Exercise 5.1 Convergence of Markov Chains

Instructions: You may discuss this assignment with other students in the class, but you must submit your own answers to the questions below. Include an honor pledge with your submission. Submit online and in PDF. This exercise is ungraded.

1. Suppose weather is a two state Markov chain. Further suppose that if it rains today, it rains tomorrow with probability 0.7, and if it is sunny today, then it is sunny tomorrow with probability 0.6. Find the long term probabilities for sunny and rain.