Computational Game Theory

Implementation Exercises on Iterated removal of Dominated Strategies, and Nash Equilibrium in Mixed-Strategies for 2x2 games.

1. Iterated Removal of Strictly Dominated Strategies

Consider the following payoff matrix:

1\2	Left	Middle	Right
Top	3,8	2,0	1,2
Bottom	0,0	1,7	8,2

Using Linear Programming to solve the iterated removal of dominant strategies problem.

2. Implementation of Iterated Removal of Strictly Dominated Strategies

Implement a strategy similar to the "RandomStrategy" available in the JAVA Player, except that it includes a pre-processing step that eliminates all strictly dominated strategies.

3. Implementation of Nash Equilibrium in Mixed-Strategies for 2x2 games

Extend the previous strategy to return a Nash equilibrium in mixed strategies whenever the strategically equivalent game resulting from the iterated removal of dominant strategies is 2x2.