)



M

$E(\{1\}) = \{1\}$ ⊕ $\quad E(\delta(\{1\},a)) = E(\{2,4\}) = \{2,4\}$ ⊕

$E(\delta(\{1\},b)) = E(\{\}) = \{\}$ ⊕

$E(\delta(\{2,4\},a)) = E(\{3,2,4\}) = \{2,3,4\}$ ⊕

$E(\delta(\{2,4\},b)) = E(\{5\}) = \{5\}$ ⊕

A função E p/ transições sem ε é irrelevante.

$E(\delta(\{\},a)) = \{\}$

$E(\delta(\{\},b)) = \{\}$

$E(\delta(\{5\},a)) = \{2\}$ ⊕

$E(\delta(\{5\},b)) = \{\}$

$E(\delta(\{2\},a)) = \{3\}$ ⊕

$E(\delta(\{2\},b)) = \{5\}$

$E(\delta(\{3\},a)) = \{\}$

$E(\delta(\{3\},b)) = \{2\}$

$E(\delta(\{2,3,4\},a)) = \{2,3,4\}$

$E(\delta(\{2,3,4\},b)) = \{2,5\}$ ⊕

$E(\delta(\{2,5\},a)) = \{2,3\}$ ⊕

$E(\delta(\{2,5\},b)) = \{5\}$

$E(\delta(\{2,3\},a)) = \{3\}$

$E(\delta(\{2,3\},b)) = \{2,5\}$

Os conjuntos finais são todos que contenham antigos finais.

A = {1}	✓
B = {2,4}	✓
C = {}	✓
D = {2,3,4}	✓
E = {5}	✓
F = {2,5}	✓
G = {2}	✓
H = {2,3}	✓
I = {3}	✓