# Assignment 3

## Due Date: April 3rd 9:45am

1. Solve the Bank Run game we discussed in class formally.
2. Exercise 426.1 Show that a finitely repeated Prisoner's Dilemma has a unique subgame perfect equilibrium, in which each player's strategy chooses D in every period (read 14.4 in the textbook), regardless of the history.
3. Exercise 429.1 (read 14.7.1) Find the condition on the discount factor $\delta$ under which the strategy pair in which each player uses the grim trigger strategy is a Nash equilibrium of the infinitely repeated game of the Prisoner's Dilemma in Figure 429.1.
4. Draw the game tree for the two-round repeated game of the battle of sexes (in each round the simultaneously move game is the one we discussed in class). Find all the sub-game perfect Nash equilibria.