Congratulations on being selected to begin the recruiting process!

Please spend some time familiarizing yourself with the data in “OnDeck Analytics Assignment.csv”. This file contains some interesting information about portfolio performance as of November 1, 2012:

Days\_delinquent\_old represents how many payments a loan has missed as of November 1, 2012

Days\_delinquent\_new represents how many payments the same loan has missed as of December 1, 2012

The other fields are either categorical or continuous variables describing other things we knew about the loan as of November 1, 2012.

Please address the following:

1. Separate days\_delinquent\_old and days\_delinquent\_new into the following groups: (0, 1-5, 5-10, 10-30, 30-60, 60+). Create a transition matrix showing the probability of movement from one group to another. Create another transition matrix showing the probability of movement from one group to another, weighted by outstanding principal balance.
2. Tell me something interesting about a variable, model, or approach that allows you to distinguish loans whose delinquency is likely to worsen from those whose delinquency is likely to improve.

Please do not spend more than 1-3 hours on this assignment. Include a copy of your code or analysis file with your response.

Thank you very much for your time and effort.