

Quantitative logics

Exercises on Markov chains

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1. Pick your favourite random game (dice game, card game etc.) and try to model it as a Markov chain.
2. What are the long-term weather averages on the Island of Hope? See the slides of the lecture on February 9 for details.
3. Consider the Markov chain below. Assume that the start state is s_0 with probability 1. What is the probability to reach s_3 in exactly five steps? What is the probability to reach s_3 in at most five steps? (For the more advanced: What is the probability to be in s_3 on the long term?)

