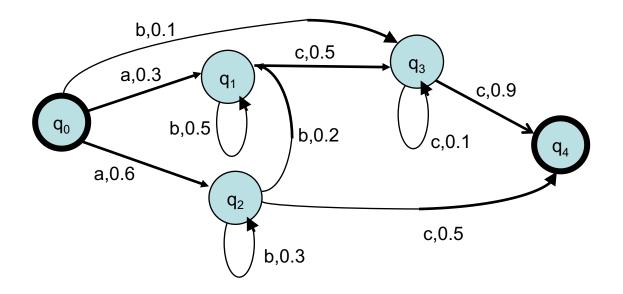
Algoritmo de Viterbi



$$P(q_0q_1q_2..q_n \mid \alpha_1\alpha_2..\alpha_n) = p(q_0).p(q_1,\alpha_1,q_2).p(q_2,\alpha_2,q_3)....p(q_{n-1},\alpha_n,q_n)$$

Ejemplo: α = abbcc

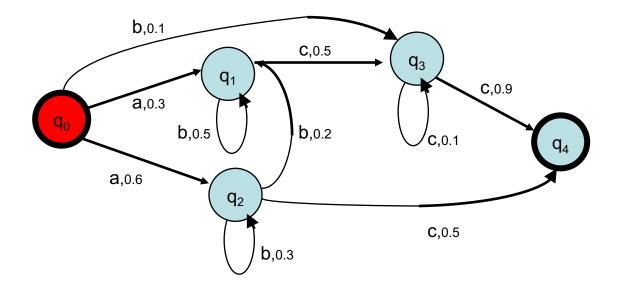
 $P(q_0,q_1,q_1,q_3,q_4|abbcc)=1*0.3*0.5*0.5*0.5*0.9=0.03375$

 $P(q_0,q_2,q_1,q_1,q_3,q_4|abbcc)=1*0.6*0.2*0.5*0.5*0.9=0.02700$

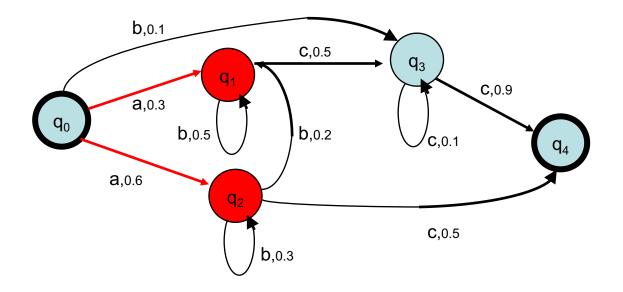
.

Algoritmo recursivo

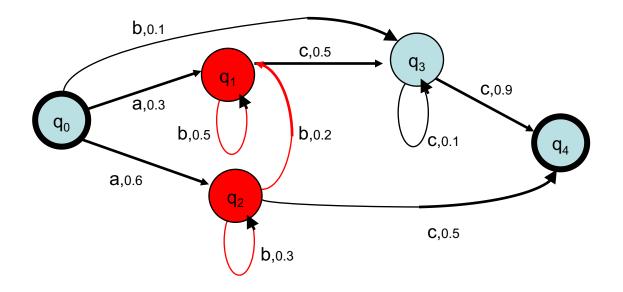
$$\operatorname{Prob}(\mathbf{q_i},t) = \begin{cases} 1 & t = 0 \land q_i = q_0 \\ 0 & t = 0 \land q_i \neq q_0 \\ \max_{q_j \in \operatorname{pred}(q_i)} & \left\{ \operatorname{Prob}(\mathbf{q_j},t-1) * P(q_j,\alpha_t,q_i) \right\} & t > 0 \end{cases}$$



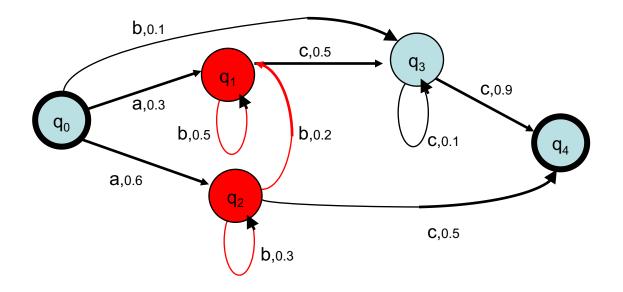
Ejemplo: α =



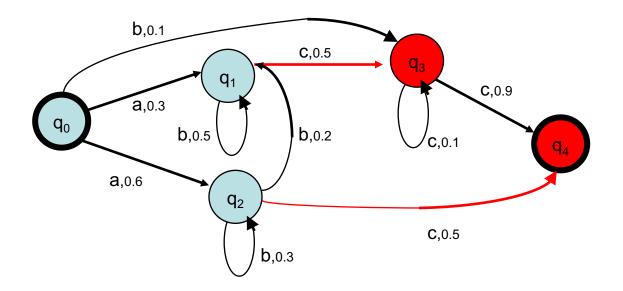
Ejemplo: α = a



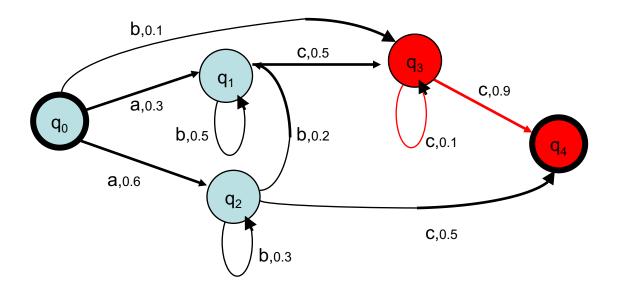
Ejemplo: α = ab



Ejemplo: α = abb



Ejemplo: α = abbc



Ejemplo: α = abbcc

