| EE 381 Homework 4 Par | t 2 |
|-------------------------|-----|
| Name, I.D. #, and Date: | |

Instructions: Attempt each exercise and show your work. You can attach pages to your submission. Submit this part of homework 4 with the additional parts of homework 4 after notification from the faculty member. You may want to make copies of your work.

Suppose that the chance of rain tomorrow depends on previous weather conditions only through whether or not it is raining today and not on past weather conditions. Suppose also that if it rains today, then it will rain tomorrow with probability 0.7 and if it does not rain today, then it will rain tomorrow with probability 0.4.

Given it is raining today what is the probability it will be raining four days from today?