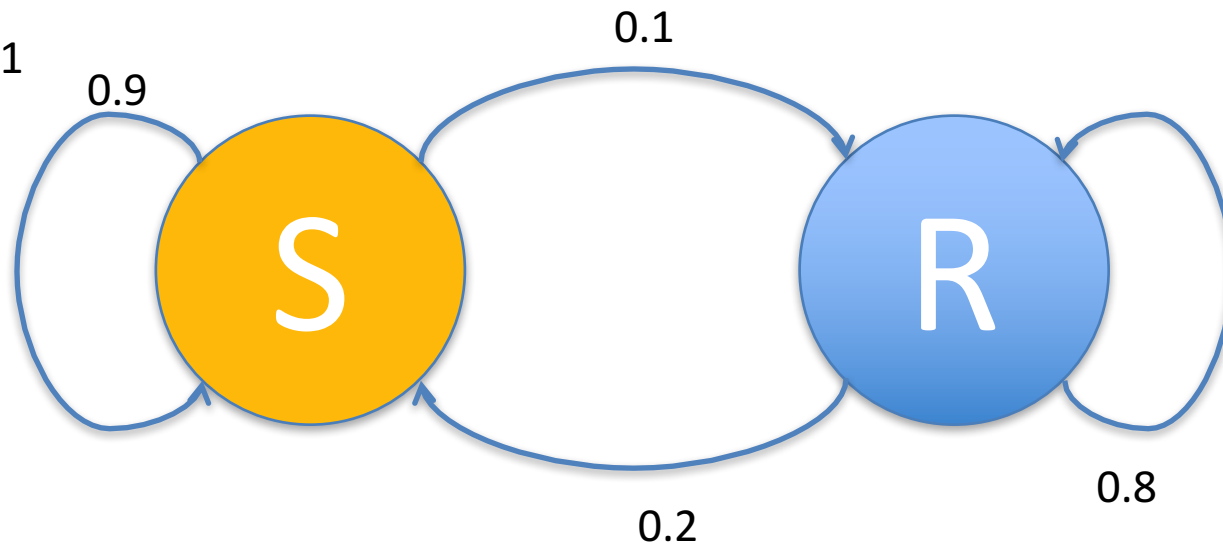


# Markov Chains

*Is a probabilistic model describing process developing as a sequence of “memoryless” events.*

The meaning of “memoryless” is that the probability distribution of the next state depends only on the current state and not on the sequence of events that preceded it.

Exercise 1



$$P(R1) = ?$$

$$P(R2) = ?$$

$$P(R3) = ?$$

$$P(S_{\infty}) = \lim_{t \rightarrow \infty} P(S_t)$$

## Exercise 2: Hidden Markov model

$P(S_1)=?$

$P(S_1|H_1)=?$

