1 Finite State Transducers

We define a finite set transducer $(Q, \Sigma, \Gamma, \delta, \tau, q_0)$, where Q i s a finite state of states, Σ is an input alphabet, Γ is an output alphabet, $\delta : Q \times \Sigma \to Q$, $\tau : Q \times \sigma \to \Gamma^*$ and $q_0 \in Q$ is an initial state.

Note that there are no final states.

If $\delta(q_0, a) = q_1$ and $\tau(q_0, a) = x$, we draw $q_0 \overset{a/x}{\to} q_1$.