Class Game Repeated Games

It is commonly believed that repeated games incentivize cooperation. But this is not true in all cases, like finite play. The repeated prisoners' dilemma played here introduces students to repeated games and shows them that repetition does not always imply cooperation.

Objective

The experiment helps students gain experience with repeated play, the differences between stage games and repeated games, as well as the creation of well formulated directions (i.e., strategies for repeated games). It can be used to motivate discussion about the differences between rational play and human behavior.

Time

Roughly 10 minutes in class, without discussion.

Administration

Show students the power point slide <u>repeated_game.pptx</u>. Ask them not to communicate during the experiment (to avoid contamination). After reading the directions, answer questions from the students as a group. Then ask students to fill submit a piece of paper with directions about how they will play each round and collect them in a box or hat. Randomly pair the students with another member of the class (<u>random.org</u> can help generate random pairs). In the next class, report the play of the various pair as well as the payoff for each pair. Do not include student names or other identifying information. Then discuss the differences between rational play and human behavior, as well as what constitutes a clear strategy and why.

Notes

Students may want to condition their behavior on the behavior of the opponent in the same round, which is not admissible in a stage game (because it is simultaneous). Acceptable strategies can only condition behavior on the play of their opponents in previous rounds.

Students cannot lose points in this game.

Electronic Responses

To go paperless, perhaps because your class is remote, try replacing the last paragraph of the student directions with the following:

If you want to play, please send me an email before the end of class (your email@yahoo.com). Write your name in the email (as it appears in records) and denote precisely how you will play each round. If there is any lack of clarity in your instructions, I will treat you as a "do not play."